



**Brazil**  
**MRS Meeting** 2019  
*Balneário Camboriú*

September, 22<sup>nd</sup> to 26<sup>th</sup>



Brazilian Materials  
Research Society

Excellence in the union of science and research  
in materials technology in Brazil

**Program Book**



# Welcome message

On behalf of the board of the Brazilian Materials Research Society (B-MRS), I welcome all the participants to its 2019 Meeting in Balneário Camboriú, state of Santa Catarina. This is the XVIII edition of B-MRS Meeting which brings together materials scientists and engineers, in addition to researchers from many other fields. The relevance of research and development in materials has been confirmed with the growing positive impacts of new technologies at the disposal of human beings. In Brazil, for instance, much of the excellence in various areas that support our economy and brings well-being results from the progress on materials science and engineering. This is especially important to highlight in Brazil today in view of the growing problems with funding for science, technology and education. The cuts in the investment on science, technology and innovation over the last few years are compromising the country's scientific system and the consequences will be terrible for the future of the country. We cannot lose hope though, and I expect that our B-MRS Meeting in Balneário Camboriú will be as vibrant and proficuous as it has always been. It is my hope that the XVIII B-MRS Meeting will be a sign of resilience of our community. Let me finish by thanking the organizers and sponsors of the 2019 B-MRS Meeting, and wishing all the participants a very fruitful week in Balneário Camboriú.

**Oswaldo Novais De Oliveira Jr.**

*President of Brazil MRS*

# Welcome to the XVIII Brazilian MRS Society Meeting

Dear Participants,

It is a great honor to receive everyone in Balneário Camboriú-SC for the 18th Brazil-MRS Meeting, in the period of September 22nd-26th, 2019. There is a remarkable list of top international plenaryists, and 23 symposia in all scientific themes in materials science with a high level of confirmed invited speakers. Overall, the technical program of the meeting consists of 2,582 submissions. More than 1,550 participants have already confirmed their presence. This is a record in the history of the meeting. Thank you all for that!

Even considering the difficult times and financial challenges to fund science and technology in Brazil, our community in materials science demonstrates that science and technology development together with high level education forms the qualified new generations necessary to promote a better future for our country. We dedicated ourselves to offer you the best conditions for a productive period of science discussions and knowledge exchange in order to promote scientific cooperation.

Finally, in the name of the organizing committee, I would like to thank all the supporting agencies and sponsors.

With kind regards,

**Ivan H. Bechtold**  
*Conference Chair*

# Organization

## Chair



**Ivan Helmuth Bechtold**  
*Department of Physics - UFSC, Florianópolis, Brazil*

## Co-Chair



**Hugo Gallardo**  
*Department of Chemistry - UFSC, Florianópolis, Brazil*

## Program Committee



**Iêda M. G. dos Santos**  
*UFPB*



**Mônica Alonso Cotta**  
*UNICAMP*



**Marta Elisa Rosso Dotto**  
*UFSC*



**José Antônio Eiras**  
*UFSCar*



## **Local Committee**

Juliana Eccher (UFSC)  
Maria Luisa Sartorelli (UFSC)  
André Avelino Pasa (UFSC)  
Carlos E. M. de Campos (UFSC)  
Vanderlei G. Machado (UFSC)  
Bernardo de Souza (UFSC)  
Bruno Silveira de Souza (UFSC)  
Josiel Barbosa Domingos (UFSC)  
Daniela Z. Mezalira (UFSC)  
Lizandra M. Zimmermann (FURB)  
Paulo A. P. Wendhausen (UFSC)  
Carlos Renato Rambo (UFSC)  
Rafael Gallina Delatorre (UFSC)

## **National Committee**

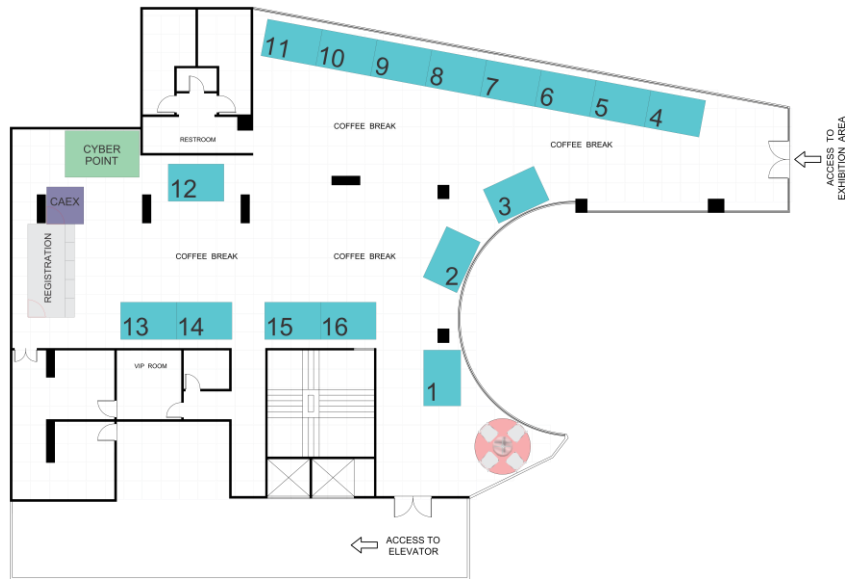
Antonio E. Martinelli (UFRN)  
Felipe Bohn (UFRN)  
André Alexandre Vieira (UFBA)  
Jérôme Depeyrot (UnB)  
Eduard Westphal (UTFPR)  
Ivo A. Hümmelgen (UFPR)  
Aldo J. G. Zarbin (UFPR)  
Lucimara Stolz Roman (UFPR)  
Adley Forti Rubira (UEM)  
José Leonil Duarte (UEL)  
Aloir Merlo (UFRGS)  
Jairton Dupont (UFRGS)  
Daniel Eduardo Weibel (UFRGS)  
Lucio S. Dorneles (UFSM)  
Carlos F. de O. Graeff (UNESP)  
Julio Ricardo Sambrano (UNESP)  
Lucas Fugikawa Santos (UNESP)  
Roberto Mendonça Faria (IFSC-USP)  
Paulo Barbeitas Miranda (IFSC-USP)  
Paulo Sérgio Pizani (UFSCar)  
Marília Junqueira Caldas (USP)  
Sylvio R. Accioly Canuto (USP)  
Ana Flávia Nogueira (UNICAMP)  
René Alfonso Nome Silva (UNICAMP)  
Fernando Ely (CTI)  
Marco Cremona (PUC-Rio)  
Isabel C. dos S. Carvalho (PUC-Rio)  
Caio H. Lewenkopf (UFF)  
Marcos A. Pimenta (UFMG)  
Ado Jório de Vasconcelos (UFMG)  
Thiago Cazati (UFOP)  
Welber Gianini Quirino (UFJF)

# Contents

Maps .....	6
General schedule .....	7
Program .....	9
Memorial Lecture “Joaquim Costa Ribeiro” .....	12
Plenary talks .....	13
Technical lectures .....	17
Symposia summary .....	18
Symposia .....	23
SYMPOSIUM A - Nanomaterials in Medicine, Nanotoxicology and Nanoregulation .....	A-1
SYMPOSIUM B - Biological, biopolymer-based and bio-inspired materials .....	B-1
SYMPOSIUM C - Advanced Materials and Surface Treatments for Biological, Dental and Medical Applications.....	C-1
SYMPOSIUM D - Environmental remediation - science applied in the search for solutions to air, water and soil pollution .....	D-1
SYMPOSIUM E - Green Materials: Processes and Devices .....	E-1
SYMPOSIUM F - Organic Electronics and Bioelectronics: Fundamentals, Applications and Emerging Technologies.....	F-1
SYMPOSIUM G - Photonics of Materials: Solar Cells, Photocatalysis, Luminescence and Physical Optics.....	G-1
SYMPOSIUM H - 2nd Hydrogen Storage Alloys Workshop.....	H-1
SYMPOSIUM I - Innovative applications for textile materials .....	I-1
SYMPOSIUM J - Glass and Glass-Ceramics: Breakthrough Materials from Synthesis to Applications..	J-1
SYMPOSIUM K - <i>i</i> -Caloric Materials and Applications.....	K-1
SYMPOSIUM L - Materials degradation and solutions to increase its lifespan.....	L-1
SYMPOSIUM M - Magnetic and Superconducting Materials .....	M-1
SYMPOSIUM N - Molecular Sieves: synthesis and applications .....	N-1
SYMPOSIUM O - Advanced laser materials processing and control of materials properties .....	O-1
SYMPOSIUM P - Materials and Fabrication Processes for Aeronautic and Space Applications .....	P-1
SYMPOSIUM Q - Advances in steel metallurgy and applications .....	Q-1
SYMPOSIUM R - Fundamentals and applications of plasma processing of materials .....	R-1
SYMPOSIUM S - Computational Design for Development of Functional Materials - Synergy Between Theoreticians and Experimentalists.....	S-1
SYMPOSIUM T - Nanofibers, Applications and Related Technology .....	T-1
SYMPOSIUM U - Carbon-based materials and devices .....	U-1
SYMPOSIUM V - Research on 2D material .....	V-1
SYMPOSIUM X - Materials for Additive Manufacturing.....	X-1
AUTHOR INDEX .....	Index-1

# Maps

Exhibition Area - Meridional/Mezanine	
Booth	Exhibitor
1	Avaco
2	Tescan
3	Horiba
4	dpUNION
5	Instrutécnica
6	Zeiss
7	Bruker
8	Tech Scientific
9	Thermo Fisher
10	Jeol
11	Analítica
12	Quantum Design Latin America
13	Agilent
14	Helmut Fischer
15	Renishaw
16	Mbraun
4C Floor	
18	Ansys Granta
19	UFSC
20	Horiba





# General schedule

	Sun 22/Sep	Mon 23/Sep	Tue 24/Sep	Wed 25/Sep	Thu 26/Sep
07:00 – 19:30		Registration (until 19:30)	Registration (until 19:30)		Registration (until 12:30)
08:00 – 19:30		Registration (until 19:30)	Registration (until 19:30)		Registration (until 12:30)
08:15 – 09:15		Plenary session	Plenary session	Plenary session	Plenary session
09:30 – 10:30		Oral Session	Oral Session	Oral Session	Oral Session
10:30 – 11:00		Coffee Break	Coffee Break	Coffee Break	Coffee Break
11:00 – 11:30		Oral Session	Poster Session	Oral Session	Poster Session
11:30 – 12:00		Oral Session	Poster Session	Oral Session	Poster Session
12:00 – 12:30		Poster Session	Poster Session	Poster Session	Poster Session
12:30 – 14:00	13:00 – 17:00 <b>Young's Researchers School</b>	13:00 – 18:30 <b>Registration</b>	Lunch	Material bonds: Brazilian-German exchanges in Material Research (Research in Germany)	Lunch
				Mastering the Art of Scientific Publication - ACS Publications' Meet the Editors	Demonstration of ANSYS Granta's materials teaching and research software
					Lunch
					Closing Ceremony
14:00 – 16:15			Oral Session	Oral Session	Oral Session
16:15 – 16:45			Coffee Break	Coffee Break	Coffee Break
16:45 – 17:45			Plenary session	Plenary session	Plenary session
18:00 – 19:30			Poster Session	Poster Session	Poster Session
	19:30 – 22:30 <b>Opening Ceremony and Welcome Cocktail (Complexo Cristo Luz)</b>				
				21:00 – 00:00 <b>Conference Party (Lounge Green Valley)</b>	



# Program

22 Sunday  
September, 2019

13:00 - 17:00 **Young's Researchers School: How to Produce and Publish High Impact Papers**  
Prof. Dr. Valtencir Zucolotto; Instituto de Física de São Carlos - USP and ELSEVIER

13:00 - 18:30 Registration

19:30 - 21:00 **Opening Ceremony and Memorial Lecture**  
Yvonne Primerano Mascarenhas: "*Cristalografia no Brasil: origem e panorama atual*"

21:00 - 22:00 Welcome Cocktail

23 Monday  
September, 2019

07:00 - 19:30 Registration

08:15 - 09:15 **Plenary session**  
**Watching Flowers Through a Silicon Glass**  
Stefano Baroni - *Italy*.

09:30 - 10:30 Oral Sessions: G, F, B, C, U, M, A, T, X, N, H, S, D

10:30 - 11:00 Coffee Break

11:00 - 12:00 Oral Sessions: G, F, B, C, U, M, A, T, X, N, H, S, D

11:00 - 12:30 1<sup>st</sup> Poster Session: P, V

12:30 - 14:00 Lunch

14:00 - 16:15 Oral Sessions: G, F, B, C, U, M, A, T, X, N, H, S, D

16:15 - 16:45 Coffee Break

16:45 - 17:45 **Plenary session**  
**Hybrid inorganic/organic semiconductor structures for opto-electronics**  
Norbert Koch - *Germany*

18:00 - 19:30 2<sup>nd</sup> Poster Session: B, C, F, G



24 Tuesday  
September, 2019

08:00 - 19:30	Registration
08:15 - 09:15	<b>Plenary session</b> <b>Sirius: The New Brazilian Synchrotron Light Source</b> Antônio José Roque da Silva - <i>Brazil</i>
09:30 - 10:30	Oral Sessions: G, F, B, C, U, M, D, P, J, A, S, V, Exp
10:30 - 11:00	Coffee Break
11:00 - 12:00	Oral Sessions: G, F, B, C, U, M, D, P, J, A, S, V, Exp
11:00 - 12:30	3 <sup>rd</sup> Poster Session: E, H, L, Q, T
12:00 - 14:00	Material bonds: Brazilian-German exchanges in Material Research (Research in Germany)
12:30 - 14:00	Lunch
14:00 - 16:15	Oral Sessions: G, F, B, C, U, M, D, P, J, A, S, V, Exp
16:15 - 16:45	Coffee Break
16:45 - 17:45	<b>Plenary session</b> <b>Bioinspired strategies for bone regeneration</b> Maria-Pau Ginebra - <i>Spain</i>
18:00 - 19:30	4 <sup>th</sup> Poster Session: A, B, D, F, G

25 Wednesday  
September, 2019

08:00 - 19:30	Registration
08:15 - 09:15	<b>Plenary session</b> <b>Materials by Design: Three-Dimensional Nano-Architected Meta-Materials</b> Julia Greer - <i>USA</i>
09:30 - 10:30	Oral Sessions: G, F, B, C, U, M, R, V, P, K, Q, E, L
10:30 - 11:00	Coffee Break
11:00 - 12:00	Oral Sessions: G, F, B, C, U, M, R, V, P, K, Q, E, L
11:00 - 12:30	5 <sup>th</sup> Poster Session: A, D, J, N, S, X
12:00 - 14:00	Mastering the Art of Scientific Publication - ACS Publications' Meet the Editors
12:00 - 14:00	Demonstration of ANSYS Granta's materials teaching and research software
12:30 - 14:00	Lunch
14:00 - 16:15	Oral Sessions: G, F, B, I, U, M, R, V, O, K, Q, E, L
16:15 - 16:45	Coffee Break
16:45 - 17:45	<b>Plenary session</b> <b>Spin Transfer in Topological Insulator/Magnetic Insulator Bi-Layered Structures</b> Mingzhong Wu - <i>USA</i>
18:00 - 19:30	6 <sup>th</sup> Poster Session: C, F, G, M, U
21:00 - 00:00	Conference Party at Green Valley Club's Lounge

26 Thursday  
September, 2019

08:00 - 12:30	Registration
08:15 - 09:15	<b>Plenary session</b> <b>Multifunctional Hybrid Carbon Interfaces</b> Maurizio Prato - <i>Italy</i>
09:30 - 11:00	Oral Sessions: G, F, B, V, Q, E, L, J
09:30 - 11:00	7 <sup>th</sup> Poster Session: I, K, M, O, R, S, U
11:00 - 11:30	Coffee Break
11:30 - 12:30	<b>Plenary session</b> <b>Challenges in Processing of Materials to Reduce Weight of Structural Components</b> Alan Taub - <i>USA</i>
12:30 - 14:00	Closing Ceremony

# Memorial Lecture “Joaquim Costa Ribeiro”



**Yvonne Primerano Mascarenhas**

*Brazil*

**Title: Cristalografia no Brasil: origem e panorama atual**

Pode-se dizer que a implantação da cristalografia estrutural no Brasil teve início na década de 60 do século passado após o retorno de Yvonne P. Mascarenhas de um estágio no Departamento de Cristalografia da Universidade de Pittsburgh, USA. Isto ocorreu inicialmente com a formação de um pequeno grupo de físicos e químicos que iniciaram seu mestrado e doutorado utilizando as instalações do recém criado laboratório de cristalografia, equipado com recursos inicialmente concedidos pelo CNPq para aquisição de câmaras para registro fotográfico dos padrões de difração de raios X e, posteriormente, pela FINEP e pela FAPESP, que permitiram a gradual modernização tanto do Laboratório, com difratômetros automáticos, como de sua infraestrutura computacional. Muito importante foi o estabelecimento de colaborações com grupos de pesquisa em diversas áreas da Química, Bioquímica e de Física da Matéria Condensada que sintetizavam ou extraíam os mais variados materiais e necessitavam o conhecimento das respectivas estruturas cristalinas e moleculares para melhor entenderem suas propriedades. Surgem novas lideranças no âmbito do IFSC, tais como Eduardo Castellano, Aldo F. Craievich, Glaucius Oliva, Richard Garratt, Javier Ellena e Igor Polikarpov que ampliaram extraordinariamente o escopo das pesquisas em cristalografia e a formação de novos recursos humanos para o setor. Um grande passo no desenvolvimento da Cristalografia se deu com a implantação em 1997 do Laboratório Nacional de Luz Síncrotron como mais um centro de pesquisa do CNPq e é grande a expectativa atual com a inauguração do SIRIUS ainda este ano.

Sunday, September 22<sup>nd</sup>

20:00 - 21:00



# Plenary talks

Monday, September 23<sup>rd</sup>

8:15 - 9:15



**Stefano Baroni**

*Scuola Internazionale Superiore di Studi Avanzati, Italy*

**Title: Watching Flowers Through a Silicon Glass**

Most natural colours in the red-purple-blue gamut are expressed by anthocyanins, a broad class of dyes responsible for the color of berries, red grapes, eggplants, red cabbage, blue corn, purple carrots, as well as many flowers. The extreme variability of the color expressed by anthocyanins depends on their detailed chemical composition, as well as on environmental conditions, such as acidity and co-pigmentation, i.e. on the presence in solution of otherwise optically inert chemicals. In this talk I will review recent theoretical work aimed at unveiling the factors that allow an anthocyanin solution to express a bright shade of blue, a rare hue to be found in nature, of great interest in the food industry. This work is based on a recently designed multi-scale protocol that allows one to properly account for the effects of both high-frequency (intra-conformer) and low-frequency (inter-conformer) thermal fluctuations on the optical spectra of the solution, the latter being computed using an embedded flavour of time-dependent density-functional theory. Besides confirming the importance of the molecule's charge state, we also unveil the hitherto unrecognized role of internal distortions in the chromophore, which affect its degree of conjugation, modulating the optical gap and in turn the color. Our results are in excellent agreement with experiments for some simple anthocyanins and provide unprecedented insight into the complex behaviour underlying color expression in this molecular family, allowing us to extend our study to the effects of intra-molecular co-pigmentation and metal complexation.

Monday, September 23<sup>rd</sup>

16:45 - 17:45



**Norbert Koch**

*Humboldt-Universität zu Berlin, Germany*

**Title: Hybrid inorganic/organic semiconductor structures for opto-electronics**

Electronic and opto-electronic devices used in information, communication, energy conversion, and energy storage technologies rely on a precise control of the charge density distribution, which is the key parameter for a wide range of electronic and optical processes in devices. The charge density and its energy spectrum in electronic materials determine elemental parameters and functions, such as the Fermi level position, type and mobility of charge carriers, interfacial energy level alignment, carrier injection and extraction at contacts, and the characteristics of excitations. The primary conventional method to control the charge density in electronic materials is doping, as already employed by Shockley, Bardeen, and Brattain in the first transistors in the 1940s. However, established electronic materials and doping concepts, e.g., the statistical incorporation of dopant atoms in a covalent lattice, will soon reach fundamental limits. The anticipated route beyond this deadlock is the use of new electronic materials and combinations thereof, where tuning quantum confinement, dimensionality, and the charge density enable new device concepts. In this contribution, at first the fundamental differences in the electronic properties of selected advanced and emerging electronic materials are contrasted, i.e., organic semiconductors, metal halide perovskites, and two-dimensional (2D) transition metal dichalcogenide (TMDC) monolayers. Next, considerations of how the energy levels differ in practical thin films from those in single crystals will provide the basis for discussing fundamental interfacial phenomena in hybrid heterostructures comprising dissimilar material classes. Modern approaches to tune the interfacial charge density re-arrangement, and concomitantly the energy level alignment, will then be introduced and their impact on interface functionality in devices exemplified. Most of these approaches are based on employing very strong molecular electron donor or acceptor molecules as interlayers, and photochromic molecular switches even facilitate operando optical control over electrical device characteristics, i.e., multifunctionality.

Tuesday, September 24<sup>th</sup>

8:15 - 9:15



**Antônio Roque Da Silva**  
*CNPEM Director, Brazil*

**Title: Sirius: The New Brazilian Synchrotron Light Source**

The use of synchrotron radiation by a great variety of fields has increased steadily worldwide. This, to a large extent, is a result of the availability of the much brighter third-generation light sources, which allowed the development of new experimental techniques. Brazil gave an important contribution to science through the development of the necessary technology and the construction of the first synchrotron in the Southern Hemisphere, the Brazilian Synchrotron Light Laboratory (LNLS), still the only one in Latin America, that operates this installation as an open facility since 1997. It is a second-generation machine, with relatively low electron energy, high emittance and few straight sections for insertion devices. Its pioneering activities in synchrotron science gave rise, with time, to the Brazilian Center for Research in Energy and Materials (CNPEM), a complex of four National Laboratories – LNLS itself, the Brazilian Biosciences National Laboratory (LNBio), the Brazilian Bioethanol Science and Technology Laboratory (CTBE) and the Brazilian Nanotechnology National Laboratory (LNNano). Since 2009, the LNLS has been working on the project and construction of the new Brazilian Synchrotron Light Source - Sirius. It will be one of the first fourth-generation machines in the world and it is a national project. It is being planned to be a state-of-the-art light source, providing cutting edge research tools that are nonexistent today in Brazil. In this talk an overview of the main characteristics, potentialities and status of the project will be provided.

Tuesday, September 24<sup>th</sup>

16:345 - 17:45



**Maria-Pau Ginebra**  
*Universitat Politècnica de Catalunya, Barcelona, Spain*

**Title: Bioinspired strategies for bone regeneration**

Bioinspiration is a powerful approach when designing functional biomaterials. Synthetic bone substitutes have been used for more than 40 years in the clinics. However, after decades of research, they have not been able to outperform autografts, which are still the gold standard, in spite of the serious drawbacks they entail. Paradoxically, conventional synthetic bone grafts are obtained by classical ceramic sintering routes, resulting in microstructures and compositions far from the bone mineral. Recently, novel biomimetic routes have opened unprecedented possibilities in terms of tuning the nanostructure and composition of hydroxyapatite, imitating more closely the mineral phase of bone. Tuning the size, shape and composition of hydroxyapatite nanocrystals allows promoting the osteoinductive and osteogenic properties of the material. This brings tremendous benefits in the in vivo synchronization between scaffold degradation and new bone deposition, suggesting that biomimetic apatite is able to enter the natural bone remodeling cycle. Moreover, the control of pore architecture by using advanced manufacturing technologies, such as 3D-printing or foam templating open up new possibilities in the design of customized bioceramics for bone regeneration.

Wednesday, September 25<sup>th</sup>

8:15 - 9:15



**Julia Greer**

*California Institute of Technology, USA*

**Title: Materials by Design: Three-Dimensional Nano-Architected Meta-Materials**

Creation of extremely strong and simultaneously ultra lightweight materials can be achieved by incorporating architecture into material design. We fabricate threedimensional (3D) nano-architected materials that can exhibit superior and often tunable thermal, photonic, electrochemical, and mechanical properties at extremely low mass densities (lighter than aerogels), which renders them ideal for many scientific pursuits and technological applications. The dominant properties of such meta-materials, where individual constituent size at each relevant scale (atoms to nanometers to microns) is comparable to the characteristic microstructural length scale of the constituent solid, are largely unknown because of their multi-scale nature. To harness the beneficial properties of 3D nano-architected meta-materials, it is critical to assess properties at each relevant scale while capturing overall structural complexity. We describe the fabrication and synthesis using two-photon lithography, nanofabrication, and additive manufacturing (AM) techniques, as well as the mechanical, biochemical, electrochemical, and thermal properties of nanolattices made of different materials with varying microstructural detail. Attention is focused on uncovering the synergy between the internal atomic-level microstructure and the nano-sized external dimensionality, where competing material- and structure-induced size effects drive overall response and govern these properties. Specific discussion topics include the nanofabrication and characterization of (often hierarchical) threedimensional nano-architected meta-materials and their applications in chemical and biological devices, ultra lightweight energy storage systems, damage-tolerant fabrics, and photonic crystals.

Wednesday, September 25<sup>th</sup>

16:45 - 17:45



**Mingzhong Wu**

*Colorado State University, USA*

**Title: Spin Transfer in Topological Insulator/Magnetic Insulator Bi-Layered Structures**

Recent years have witnessed a rapidly growing interest in topological insulators, not only because of rich intriguing physics in such materials, but also due to their promising potential in quantum computing and spintronics applications. This presentation will discuss a bi-layer system where a topological insulator interfaces with a magnetic insulator. This system is of particular interest for two main reasons. First, one can use the magnetic insulator to pump spins into the topological insulator; by measuring the resultant responses in the topological insulator, one can reveal the nature of the topological surface states. Second, the system can serve as a platform for exploring the use of topological insulators for magnetization manipulation. The first half of this presentation will report experiments on spin pumping from a magnetic insulator  $Y_3Fe_5O_{12}$  slab to a topological Kondo insulator  $SmB_6$  thin film. The data not only confirmed the non-trivial nature of the topological surface states, but also enabled the determination of the depth of the surface states. The second half will report on topological surface state-induced magnetization switching in a bi-layer that consists of a topological insulator  $Bi_2Se_3$  thin film and a magnetic insulator  $BaFe_{12}O_{19}$  thin film.

Thursday, October 26<sup>th</sup>

8:15 - 9:15



**Maurizio Prato**

*Università degli Studi di Trieste, Italy*

**Title: Multifunctional Hybrid Carbon Interfaces**

Connecting nanostructured materials to biological compartments is a crucial step in prosthetic applications, where the interfacing surfaces should provide minimal undesired perturbation to the target tissue. Ultimately, the (nano)material of choice has to be biocompatible and promote cellular growth and adhesion with minimal cytotoxicity or dis-regulation of, for example, cellular activity and proliferation. In this context, carbon nanomaterials, including nanotubes and graphene, are particularly well suited for the design and construction of functional interfaces. This is mainly due to the extraordinary properties of these novel materials, which combine mechanical strength, thermal and electrical conductivity. Our group has been involved in the organic functionalization of various types of nanocarbons, including carbon nanotubes, fullerenes and, more recently, graphene. The organic functionalization offers the great advantage of producing soluble and easy-to-handle materials. As a consequence, since biocompatibility is expected to improve upon functionalization, many modified carbon nanomaterials may be useful in the field of nanomedicine. In particular, we have recently shown that carbon nanotubes and graphene can act as active substrates for neuronal growth, a field that has given so far very exciting results. Nanotubes and graphene are compatible with neurons, but, especially, they play a very interesting role in interneuronal communication. Improved synaptic communication is just one example. In addition, in combination with suitable catalysts, carbon nanotubes can serve as versatile interfaces for the splitting of water molecules to give oxygen, but, especially, molecular hydrogen, ideal for clean energy generation. In combination with catalysts of different nature, carbon nanostructures can serve for many scopes. During this talk, we will show the latest and most exciting results obtained in our laboratories in these fast developing fields.

Thursday, October 26<sup>th</sup>

11:30 - 12:30



**Alan Taub**

*University of Michigan, USA*

**Title: Challenges in Processing of Materials to Reduce Weight of Structural Components**

The potential for reducing weight in automobiles and aircraft using high-strength steels, aluminum, titanium and magnesium alloys and polymer composites is well established. The challenge is to achieve the weight reduction at a cost acceptable to the user. Optimization of the material properties and processes together with robust design tools and joining technologies to enable multi-material structures is required. This has become possible through co-development of the new material, the component design and the manufacturing process using state-of-the-art Integrated Computational Materials Engineering models. Examples will be discussed crossing melt, thermomechanical and powder processing. We will also describe the role of Lightweight Innovations for Tomorrow (LIFT). The Institute was established to accelerate the adoption of advanced metals and serves as the bridge between basic research and final product commercialization. Our industry partners in collaboration with an extensive network of universities and the national and federal laboratories are developing the next generation of advanced manufacturing processes.

# Technical lectures

TUESDAY , SEPTEMBER 24

## *SESSION EXP.1.D2 (09:30 - 10:30) - Room Cáspio*

- 09:30** **Fluorescence, Luminescence, Transient Absorption. The State of Art Systems and Applications** **EXP.1.D2.1**  
Divinomar Severino<sup>1</sup>; <sup>1</sup>Tech Scientific
- 09:50** **QD-LATAM solutions for frontier research in Materials Science, Physics and Biophysics** **EXP.1.D2.2**  
Fabio Cavalcante<sup>1</sup>; <sup>1</sup>Quantum Design Latin America
- 10:10** **Nanoscale Raman and SPM characterization of heterogeneities in 2D materials** **EXP.1.D2.3**  
Igor Carvalho<sup>1</sup>; <sup>1</sup>HORIBA Scientific

## *SESSION EXP.2.D2 (11:00 - 12:00) - Room Cáspio*

- 11:00** **Determination of Coating Thickness, elemental composition and mechanical properties via X-Rays and Nanoindentation from Helmut Fischer** **EXP.2.D2.1**  
Matheus Petreche<sup>1</sup>; <sup>1</sup>Helmut Fischer
- 11:20** **Tescan X-ray micro-CT – A New alternative for 4D studies** **EXP.2.D2.2**  
Rui Eduardo Moreira<sup>1</sup>; <sup>1</sup>Tescan do Brasil
- 11:40** **Technological Improvements in Confocal Raman Microscopy and Photoinduced Force Microscopy (PiFM)** **EXP.2.D2.3**  
Ricardo Gonçalves Mendes<sup>1</sup>; <sup>1</sup>Instrutécnica

## *SESSION EXP.3.D2 (14:00 - 16:15) - Room Cáspio*

- 14:00** **Multiscale and Multimodale Microscopy in Material Science** **EXP.3.D2.1**  
Antonio Casares<sup>1</sup>; <sup>1</sup>Zeiss
- 14:20** **Renishaw: Advances in Raman Imaging Technology** **EXP.3.D2.2**  
Fabio Godoy<sup>1</sup>; <sup>1</sup>Renishaw
- 14:40** **Scanning Electron Microscopy: Applications in Ultra Low kV** **EXP.3.D2.3**  
Rafael Gustavo Torres Leal<sup>1</sup>; <sup>1</sup>Jeol
- 15:00** **Multi-modal microscopy characterization using Analytical Techniques in Materials** **EXP.3.D2.4**  
Rafael Villaurrutia Arenas<sup>1</sup>; <sup>1</sup>Thermo Fisher
- 15:20** **Scanning Ion Conductance Microscopy – The emerging standard for nanoscale imaging in aqueous environments. Gabriela Mendoza - Applications Scientist at Park Systems LatinAmerica** **EXP.3.D2.5**  
Gabriela Mendoza<sup>1</sup>; <sup>1</sup>Analítica
- 15:40** **Innovative Bruker Solutions in X-ray Diffraction for Characterization of Materials** **EXP.3.D2.6**  
Renato Figueira da Silva<sup>1</sup>; <sup>1</sup>Bruker
- 16:00** **Analysis of Luminescent Materials through Fluorescence and PL Spectroscopy** **EXP.3.D2.7**  
Joao Lucas Silva<sup>1</sup>; <sup>1</sup>HORIBA Scientific

# Symposia summary

## BIO-RELATED MATERIALS AND APPLICATIONS

---

<b>A - Nanomaterials in Medicine, Nanotoxicology and Nanoregulation</b>	Valtencir Zucolotto ( <i>Nanomedicine and Nanotoxicology Group, IFSC, USP</i> ) Juliana Cancino ( <i>Federal University of Alfenas</i> ) Felipe Silva Belucci ( <i>Ministry of Science, Technology, Innovation and Communications - MCTIC</i> ) José M Granjeiro ( <i>INMETRO</i> )
<b>B - Biological, biopolymer-based and bio-inspired materials</b>	Nico Bruns ( <i>University of Strathclyde</i> ) Rafael Libanori ( <i>ETH Zurich</i> ) Gilberto Siqueira ( <i>EMPA</i> ) Sara Velasquez ( <i>University of Strathclyde</i> ) Classius Ferreira da Silva ( <i>Universidade Federal de São Paulo</i> ) Mariana Agostini de Moraes ( <i>Universidade Federal de São Paulo</i> ) Marisa Masumi Beppu ( <i>UNICAMP</i> ) Thomas Crouzier ( <i>KTH Royal Institute of Technology</i> )
<b>C - Advanced Materials and Surface Treatments for Biological, Dental and Medical Applications</b>	Carlos Roberto Grandini, FBSE ( <i>UNESP/Bauru</i> ) Ana Paula Rosifini Alves Claro ( <i>UNESP/Guaratinguetá</i> ) Paulo Noronha Lisboa Filho ( <i>UNESP/Bauru</i> ) Rossana Mara da Silva Moreira Thiré ( <i>UFRJ/COPPE</i> ) Rodrigo Silveira Vieira ( <i>Universidade Federal do Ceará</i> )
<b>D - Environmental remediation - science applied in the search for solutions to air, water and soil pollution</b>	Ieda Maria Garcia dos Santos ( <i>Universidade Federal da Paraíba - UFPB</i> ) Ary da Silva Maia ( <i>Universidade Federal da Paraíba - UFPB</i> ) Donald Macphee ( <i>University of Aberdeen, Scotland - UK</i> ) Ingrid Tavora Weber ( <i>Universidade de Brasília - Unb</i> ) François Chéviré ( <i>University of Rennes 1, Rennes, France</i> ) Carlos Alberto Paskocimas ( <i>Universidade Federal do Rio Grande do Norte - UFRN</i> )
<b>E - Green Materials: Processes and Devices</b>	Marcelo Ornaghi Orlandi ( <i>Sao Paulo State University</i> ) Clara Santato ( <i>Polytechnique Montreal</i> ) Francesca Soavi ( <i>Alma Mater Studiourm Università di Bologna</i> ) Neftali Lenin Carreno ( <i>Federal University of Pelotas</i> )

---



## MATERIALS PROPERTIES AND EMERGING TECHNOLOGIES

<b>F - Organic Electronics and Bioelectronics: Fundamentals, Applications and Emerging Technologies</b>	Juliana Eccher ( <i>Universidade Federal de Santa Catarina</i> ) Marystela Ferreira ( <i>Universidade Federal de São Carlos</i> ) Douglas José Coutinho ( <i>Universidade Tecnológica Federal do Paraná</i> ) Eduard Westphal ( <i>Universidade Tecnológica Federal do Paraná</i> )
<b>G - Photonics of Materials: Solar Cells, Photocatalysis, Luminescence and Physical Optics</b>	Sergio da Silva Cava ( <i>Universidade Federal de Pelotas</i> ) Mario Lucio Moreira ( <i>Universidade Federal de Pelotas</i> ) Cristiane Wienke Raubach Ratmann ( <i>Universidade Federal de Pelotas</i> ) Pedro Lovato Gomes Jardim ( <i>Universidade Federal de Pelotas</i> )
<b>H - 2nd Hydrogen Storage Alloys Workshop</b>	Daniel Rodrigo Leiva ( <i>Universidade Federal de São Carlos</i> ) Guilherme Zepon ( <i>Universidade Federal de São Carlos</i> ) Jacques Huot ( <i>Université du Québec à Trois-Rivières</i> )
<b>I - Innovative applications for textile materials</b>	Lizandra Maria Zimmermann ( <i>FURB</i> ) Jürgen Andreaus ( <i>FURB</i> ) Ivoneite Oliveira Barcellos ( <i>FURB</i> ) Eduardo Guilherme Cividini Neiva ( <i>FURB</i> )
<b>J - Glass and Glass-Ceramics: Breakthrough Materials from Synthesis to Applications</b>	Mohammad Reza Dousti ( <i>Universidade Federal Rural de Pernambuco</i> ) Danilo Manzani ( <i>Universidade de São Paulo</i> ) Gaël Yves Poirier ( <i>Universidade Federal de Alfenas</i> ) Jefferson Luis Ferrari ( <i>Universidade Federal de Uberlândia</i> )
<b>MATERIALS CHARACTERIZATION AND DEGRADATION</b>	
<b>K - i-Caloric Materials and Applications</b>	Alexandre Magnus Gomes Carvalho ( <i>CNPq</i> ) Mario de Souza Reis Junior ( <i>UFF</i> ) Jader R. Barbosa Jr. ( <i>UFSC</i> ) Vladimir I. Zverev ( <i>M. V. Lomonosov Moscow State University</i> )
<b>L - Materials degradation and solutions to increase its lifespan</b>	Polyana Alves Radi ( <i>Universidade Federal de São Paulo - UNIFESP</i> ) Lucia Vieira ( <i>Universidade do Vale do Paraíba - UNIVAP</i> ) Luis Augusto Sousa Marques da Rocha ( <i>Universidade Estadual Paulista Julio de Mesquita Filho - Unesp - Campus de Bauru.</i> ) Marcelo Augusto Gonçalves Bardi ( <i>Universidade São Francisco</i> )
<b>M - Magnetic and Superconducting Materials</b>	Felipe Bohn ( <i>UFRN</i> ) Lucio Strazzabosco Dorneles ( <i>UFES</i> ) Marcio Assolin Correa ( <i>UFRN</i> )

## MATERIALS SYNTHESIS AND PROCESSING

---

<b>N - Molecular Sieves: synthesis and applications</b>	Sibele B. C. Pergher ( <i>UFRN</i> ) Katia Bernardo Gusmão ( <i>UFRGS</i> ) Vincius Patrício da Silva Caldeira ( <i>UERN</i> )
<b>O - Advanced laser materials processing and control of materials properties</b>	Luís Gonzaga Trabasso ( <i>SENAI Innovation Institute in Manufacturing Systems and Laser Processing</i> ) Alexandre Cunha ( <i>SENAI Innovation Institute in Manufacturing Systems and Laser Processing</i> ) Paulo Wendhausen ( <i>Federal University of Santa Catarina (UFSC)</i> ) Milton Sérgio Fernandes Lima ( <i>Institute of Advanced Studies (IEAV)</i> )
<b>P - Materials and Fabrication Processes for Aeronautic and Space Applications</b>	Gilberto Carvalho Coelho ( <i>USP</i> ) Carlos Angelo Nunes ( <i>EEL-USP</i> ) Catherine J. Parrish ( <i>Boeing</i> ) Fernando Ferreira Fernandez ( <i>Embraer</i> ) José Daniel Diniz Melo ( <i>UFRN</i> ) Milton Sergio Fernandes de Lima ( <i>IEAv/DCTA</i> )
<b>Q - Advances in steel metallurgy and applications</b>	Hamilton Ferreira Gomes de Abreu ( <i>Universidade Federal do Ceará</i> ) Helio Goldenstein ( <i>Escola Politécnica, Universidade de São Paulo</i> ) Márcio Gustavo Di Vernieri Cuppari ( <i>CECS, Universidade Federal do ABC</i> ) Roberto Gomes de Aguiar Veiga ( <i>CECS, Universidade Federal do ABC</i> ) Sydney Ferreira Santos ( <i>CECS, Universidade Federal do ABC</i> )
<b>R - Fundamentals and applications of plasma processing of materials</b>	Elidiane C Rangel ( <i>Laboratory of Technological Plasmas - Unesp</i> ) Nilson C Cruz ( <i>Laboratory of Technological Plasmas - Unesp</i> ) Clodomiro Alves Jr. ( <i>UFERSA - Department of Natural and Mathematical Sciences</i> ) Rodrigo Savio Pessoa ( <i>Instituto Tecnológico de Aeronáutica</i> ) André Paulo Tschiptschin ( <i>Escola Politécnica da Universidade de São Paulo</i> ) Lucia Vieira ( <i>Universidade do Vale do Paraíba</i> )

---

## NANOSTRUCTURED AND FUNCIONAL MATERIALS

---

<b>S - Computational Design for Development of Functional Materials - Synergy Between Theoreticians and Experimentalists</b>	Julio Ricardo Sambrano ( <i>São Paulo State Univerity, Bauru, Brazil</i> ) Miguel A. San-Miguel ( <i>São Paulo State University of Campinas, Brazil</i> ) Aníbal J. Rodríguez-Cuesta ( <i>Oak Ridge National Laboratory, USA</i> ) Silvia Casassa ( <i>Torino University, Italy</i> )
--	--

---

**T - Nanofibers, Applications and Related Technology**

Profa. Dra. Claudia Merlini (*Universidade Federal de Santa Catarina (UFSC)*)  
Prof. Dr. Cicero R. Cena (*Universidade Federal de Mato Grosso do Sul (UFMS)*)  
Prof. Dr. Deuber Lincon da Silva Agostini (*Universidade Estadual Paulista "Júlio de Mesquita Filho" (UNESP)*)  
Profa. Dra. Roselena Faez (*Universidade Federal de São Carlos (UFSCar)*)

---

**U - Carbon-based materials and devices**

Murilo Santhiago (*CNPEM-LNNano*)  
Mathias Strauss (*CNPEM-LNNano*)  
Danilo J. Carastan (*Universidade Federal do ABC*)

---

**V - Research on 2D material**

Benjamin Fagneaud (*UFJF*)  
Leonardo Cristiano Campos (*UFMG*)  
Rodrigo Gribel Lacerda (*UFMG*)  
Jenaina Ribeiro Soares (*UFLA*)

---

**X - Materials for Additive Manufacturing**

Piter Gargarella (*Department of Materials Engineering - Federal University of São Carlos/Brazil*)  
Lidiane Cristina Costa (*Department of Materials Engineering - Federal University of São Carlos/Brazil*)  
Murilo C. Crovace (*Department of Materials Engineering - Federal University of São Carlos/Brazil*)  
Marcos Akira d'Ávila (*Universidade Estadual de Campinas - UNICAMP/Brazil*)  
Edvani Curti Muniz (*Universidade Estadual de Maringá - UEM/Brazil*)  
Guilherme Mariz de Oliveira Barra (*Universidade Federal de Santa Catarina - UFSC/Brazil*)  
Varlei Rodrigues (*Universidade Estadual de Campinas - UNICAMP/Brazil*)



# Symposia

## BIO-RELATED MATERIALS AND APPLICATIONS

### Symposium A - Nanomaterials in Medicine, Nanotoxicology and Nanoregulation

**Scope of the Symposium:** Nanomaterials have been proven efficient theranostic agents to disease detection and diagnosis. Nevertheless, understanding the bio-nano interface is of key importance to guide the design of drug delivery systems with the better therapeutic outcomes. In this context, functionality, and safety is considered an integrated way from the earliest phases of the research and innovation of the nanoproduct, which opens up the focus on safety, making agencies around the world to supply specific regulatory guidelines for such materials before their commercialization. The latter is an openness of toxicology studies which can give information to guide regulatory decisions toward developing a safety net to enable the marketing of products before commercialization.

We propose the symposium "Nanomaterials in Medicine, Nanotoxicology and Nanoregulation", which will bring together a state-of-the-art discussion on the safe-by-design nanomaterials to be used in medicine as well as their toxicological aspects, a topic which is increasing over the world, and has been covered by important international conferences. Moreover, it will be the opportunity to present the updates of the international agreement NanoReg between Brazil and EU for the standardization of production and safe use of nanomaterials. The symposium welcomes all researchers in the field of Nanoscience and Nanotechnology that is interesting in the nanomaterials applied to medicine and Nanotox field.

Aligned with the fruitful scientific environment of the event, we also intend to organize the first technical meeting of the Project "Certification of Nanoproducts", a project elaborated as a national continuation of the NanoReg Program and coordinated by MCTIC and Inmetro, which aims to transfer the technical knowledge produced to the regulator agencies in Brazil such as Anvisa (National Health Surveillance Agency), Ibama (Brazilian Institute of the Environment and Renewable Natural Resources), Mapa (Ministry of Agriculture, Livestock and Food Supply) and Inmetro.

The symposium will create opportunities for participants to present and share experiences, explore new directions and to debate topics with experts from across the globe in the fields of Nanomedicine and Nanotoxicology. This symposium has been offered since 2015 in SBPMat.

#### **Abstracts will be solicited in (but not limited to) the following areas:**

- Nanomaterials for Diagnosis and Therapy
- Nanomaterials for Biosensors
- Nanomedicine and Bio-Nano Interfaces
- Nanomedicine in Cancer
- Nanocarriers for Drug-Delivery
- Nanomedicine for Tissue Regeneration
- In vitro and In vivo Nanotoxicology
- Eco/Environment

### Symposium B - Biological, biopolymer-based and bio-inspired materials

**Scope of the Symposium:** Nature serves as inspiration for the development of new high-performance materials through the mimicking of biological architectures or use of materials such as biopolymers. The

mimicking of biological architectures serves for the development of new high-performance synthetic materials as they often exhibit combinations of properties that are mutually exclusive. Understanding the underlying principles that lead to these unusual combinations of properties in biological materials allows materials scientists and engineers to fabricate synthetic materials with unprecedented performance. Biopolymers possess properties such as biocompatibility, low toxicity, biodegradability, as well as abundant raw material which draws the attention for its use in areas such as medical-pharmaceutical, food, environment or energy. This symposium aims at strengthening the interactions between Brazilian and international researchers who are working on biological, biopolymer-based and bio-inspired materials and encourage scientific discussions of recent research, challenges and findings to foster new interdisciplinary collaborations.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Bio-inspired materials
- Bio-mimetic materials
- Technologies inspired by nature
- Characterization of biological and bio-inspired materials
- Processing of cellulose-based materials (e.g. cellulose nanocrystals, nanofibrillated cellulose and bacterial cellulose)
- 3D printing of Nano cellulose-based materials
- Applications of nano and bacterial cellulose products
- Biopolymer-based devices in food applications
- Biopolymer-based devices in medical-pharmaceutical applications
- Biopolymer-based devices in environment or energy applications

## **Symposium C - Advanced Materials and Surface Treatments for Biological, Dental and Medical Applications**

**Scope of the Symposium:** The ongoing development of biomaterials semi-synthetic, nanomaterials and soft materials continue to offer innovative, biological, dental and medical applications. These “materials for life” express the challenge which the field of biomaterials is currently facing: to provide effective and affordable biomaterials-based methods to repair and regenerate damaged and diseased tissues and organs and/or to interact with the specific biological target. This challenge can only be overcome by converging breakthrough developments from the fields of chemistry, physics, materials science, biology and engineering to address real clinical needs, while also considering the translational pathway from bench to bedside. Surface modifications techniques are currently used in order to tailor the surface of materials to obtain desired properties for several applications, in special to biological, dental and medical. Thus, materials that possess excellent bulk properties can be used in the aggressive environment where will be in service with appropriate surface. The symposium focuses on the development of new materials for biological, dental and medical applications and on the fundamental understanding of biological and biomimetic-solid interfaces as well as their implementation into biological, dental and medical applications. Interfacing biological molecules predictably with solid materials at the nanoscale is the key for hybrid materials design leading to innovative functional properties. Exploiting such properties towards developing functional materials and devices depends on a better understanding and control of the interfacial interactions at the atomic to nanoscale.

Selected papers will be published in a special issue of Revista Matéria.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Synthesis and characterization of novel biomaterials for biomedical applications
- Surface biofunctionality: the interface between the material and living cells and tissues
- Corrosion, tribocorrosion, and degradation of materials



- Mechanical behavior of materials for biomedical applications
- Biocompatibility of materials for biomedical applications
- Tissue regeneration: Advanced biomaterial approaches for promoting healing and restorative repair process
- Results of clinical evaluations of implantable materials

## **Symposium D - Environmental remediation - science applied in the search for solutions to air, water and soil pollution**

**Scope of the Symposium:** Sustainable development is certainly a concern all around the world, especially when 92% of the world population lives in polluted areas, according to the World Health Organization. As a consequence, managing pollution is certainly one of the world's greatest challenges. Whilst strategies towards waste minimization (including recycling) are now established in many countries, society continues to pollute the environment. For these reasons, this symposium intends to be a forum for discussions on new technologies for the mitigation of air, water and soil pollution.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Waste Management by immobilization of residues not amenable to recycling (e.g. in cements, building materials and polymers)
- Waste management by processing/concentrating diffuse wastes in aqueous media by the use of clays/zeolites/other ion exchangers; precipitation/redox chemistry; advanced oxidative processes
- Waste management by processing/concentrating diffuse wastes in gaseous media by the use of catalytic and photocatalytic processes
- Assessing/monitoring effectiveness of technologies for environmental remediation by the use of biosensors for toxicity monitoring
- Metal oxynitrides: synthesis, nitrating methods, characterization and theoretical calculations applied in the understanding of structural, vibrational and energetic aspects of oxynitride and related materials
- Environmental remediation systems based on oxynitride and related materials, including oxynitride based photocatalysts

## **Symposium E - Green Materials: Processes and Devices**

**Scope of the Symposium:** A sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs?. However, materials dominating nowadays technologies for electronic and energy storage devices have proven to lack sustainability. In contrast, carbon-based materials and technologies are options to reach sustainability in the electronic and energy storage fields. This means that new technologies covering the entire supply chain for developing environmentally friendly batteries are in high demand. Reuse and recycling are key factors to decrease the environmental impact of batteries, and energy storage and conversion devices. Finding new chemicals (easy-to-recover) to substitute critical materials (precious and/or heavy metals) will have a positive impact on "green" energy storage devices. Newly designed batteries, that use of carbon-based biosourced redox-active electrode materials, natural binders and "green" electrolytes, are expected to be biodegradable within dedicated waste management facilities. The intention/goal of this symposium is to bring together leading experts in bio-sourced materials and recycling and degradation strategies to highlight the forefront of research and steer future research directions in greener devices.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Biodegradable electrode materials
- Electronic and ionic transport in sustainable energy storage devices

- Heavy metal-free electrodes
- Materials from bio-waste
- Renewable biomass-derived materials for energy storage
- Supercapacitors
- Sustainable synthesis processes

## **MATERIALS PROPERTIES AND EMERGING TECHNOLOGIES**

### **Symposium F - Organic Electronics and Bioelectronics: Fundamentals, Applications and Emerging Technologies**

**Scope of the Symposium:** The Symposium intends to bring together chemists, materials scientists, biologist, physicists, and engineers from both academia and industry to share information on the organic- and bio-related materials for devices application and emerging technologies in organic electronics field. It includes all types of organic/inorganic functional materials, as well as their electronic and optoelectronics properties towards applications. The research topics comprise all types of synthesis, processing techniques (molecular crystals, multilayers, self-assemblies, printing techniques, and thin films), compounds (polymers, small molecules, composites, blends, nanoparticles, liquid crystals, hybrid), micro- and nano-fabrication, interfaces, spectroscopic characterization (linear and non-linear), surfaces (conducting, flexible, transparent substrates), electronic, and photonic properties. In addition, the symposium is equally opened for any type of electronic, photonic and hybrid devices, such as: light-emitting diodes (LEDs), field-effect transistors (FETs), MIS capacitors, diodes, electrochemical cells and transistors, photovoltaics (PVs), thermoelectrics, supercapacitors, integrated circuits, non-volatile memories, batteries, sensors, actuators & detectors. In this context, the Symposium aims to discuss the future of Organic Electronics and Bioelectronics to argue our current understanding and to define future trends of this exciting field.

#### **Abstracts will be solicited in (but not limited to) the following areas:**

- Synthesis and characterization of conjugated molecules and polymers, hybrid, and compounds
- Natural/biocompatible electronic materials
- Synthesis and characterization of functional liquid crystals and their applications
- Mixed ion-electron conduction
- Interfaces and bulk properties: advances in material processing
- Photonic, photophysics, and photochemistry of conjugated molecules and polymers
- Electronic, photonic, hybrid and carbon-based devices
- Micro- and nano-fabrication of organic or hybrid materials
- Organic sensors, biosensors and interfacing biology to electronics
- Theoretical modeling of conjugated molecules or polymers and organic devices

### **Symposium G - Photonics of Materials: Solar Cells, Photocatalysis, Luminescence and Physical Optics**

**Scope of the Symposium:** This symposium aims at providing a forum for material scientists, chemists and physicists where to debate about the state of the art and the perspectives of the photonic materials. Both fundamental luminescence and photovoltaic properties and application oriented material investigations will be considered, including the theoretical and experimental mechanisms involved in nanometric scale properties and aspects related to surface modification related to optical phenomena. The symposium also aims to integrate the institutions and their research groups interested in the processing and applications of materials for photovoltaic devices, photo catalysis and optical physics like light emitters, photo detectors and multiple junction devices.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Solar Cells
- Photocatalyst
- Luminescence
- Physical optics

## **Symposium H - 2nd Hydrogen Storage Alloys Workshop**

**Scope of the Symposium:** Safe and effective hydrogen storage is one of the key challenges for a broader use of hydrogen as an energy carrier. Hydrogen storage in metal hydrides may offer an interesting solution, since very high volumetric capacities can be attained when hydrogen is confined in the inner structure of an appropriate metallic alloy. In this workshop, the main aspects related to the structure, synthesis, processing, properties and applications of metal hydrides will be covered. A special emphasis is given for advanced processing and characterization of novel materials such as nanocomposites, severely deformed alloys, and high entropy alloys. The proposed program aims to provide a comprehensive overview of these interesting class of functional materials, which have a central role in the utilization hydrogen as an energy carrier but also could be used in other applications such as heat storage and battery electrodes.

**Abstracts will be solicited in (but not limited to) the following areas:**

- New Alloys and Composites with Enhanced Hydrogen Storage Properties
- Advanced Processing of Hydrogen Storage Materials
- Hydrogen Storage in Metal-Polymer Nanocomposite Materials
- Low Cost Alloys for Hydrogen Storage
- High Entropy Alloys for Hydrogen Storage
- Practical Applications of Hydrogen Storage Materials

## **Symposium I - Innovative applications for textile materials**

**Scope of the Symposium:** The symposium Innovative applications for textile materials will be focused on research and development of textile innovations, including biotechnology and enzyme technology applied to fibers and fabrics. The proposed symposium is intended to be multidisciplinary and the thematic technical sessions and oral presentations will consider: Alternative sustainable textile wet processing; Nanotechnology for textile finishing; Enzymatic and Biotechnology in textile processing; Treatment and recycling of textile waste; Smart technologies in textile processing;

The textiles and fabrics industry has significantly grown in the last decade, bringing new demands and the need for new fields research, such as the sustainability throughout the production scale, from the extraction of the raw material to the treatment of textile waste. In this sense, the textile industries are closely linked with the development of new materials or nanomaterials. The growing textile fields face many challenges and concerns, especially when are considering the issues of textile recycling, the large amount of waste and water used during the production. The development of greener and sustainable processes with less consumption of harmful chemical reagents, procedural milder conditions (neutral pH, lower temperatures), lower consumption of energy and water, and lower generation of effluents and residues. The use of bio, nano and other new technologies should, in principle, contribute to the development of innovative and high quality of products, in line with the technological requirements, and environmental preservation. The region of the Itajaí Valley is considered one of the largest textile centers in the country and Latin America and has various industries sectors using conventional and innovative technologies. The symposium is an exceptional opportunity for the discussion of research advances and prospects of technologies applied to the textile processing. Besides, will stimulate the exchange of information between participants from universities, research institutes, government agencies and industries.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Alternative sustainable textile wet processing
- Nanotechnology for textile finishing
- Enzymatic and Biotechnology in textile processing
- Treatment and recycling of textile waste
- Smart technologies in textile processing

## **Symposium J - Glass and Glass-Ceramics: Breakthrough Materials from Synthesis to Applications**

**Scope of the Symposium:** Glass and glass-ceramics have attracted large attention due to their interesting properties, which could be tune by changing composition as well as their isotropy, easiness and loss cost of preparation when compared to monocrystalline materials. Their excellent mechanical, electrical and optical properties make glass and glass-ceramics important materials for many technological applications. In this scenario, an extend research on the glasses has been carried in Brazil, following the trends of the international glass community researches on the synthesis, structural investigation, optical applications and characterization of different class of glass and glass-ceramics. This symposium on glasses and glass-ceramics, aims to gather the actual research community to share ideas, discuss results and debate the most recent research trends exploited on glass and glass-ceramic synthesis. The topics are mainly focused on, but not limited to, synthesis and characterization of glasses and glass-ceramics for a broad range of applications including optics, communication, data storage, luminescence, biology, electronics and optical microstructuring etc.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Synthesis of glass and glass-ceramics
- Structural properties of glass and glass-ceramics
- Optical properties of glass and glass-ceramics
- Optically active glass and glass-ceramics
- Rare-earth doped glass and glass-ceramics
- Advanced applications of smart glasses
- Photovoltaic glass technology
- Photochromic materials
- Electrical, mechanical and magnetic properties of glass and glass-ceramics
- Glass and glass-ceramics for biological applications

## **MATERIALS CHARACTERIZATION AND DEGRADATION**

### **Symposium K - i-Caloric Materials and Applications**

**Scope of the Symposium:** This symposium is focused on materials that present at least one of the i-caloric effects and, in addition, have emerging technological applications. The general definition of i-caloric effect can be stated as a thermal response of the material when exposed to a change of external perturbations (where i stands for intensive thermodynamic variable, including external fields). The nature of the response depends on the thermodynamic process performed on the material. The effects are characterized by a temperature change, when the material undergoes an adiabatic process; or an entropy change, when the material undergoes an isothermal process. Depending on the nature of this external perturbation (magnetic field, electric field or stress), i-caloric effects can be categorized as magnetocaloric effect, electrocaloric effect and mechanocaloric effect. Mechanocaloric effect can still be divided in elastocaloric effect, driven by uniaxial stress; barocaloric effect, driven by isotropic stress variations; and torsional effect, driven by pure shear stress of torsion. It is worth mentioning that a few materials present more than one i-caloric effect and are called multicaloric materials.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Materials: theory
- Materials: experimental
- Devices: theory, design
- Devices: experimental
- Other experimental setups
- Novel effects and applications

## **Symposium L - Materials degradation and solutions to increase its lifespan**

**Scope of the Symposium:** Understanding the fundamental science behind the degradation of materials and how to improve then reducing wear, corrosion and fatigue are vital more than ever. This symposium covers all aspects of fundamental and applied research on the degradation of metallic, ceramic, glasses, polymeric and composite materials. Characterization techniques needed to understand degradation phenomena and solutions to increase materials lifespan submitted to degradation, tribological fundamentals, tribocorrosion, tribotesting (micro and nanoscale), tribomaterials and in-situ tribology are also included.

We welcome contributions to improve scientific and mechanistic understanding of the degradation of materials, characterization tools, and solutions to avoid or reduce degradation.

Full papers of presented works may be submitted for publication in a special issue of the Journal of Bio- and Tribo-Corrosion (Springer).

**Abstracts will be solicited in (but not limited to) the following areas:**

- Advanced materials and tribomaterials
- Biotribology
- Coatings and surface treatments
- Corrosion, tribocorrosion and biotribocorrosion
- Degradation of materials
- Lubrication and lubricants, including solid lubricants
- Materials for corrosion control
- Mechanisms of friction and wear
- Surface treatments and multifunctional surfaces
- Tribology fundamentals

## **Symposium M - Magnetic and Superconducting Materials**

**Scope of the Symposium:** The symposium is intended to bring together scientists and engineers interested in all aspects of experimental and theoretical research in magnetic and superconducting materials, as well as in their technological applications. Contributions are expected in topics ranging from basic properties to recent developments in magnetism and superconductivity at nanoscale. Emphasis will be given on new materials, properties and devices.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Fundamental magnetic properties; Hard and soft magnetic materials and applications
- Magnetism in nanoparticles, nanowires, films, multilayers and other nanostructured materials; Magnetic semiconductors; Magnetism in carbon-based materials
- Micromagnetism
- Magnetization dynamics and magnetization processes in magnetic materials

- Nontrivial spin textures, stripe domains, vortices, skyrmions and other chiral structures
- Spintronics in metals and semiconductors; spin dependent transport
- Magnetocaloric materials and multiferroics
- Applied magnetism and instrumentation; non-destructive magnetic measurements; biomedical applications, magnetic recording
- Superconductors
- Spin and charge excitations in superconductors; Interaction between magnetism and superconductivity

## **MATERIALS SYNTHESIS AND PROCESSING**

### **Symposium N - Molecular Sieves: synthesis and applications**

**Scope of the Symposium:** Molecular Sieves are solids with defined porosity and with the capacity of differentiate molecules through their dimensions and geometries. They can be used as catalysts for several kinds of reactions, and also for separation and adsorption processes. In this class of materials are included: zeolite, mesoporous materials, hierarchical porous materials, lamellar materials, pillared clays, mesoporous and microporous carbons and others.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Zeolites
- Mesoporous Materials
- Lamellar materials
- Pillared Clays
- Mesoporous and microporous carbons
- hierarchical porous materials

### **Symposium O - Advanced laser materials processing and control of materials properties**

**Scope of the Symposium:** Materials processing and the control of surface properties are of utmost importance in the industrial environment. Several industries such as automotive, aerospace, oil & gas and biomedical can benefit from materials design and processing in the scope of advanced manufacturing. Among the technologies capable of processing materials, the laser-based technology rises as an advanced and promising tool due to its versatility, flexibility, and reproducibility. In addition, it is important to point it out several inherent advantages such as the capability of virtually processing any type of material (metals, ceramics, semiconductors, and polymers), does not involve any physical contact with the processed material (avoiding contamination), the developed processes can be carried out at high-processing speeds and can be easily scaled-up to a production environment. Among the laser materials processing methods, one can highlight the additive manufacturing, surface treatment (texturing, cladding, surface alloying, heat treatment, shock peening, among others). As a result, these laser materials processing may increase the wear and corrosion resistance and control wettability, cellular behavior, optical and mechanical properties, giving rise to advanced materials. Study and development of industrial applications involving the use of continuous wave (CW) and pulsed lasers (short- and ultrashort pulses) for processing metallic alloys, ceramics, polymeric and composites materials fit into the present symposium.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Laser Additive Manufacturing: reutilization of powder, topological optimization, monolithic concept and design, new metallic and ceramic powders, new ways of powder manufacturing, laser additive manufacturing for conformal cooling, heat exchangers, valves



- Laser surface texturing and functionalization: nano- and microtextures for controlling optical properties, the wettability of oil, water, saline solutions, and other liquids, cellular behavior, the coefficient of friction, wear and corrosion resistance
- Laser fabrication of nanomaterials: development and optimization of metallic, metal oxides, and polymeric nanomaterials, in particular, nanoparticles for applications in catalysis, drug delivery, antibacterial coatings, advanced liquid and dry lubricants,
- Laser shock peening: application of LSP in metallic alloys (steel, titanium, aluminum, among others) for improving wear and corrosion resistance and optimization of mechanical properties
- Other laser-based processes: laser cladding, laser surface alloying, laser heat treatment, laser micromachining, laser marking, and laser engraving

## **Symposium P - Materials and Fabrication Processes for Aeronautic and Space Applications**

**Scope of the Symposium:** The scope of the symposium is to promote the networking of researchers from the academic and industrial sectors interested in the research, development, manufacture and application of aeronautic and space materials (metals, ceramics, polymers and composites).

**Abstracts will be solicited in (but not limited to) the following areas:**

- Modeling and simulations
- Materials properties and characterization
- Materials degradation and protection
- Manufacturing of materials and components
- Additive manufacturing
- Sustainable and cost-effective materials & processes

## **Symposium Q - Advances in steel metallurgy and applications**

**Scope of the Symposium:** This symposium is dedicated to contributions regarding recent developments on steels ranging from fundamental aspects of physical metallurgy, enhancements in properties, and innovations in applications. Research areas related to novel alloy compositions and microstructures (TRIP, TWIP, high-entropy, low density, multiphase steels, etc.), phase transformations (TRIP / TWIP effects, bainitic, martensitic) in steels, improvements in mechanical and functional properties, enhancements in degradation behavior of steels (corrosion, wear and oxidation resistance), heat treatments (intercritical, Q&P, cryogenic, and thermochemical treatments), thermomechanical treatments, surface modifications, innovative applications in defense, automotive, biomedical, and other relevant industrial sector are welcome. Investigations by means of both theoretical and experimental approaches are encouraged. The main goal of this symposium is bringing together Brazilian and foreign experts in several aspects of steel research opening possibilities of valuable discussions of new concepts, trends and technologies related to developments and technological applications of steels. This symposium is also a valuable opportunity to strengthen on-going collaborations, prospect new ones and build-up research networks.

**Abstracts will be solicited in (but not limited to) the following areas:**

- TRIP and TWIP effects in steels
- Innovations in heat treatments of steels (Q&P, Intercritical, cryogenic treatments, and so on)
- Degradation of steels (corrosion, wear, tribo-corrosion, hydrogen embrittlement, high-temperature oxidation, decarburizing, etc.)
- Surface treatments and coatings
- High-entropy steels
- Multiphase steels

- Advanced high-strength steels
- Computational investigations in steels (DFT, Monte Carlo, molecular dynamics, phase field, and finite elements)
- Advanced characterization tools in steel research (Characterization in synchrotron sources, neutron diffraction and scattering, high-resolution transmission electron microscopy, scanning-transmission electron microscopy, atom probe tomography, EBSD, EELS)
- Thermomechanical treatments and processing

## **Symposium R - Fundamentals and applications of plasma processing of materials**

**Scope of the Symposium:** The aim of this symposium is to bring together physicists, chemists, materials scientists, dentists, engineers and members of other scientific communities, offering a forum for discussions on the advances of plasma processing of materials, from both experimental and theoretical approaches, to facilitate the contacts between science, technology and industry.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Fundamentals of deposition processes and techniques
- Experiments and simulations on plasma surface-interactions
- Plasma characterization
- Plasma Enhanced Chemical Vapor Deposition of protective coatings
- Plasma treatment of biomaterials
- Surface engineering via plasma processing
- Applications of plasmas in agriculture, medicine and environmental sciences

## **NANOSTRUCTURED AND FUNCIONAL MATERIALS**

### **Symposium S - Computational Design for Development of Functional Materials - Synergy Between Theoreticians and Experimentalists**

**Scope of the Symposium:** This symposium aims to discuss research frontiers and joining studies in theoretical and experimental areas in the control and understanding of intrinsic and extrinsic properties of functional materials. The main idea is to promote discussions involving fundamental and technological aspects of materials systems that may lead to the improvement, understanding and foreseeing of the properties of technological devices. It will be desirable to gather researchers actively working in Materials Science focusing on nanomaterials with functional properties and using both theoretical methods or experimental techniques to characterize electronic and structural properties. This meeting intends to open up new opportunities to collaboration between experimentalists and theoreticians improving the ways to gain insights into the atomistic understanding of the nanomaterials. The list of invited speakers includes several world leaders in computational simulations showing how the theoretical contributions can significantly aid the experimental observations to gain a better knowledge in Materials Science. Several participants for oral contributions will be selected among the best abstracts.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Computational simulation methods and experimental techniques applied to study structural and electronic properties of 1D, 2D and 3D materials
- Applied Nanostructured materials
- Development and application of art state computational methodologies; applied to Materials Science

- Materials with potential application in energy generation and environment
- Transparent conducting oxides
- Electron-material interaction
- Chemical reactions in materials synthesis
- Computational design of biomaterials
- Computational design of biomaterials
- Theoretical insights in catalysis

## **Symposium T - Nanofibers, Applications and Related Technology**

**Scope of the Symposium:** Nanofibers have become increasingly attractive, mainly because of their remarkable properties, highly porous structure and large surface-to-volume ratio, making them ideal for use in several applications. This symposium aims to provide a profitable environment for dissemination and discussion of projects and research related but not limited to the Development of new Functional Nanofibers, Design, Processing and Applications of Nanofibers, produced by different techniques, such as electrospinning, blow-spinning, rotating spinning, etc. The aim of this event is also to bring together students, scientists and researchers in academia and industry, in order to promote a greater interaction between research groups from different Universities and Companies, which work in the fields. It is thus expected that the symposium that strategically brings together researchers in related areas will provide a pleasant and rich discussion environment.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Technology innovations and trends
- Polymer composite functional nanofibers
- Progress on cellulose nanofibers
- Ceramic and metal nanofibers
- 3D nanostructures and actuators
- Processing of Fibrous Materials
- Physical Properties and characterization of Nanofibers
- Modeling and Theoretical Considerations
- Surface Modification and Functionalization of Nanofibers
- Green materials and sustainability
- Applications of nanofibers including filtration and water remediation processes, biomedical applications, optoelectronics, food packaging, smart wearables and textiles, energy harvesting and storage, catalysis, sensor and actuators, controlled delivery sy

## **Symposium U - Carbon-based materials and devices**

**Scope of the Symposium:** This symposium will provide a multidisciplinary forum for the discussion of carbon-based materials, composites and devices. Recent advances on fundamental, technological, design, simulation and applications of carbon-based materials will be covered by this symposium. The main focus will be related but not limited to carbon nanostructures and nanocomposites. Exfoliation methods, pyrolysis, process scalability, conductive inks, transfer methods (wet and dry), synthesis of hybrid materials, nano-functionalization (from graphene to graphite), fabrication of flexible electrochemical devices and applications of carbon-based materials will be contemplated in this forum. Advanced characterization of carbon-based materials and devices at the micro and nanoscale are also welcome to this forum (microscopy, spectroscopy, electrical, electrochemical and mechanical). In summary, the scope of this forum is broad and includes the most recent advances of carbon-based materials (from synthesis to applications).

**Abstracts will be solicited in (but not limited to) the following areas:**

- Nanocomposites with carbon-based additives
- Electrical and electrochemical characterization of carbon-based materials
- Nano-functionalization of carbon interfaces
- Synthesis of hybrid materials
- Synthesis and applications of biocarbons
- Flexible and stretchable electrochemical devices
- Advanced characterization
- Carbon materials for environmental technologies
- Energy storage and conversion devices
- Mechanical and rheological characterization of carbon-based nanomaterials and nanocomposites
- Computational modeling of carbon-based nanomaterials and nanocomposites

## Symposium V - Research on 2D material

**Scope of the Symposium:** The last few years, material scientists have focused a lot of their effort in studying the properties of bi-dimensional materials (2D material). Indeed, since the first experimental studies on graphene (2004), it has been shown that lots of other materials can be confined into two dimensions: transition metal dichalcogenides, Van der Waals heterostructures or more recently hybrid organic-inorganic perovskites. The research in this area is atypically intense resulting in more than 32.000 papers published since 2010. (web of science, keyword: 2D material), and almost half of those works were released since 2015 till now. In Brazil, this field is also extremely hot and we would like to suggest the creation of a symposium in the area of two-dimensional materials. There are many universities and active networks of collaborative researchers working in Brazil. For instance, the proponents of the symposium are members of a 2D materials network created in 2018 which is fully supported by the Minas Gerais state funding agency (FAPEMIG). Only this thematical network is composed of 6 federal universities and 36 professors. Also, there is another network called INCT of Nanocarbon that also supports researcher groups all over the country which work in the field of graphene, carbon nanotubes and 2D material. Very likely, a symposium in the area of 2D materials will be attractive for a large number of people in Brazil. Due to innumerous applications of such materials we believe that this symposium should cover a wide range of theoretical and applied sciences in physics, chemistry and biological applications. Thus we expect that this symposium should bring to the conference some new conferees that are not yet attending the SBPMat in 2019.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Synthesis of 2D material
- Electronic properties and applications
- Optical properties
- Biological applications
- Chemistry on 2D materials
- 2D material nano-composites

## Symposium X - Materials for Additive Manufacturing

**Scope of the Symposium:** Industry 4.0 is appointed by government and industry leaders as a new industrial revolution, which is based on the integration of intelligent production processes and advanced information technologies. Additive manufacturing (AM) or 3D printing is an important tool towards its implementation. It allows increasing flexibility, sustainability and automation in order to promote this integration. AM processes build parts layer by layer and may use different heating systems (laser, resistive heating, electron beam, etc.) and different raw materials (powder, wires, filaments, laminates, liquids, etc.). There is a crescent interest in the development of new materials to be used in these processes in order to satisfy their requirements and expand the AM application range. The specifics of each process make necessary the use

of materials with adequate characteristics in order to produce products with superior properties for high performance applications. AM has not only fastened the development of new manufacturing solutions, but also driven a renewed interest in existing architectures in materials science and novel designs. The present symposium aims to allow participants to present and share experiences, explore new developments and discuss AM topics with researchers from different institutions around the world. It will cover areas of development, processing and characterization of materials for AM, materials selection, final properties and applications and also post-processing and testing of AM products. Perspectives on the future directions on 3D printing on materials science will also be discussed.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Polymers, metals, ceramics and composites for additive manufacturing
- Processing and characterization of materials for additive manufacturing
- Post-processing of additive manufacturing products
- Testing of additive manufacturing products
- Development of hydrogels and bioinks for additive manufacturing
- Cell laden materials for 3D printing
- New 3D printing and additive manufacturing technologies





# **SYMPOSIUM A - Nanomaterials in Medicine, Nanotoxicology and Nanoregulation**

## **Symposium organizers:**

Valtencir Zucolotto (Nanomedicine and Nanotoxicology Group, IFSC, USP)

Juliana Cancino (Federal University of Alfenas)

Felipe Silva Belucci (Ministry of Science, Technology, Innovation and Communications - MCTIC)

José M Granjeiro (INMETRO)



# MONDAY , SEPTEMBER 23

\* Invited Lecture

## *SESSION A.01.D1 (09:30 - 10:30) - Room Ártico*

- 09:30 IR-780 albumin-based nanocarriers promote tumor regression by a non-irradiation mechanism** **A.01.D1.1**  
Gustavo Capistrano<sup>1</sup>, Clever Gomes Cardoso<sup>1</sup>, Andre LS Oliveira<sup>1</sup>, Sonia Santos<sup>1</sup>, Allancer D Nunes<sup>1</sup>, Ailton Sousa-Junior<sup>1</sup>, Emilio Ramos Cintra<sup>1</sup>, Nicholas Zufelato<sup>1</sup>, Eliana Martins Lima<sup>1</sup>, Carlos Henrique Castro<sup>1</sup>, Elisângela P. Silveira-Lacerda<sup>1</sup>, Andris Figueiroa Bakuzis<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 09:45 Allosteric Regulation of Enzymatic Activity with Ultrasmall Gold Nanoparticles** **A.01.D1.2**  
André Luís Lira da Silva<sup>1</sup>, Rodrigo Ferreira<sup>1</sup>, Maria Luiza Vilela Oliva<sup>1</sup>, Alioscka Augusto Sousa<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 10:00 Synthesis of Monodispersed Mesoporous Silica Nanoparticles and Their Stability in Biological Media** **A.01.D1.3**  
Andressa da Cruz Schneid<sup>1</sup>, Larissa Fernanda Ferreira<sup>1</sup>, Flávia Elisa Galdino<sup>1</sup>, Mateus Borba Cardoso<sup>1</sup>; <sup>1</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)
- 10:15 Synthesis and antibacterial activity of silver nanoparticles and nitric oxide donor in biohydrogels** **A.01.D1.4**  
Alessandro Lamarca Urzedo<sup>1</sup>, Marcelly Chue Gonçalves<sup>2</sup>, Monica Helena Monteiro do Nascimento<sup>1</sup>, Gerson Nakazato<sup>2</sup>, Christiane Bertachini Lombello<sup>1</sup>, Amedea Barozzi Seabra<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidade Estadual de Londrina

## *SESSION A.02.D1 (11:00 - 12:00) - Room Ártico*

- 11:00 Nanomaterials as Theranostic Agents against Cancer: Photohyperthermia and Nanotoxicology Studies** **A.02.D1.1**  
Valeria Spolon Marangoni<sup>1,2</sup>, Fabrício A. dos Santos<sup>3</sup>, Juliana Cancino Bernardi<sup>4</sup>, Valtencir Zucolotto<sup>2</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie, <sup>2</sup>Instituto de Física de São Carlos - USP, <sup>3</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>4</sup>Universidade Federal de Alfenas
- 11:30 Superparamagnetic iron oxide nanoparticles functionalized with europium complex and chitosan as vehicles for bioapplications** **A.02.D1.2**  
Ariane Espindola<sup>1</sup>, Paula Silvia Haddad<sup>1</sup>, Celso Molina<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 11:45 Spherical bioactive glass nanoparticles containing manganese for therapeutic delivery of ions** **A.02.D1.3**  
Breno Rocha Barrioni<sup>1</sup>, Parichart Naruphontjirakul<sup>2</sup>, Elizabeth Norris<sup>3</sup>, Siwei Li<sup>3</sup>, Nicole Kelly<sup>4</sup>, John Hanna<sup>4</sup>, Molly Stevens<sup>3</sup>, Julian Jones<sup>3</sup>, Marivalda Magalhães Pereira<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>King Mongkut's University of Technology Thonburi, <sup>3</sup>Imperial College, <sup>4</sup>University of Warwick

### **SESSION A.03.D1 (14:00 - 16:15) - Room Ártico**

- 14:00 Biofunctionality and bioengineered poly(lactic-co-glycolic) acid nanomedicines in biomedicine** **A.O3.D1.1\***  
Bruno Filipe Carmelino Cardoso Sarmiento<sup>1</sup>; <sup>1</sup>Universidade do Porto
- 14:30 Nanoparticle colloidal stability investigated by small-angle x-ray scattering** **A.O3.D1.2**  
Flávia Elisa Galdino<sup>1</sup>, Agustin Silvio Picco<sup>2</sup>, Renata Lang Sala<sup>3</sup>, Mateus Borba Cardoso<sup>1</sup>; <sup>1</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>2</sup>Universidad Nacional de La Plata, <sup>3</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 14:45 Ionic hydrogel-boron nitride nanotubes hybrid systems for pH and thermo-sensitive smart drug delivery** **A.O3.D1.3**  
Gabriel Augusto Alemão Monteiro<sup>1</sup>, WELLINGTON MARCOS MASCULINO SILVA<sup>1</sup>, Ricardo Geraldo Sousa<sup>2</sup>, Edésia Martins Barros Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 15:00 Development of bimodal nanoprobes based on Quantum Dots and paramagnetic chelates** **A.O3.D1.4**  
Gabriela Marques de Albuquerque<sup>1</sup>, Izabel Gomes Souza Sobrinha<sup>1</sup>, Paulo Euzébio Cabral Filho<sup>1</sup>, Adriana Fontes<sup>1</sup>, Beate S Santos<sup>1</sup>, Goreti Pereira<sup>1</sup>, Giovannia Araújo Pereira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 15:15 Evaluation of magnetic mesoporous silica nanoparticles as non-viral vectors in magnetofection** **A.O3.D1.5**  
Giorgio Francisco<sup>1</sup>, Sang Won Han<sup>1</sup>, Marcos Bizeto<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 15:30 Transport of stable silica nanoparticles across the intestinal model** **A.O3.D1.6**  
Iris Ribeiro Ribeiro<sup>1</sup>, Nathalia de Carvalho Indolfo<sup>2</sup>, Talita Miguel Marin<sup>2</sup>, Mateus B Cardoso<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 15:45 Radiation response enhancement of breast cancer cells using Bi<sub>2</sub>S<sub>3</sub> nanoparticles as radiosensitizers** **A.O3.D1.7**  
Isabel Galain<sup>1</sup>, María Eugenia Pérez Barthaburu<sup>1</sup>, Ivana Aguiar<sup>1</sup>, Emilia Tejeria<sup>1</sup>, María Elena Cardoso<sup>1</sup>, Mauricio Rodríguez Chialanza<sup>1</sup>, Gustavo Mourglia Ettlin<sup>1</sup>, Paula Arbildi<sup>1</sup>, Mariella Terán<sup>1</sup>; <sup>1</sup>Universidad de la República
- 16:00 Gd<sup>3+</sup>-Zeolites as contrast agents for MRI exams** **A.O3.D1.8**  
Janine Contro<sup>1</sup>, Ponnada A. Narayana<sup>2</sup>, Jose Geraldo Nery<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>University of Texas Health Science Center at Houston

## **TUESDAY, SEPTEMBER 24**

\* Invited Lecture

### **SESSION A.01.D2 (09:30 - 10:30) - Room Ártico**

- 09:30 Radiolabeling hydroxyapatite nanoparticles through doping process with purified COPPER-64 activated by neutron irradiation** **A.O1.D2.1**  
Marcelo Fernandes Cipreste<sup>1</sup>, Elisa Maria da Cunha Mercês<sup>1</sup>, Juliana Batista Silva<sup>1</sup>, Wagner da Nova Mussel<sup>2</sup>, Edésia Martins Barros Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais

- 09:45 Fungi identification by SERS using non-conventional metal nanoparticles** **A.O1.D2.2**  
Juliana Thaler<sup>1</sup>, Thiago Neves Machado<sup>1</sup>, Arandi Ginane Bezerra-Jr<sup>1</sup>, Rafael Eleodoro de Góes<sup>1</sup>, Raquel de Oliveira dos Santos<sup>1</sup>, Giovanna Zuzarte<sup>2</sup>, Sofia Luders<sup>2</sup>, Jade Soares<sup>2</sup>, Bruna Jacomel<sup>2</sup>, Ranata Gomes<sup>2</sup>, Amanda Bombassaro<sup>2</sup>, Vania Aparecida Vicente<sup>2</sup>, Graciela Ines Bolzon Muñiz<sup>2</sup>, Edilson Sergio Silveira<sup>2</sup>, Edvaldo Trindade<sup>2</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade Federal do Paraná
- 10:00 Evaluation of nanoparticle deposition causing cancer in the human respiratory tract: a case study of particles from the combustion of oxygenated fuels** **A.O1.D2.3**  
Lílian Lefol Nani Guarieiro<sup>1,2</sup>, Ilan Sousa Figueirêdo<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia Senai Cimatec, <sup>2</sup>Universidade Federal da Bahia
- 10:15 Biocide effect of polypropylene doped with silver nanoparticles anchored in a nanoclay surface** **A.O1.D2.4**  
Rodrigo Saldanha Romanus<sup>1</sup>, Yuri Bilk Matos<sup>1</sup>, Emilson Ribeiro Viana Junior<sup>1</sup>; <sup>1</sup>Federal University of Technology - Paraná

### *SESSION A.02.D2 (11:00 - 12:00) - Room Ártico*

- 11:00 Functionalization process of hydroxyapatite nanoparticles with folate-mdp and complexation with COPPER-64** **A.O2.D2.1**  
Marcelo Fernandes Cipreste<sup>1</sup>, Maria Betânia de Freitas Marques<sup>2</sup>, Juliana Batista Silva<sup>1</sup>, Pedro Lana Gastelois<sup>1</sup>, Waldemar Augusto de Almeida Macedo<sup>1</sup>, Wagner da Nova Mussel<sup>2</sup>, Edésia Martins Barros Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 11:15 Functionalized upconversion nanoparticles for photodynamic inactivation of bacteria** **A.O2.D2.2**  
Marylyn Setsuko Arai<sup>1</sup>, Malte Grüner<sup>1</sup>, Mariana Carreira Geralde<sup>1</sup>, Natalia Mayumi Inada<sup>1</sup>, Andrea Simone Stucchi de Camargo<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 11:30 Surface modification of hydroxyapatite with stearic acid for use in bone tissue engineering** **A.O2.D2.3**  
Julia Ce de Andrade Pinto<sup>1</sup>, Marcio Celso Fredel<sup>1</sup>, Dachamir Hotza<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:45 Triclosan electrochemical detection in tooth paste by means of gold nanoparticle-polyionic liquid composite electrode** **A.O2.D2.4**  
Priscila Rios Teixeira<sup>1</sup>, Leonardo Giordano Paterno<sup>1</sup>; <sup>1</sup>Universidade de Brasília

### *SESSION A.03.D2 (14:00 - 16:15) - Room Ártico*

- 14:00 Solid-supported membrane proteins studied by time-resolved, surface and tip-enhanced ir spectroscopies** **A.O3.D2.1\***  
Joachim Heberle<sup>1</sup>; <sup>1</sup>Freie Universitaet Berlin
- 14:30 Interactions of functionalized cellulose nanocrystals (CNCs) with murine dendritic cells (DCs)** **A.O3.D2.2**  
Raja Sebastian<sup>1</sup>, Marcelo Szymanski<sup>2</sup>, Ahmed Hamouda<sup>2</sup>, Chaolei Hu<sup>3</sup>, Eva Miriam Buhl<sup>4</sup>, Pich Andrij<sup>3</sup>, Zenke Martin<sup>2</sup>, Luiz Henrique Capparelli Mattoso<sup>1</sup>, Sechi Antonio<sup>2</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Institute for Biomedical Engineering, <sup>3</sup>DWI-Leibniz-Institute for Interactive Materials, RWTH Aachen University, <sup>4</sup>Institute for Pathology, Uniklinik RWTH Aachen

- 14:45 Magnetic-Upconverting  $Zn_xMn_{1-x}Fe_2O_4@SiO_2@CaF_2:Nd, Yb, Er$  Nanocolloids for Combined Thermal Therapy and Nanothermometry** **A.O3.D2.3**  
 NAVADEEP SHRIVASTAVA SHRIVASTAVA<sup>1</sup>, Marcus Vinicius-Araujo<sup>1</sup>, Ricardo Santana<sup>1</sup>, Andris Figueiroa Bakuzis<sup>1</sup>; <sup>1</sup>Institute of Physics, Federal University of Goiás
- 15:00 Development and manufacture of biosensors for rapid detection of miRNAs** **A.O3.D2.4**  
Vinicius Claudio Zoldan<sup>1</sup>, Artur Vicente Pfeifer Coelho<sup>1</sup>, André M. Daltrini<sup>1</sup>, Ronald Tararam<sup>1</sup>, Leandro Legramanti Ody<sup>1</sup>, Julia Cisilotto<sup>2</sup>, Paulo de Tarso Mendes Luna<sup>1</sup>, Tânia Beatriz Creczynski-Pasa<sup>2</sup>, André Avelino Pasa<sup>2</sup>; <sup>1</sup>CEITEC S.A, <sup>2</sup>Universidade Federal de Santa Catarina
- 15:15 FTIR spectroscopy in biofluids for Leishmaniasis diagnosis** **A.O3.D2.5**  
Gustavo Sander Larios<sup>1</sup>, Matheus Cicero Ribeiro<sup>1</sup>, bruno marangoni<sup>1</sup>, Carlos Alberto Ramos<sup>1</sup>, Cicero Rafael Cena<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso do Sul
- 15:30 Lipid nanocapsules containing bimodal Qdots: magnetic resonance and fluorescence images** **A.O3.D2.6**  
Bruna Lallo da Silva<sup>1</sup>, Laurent Lemaire<sup>2</sup>, Leila Aparecida Chiavacci<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>MINT, INSERM U1066- CNRS 6021- Université Angers
- 15:45 How analytical techniques can improve the nanotoxicity understanding** **A.O3.D2.7**  
Juliana Cancino Bernardi<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas

## Poster presentations

### SESSION A.P4 (18:00 - 19:30)

- 18:00 Fractal study of Kefir biofilms** **A.P4.1**  
Ellen Caroline Moraes Gonçalves<sup>1</sup>, EVERTON PINTO<sup>2</sup>, Nilson dos Santos Ferreira<sup>2</sup>, ROBERT SARAIVA MATOS<sup>3,2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade Federal do Amapá, <sup>3</sup>Universidade Federal de Sergipe
- 18:00 Microfluidic device based on diffusive concentration gradient as a potential platform for cell transfection** **A.P4.2**  
 Franciele Flores Vit<sup>1</sup>, Bruna Gregatti de Carvalho<sup>1</sup>, Hernandes Faustino de Carvalho<sup>1</sup>, Sang Won Han<sup>2</sup>, Lucimara Gaziola de la Torre<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal de São Paulo
- 18:00 Green synthesized nitric oxide-releasing chitosan coated  $Fe_3O_4@Ag$  nanoparticles: Antibacterial and antitumorogenic activities** **A.P4.3**  
Joana Claudio Pieretti<sup>1</sup>, Wallace Rosado Rolim<sup>1</sup>, Milena Trevisan Pelegrino<sup>1</sup>, Marcelly Chue Gonçalves<sup>2</sup>, Gerson Nakazato<sup>2</sup>, Ana Carolina Santos de Souza<sup>1</sup>, Amedea Barozzi Seabra<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidade Estadual de Londrina
- 18:00 Thermoreversibility in supramolecular amphiphiles analogues** **A.P4.4**  
Jovan Duran Alonso<sup>1</sup>, Leonardo Miziara Barboza Ferreira<sup>2</sup>, Marcia Helena Oyafuso<sup>1</sup>, Clóvis Augusto Ribeiro<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade de São Paulo
- 18:00 Label-free electrochemical biosensor for detection of PML-RAR $\alpha$  fusion gene based on gold nanoparticles and conductive polymer** **A.P4.5**  
Karen Yasmim Pereira dos Santos Avelino<sup>1</sup>, Maryana Rogéria dos Santos<sup>1</sup>, Norma Lucena-Silva<sup>2</sup>, César Augusto Souza de Andrade<sup>1</sup>, Maria Danielly Lima de Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Fundação Oswaldo Cruz

- 18:00 Single molecule transport phenomena through one nanopore** **A.P4.6**  
Leandro Augusto Zago<sup>1</sup>, Francisco E.G. Guimaraes<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 18:00 PEGDA / Laponite nanocomposite hydrogel for application in tissue engineering** **A.P4.7**  
Leila Samara Magalhães<sup>1</sup>, Conceição de Maria Vaz Elias<sup>2</sup>, Fernanda Roberta Marciano<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>, Anderson Oliveira Lobo<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Brasil
- 18:00 Targeted delivery nanoparticles for central nervous system cancers combined with tumor spheroids technologies for 3D in vitro** **A.P4.8**  
Leonardo Barcelos de Paula<sup>1</sup>, Antonio Claudio Tedesco<sup>1</sup>; <sup>1</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto
- 18:00 Hybrid Meglumine-based Supra-Amphiphiles Gels: tailoring material properties for smart functions** **A.P4.9**  
Leonardo Miziara Barboza Ferreira<sup>1</sup>, Jovan Duran Alonso<sup>2</sup>, Marcia Helena Oyafuso<sup>2</sup>, Clóvis Augusto Ribeiro<sup>2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>São Paulo State University
- 18:00 Impedimetric genosensor nanostructured with conductive polymer for detection of the human papillomavirus** **A.P4.10**  
Léony Soares Oliveira<sup>1</sup>, Karen Yasmim Pereira dos Santos Avelino<sup>1</sup>, Maria Danielly Lima de Oliveira<sup>1</sup>, César Augusto Souza de Andrade<sup>1</sup>, Norma Lucena-Silva<sup>2</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Fundação Oswaldo Cruz
- 18:00 Structural and thermal characterization of hyperbranched polyglycerols initiated by glycerol, dodecanediol and tetraethyleneglycol** **A.P4.11**  
Ligia Passos Maia<sup>1</sup>, Reinaldo Camino Bazito<sup>2</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Instituto de Química de São Carlos - Universidade de São Paulo
- 18:00 Zein nanoparticles as carrier systems for herbicides** **A.P4.12**  
Lucas Bragança de Carvalho<sup>1</sup>, Patrícia L.F. Proença<sup>1</sup>, Estefania Vangelie Ramos Campos<sup>2</sup>, Leonardo F Fraceto<sup>1</sup>; <sup>1</sup>Instituto de Ciência e Tecnologia - Câmpus de Sorocaba, <sup>2</sup>Centro de Ciências Naturais e Humanas - UFABC
- 18:00 Encapsulation of essential oils with bioinsecticide properties in zein nanoparticles** **A.P4.13**  
Renata A. Monteiro<sup>1</sup>, Luiz H.Y. Caldeira<sup>1</sup>, Patrícia L.F. Proença<sup>1</sup>, Estefania Vangelie Ramos Campos<sup>2</sup>, Marcela C. Camara<sup>1</sup>, Lucas Bragança de Carvalho<sup>1</sup>, Leonardo F Fraceto<sup>1</sup>; <sup>1</sup>Instituto de Ciência e Tecnologia - Câmpus de Sorocaba, <sup>2</sup>Centro de Ciências Naturais e Humanas - UFABC
- 18:00 Comparative study of the cytotoxicity of graphene oxide and reduced graphene oxide** **A.P4.14**  
Luci Cristina de Oliveira Vercik<sup>1,2</sup>, Antonio Márcio Scatolini<sup>1,2</sup>, Silvana Marina Piccoli Pugine<sup>1,2</sup>, Maria Júlia Passarin<sup>1,2</sup>, Eliana Cristina da Rigo Rigo<sup>1,2</sup>, Mariza P Melo<sup>1,2</sup>, Andrés Vercik<sup>1,2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Faculdade de Zootecnia e Engenharia de Alimentos
- 18:00 Photochemical synthesis of gold nanoparticles stabilized by graphene oxide-polyethylene imine nanocomposite** **A.P4.15**  
Maria Aparecida Pereira da Silva da Edgar da Silva Filho<sup>1</sup>, Leonardo Giordano Paterno<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 18:00 Photodynamic therapy of breast (MCF7) and oropharyngeal (HEp-2) tumor cells mediated by erythrosine B** **A.P4.16**  
Maria Julia Bistaffa<sup>1</sup>, Karina Alves Toledo<sup>1</sup>, Mirella Boaro Kobal<sup>1</sup>, Priscila Silva Sampaio Souza<sup>1</sup>, Pedro Henrique Benites Aoki<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

- 18:00 Detection of dopamine in presence of ascorbic and uric acids by surface-enhanced Raman scattering (SERS)** **A.P4.17**  
Maria Luísa Botter de Figueiredo<sup>1</sup>, Leonardo Negri Furini<sup>1</sup>, Cibely Silva Martin<sup>1</sup>, rafael Jesus gonçaves Rubira<sup>1</sup>, Carlos José Leopoldo Constantino<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista
- 18:00 Carbon paste electrode modified with gold nanoparticles and/or graphite powder with electrodeposited gold and its functionalization: application in electrochemical biosensor for Hantaviruses** **A.P4.18**  
Maria Luiza Lopes Sierra e Silva<sup>1</sup>, Marielena Vogel Saivish<sup>1</sup>, Marcos Lázaro Moreli<sup>1</sup>, Gildiberto Mendonça de Oliveira<sup>1</sup>, Tatiane Moraes Arantes<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 18:00 Thiol ligand adsorption on gold nanoparticle surfaces for HRP immobilization** **A.P4.19**  
Cristina Chies Bianco<sup>1</sup>, Caroline Menti<sup>2</sup>, Gustavo A Lorensi<sup>3</sup>, Cesar Aguzzoli<sup>4</sup>, Joao Antonio Pegas Henriques<sup>4</sup>, Cilene Labre<sup>5</sup>, Rubem Luis Sommer<sup>5</sup>, Mariana Roesch Ely<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul, <sup>2</sup>Dublin City University, <sup>3</sup>Universidade Federal do Rio Grande do Sul, <sup>4</sup>University of Caxias do Sul, <sup>5</sup>Brazilian Center for Research in Physics
- 18:00 Characterization of AuNPs modified with cysteamine and PEG for ScFv anti-MC-LR and anti-zika virus immobilization** **A.P4.20**  
Caroline Menti<sup>1</sup>, Guilherme Berseli<sup>2</sup>, João Pêgas Henriques<sup>1</sup>, Caroline Shirley murphy<sup>2</sup>, Richard O Kennedy<sup>2</sup>, Mariana Roesch Ely<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul, <sup>2</sup>Dublin City University
- 18:00 Relaxometry as a tool for the characterization of materials obtained by nanoprecipitation** **A.P4.21**  
Mariana Silva Alves<sup>1</sup>, Maria Inês Bruno Tavares<sup>1,2</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ
- 18:00 Development and characterization of lipid nanocarriers containing hesperitin** **A.P4.22**  
Marigilson Pontes Siqueira Moura<sup>1</sup>, Daniele Simão<sup>1</sup>, Patricia Goto<sup>2</sup>, Larissa Araújo Rolim<sup>1</sup>, Cédric-Olivier Turrin<sup>2</sup>, Muriel Blanzat<sup>2</sup>, Antonio Claudio Tedesco<sup>3</sup>; <sup>1</sup>Fundação Universidade Federal do Vale do São Francisco, <sup>2</sup>Université Toulouse III - Paul Sabatier, <sup>3</sup>Universidade de São Paulo
- 18:00 Development of MOF nanocapsules by spray drying** **A.P4.23**  
Marina Paiva Abuçafy<sup>1</sup>, Regina Célia Galvão Frem<sup>1</sup>, Cedric Boissiere<sup>2</sup>, Christian Serre<sup>3</sup>, Leila Aparecida Chiavacci<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Pierre and Marie Curie University - Paris 6, <sup>3</sup>École Supérieure de Physique et de Chimie Industrielles de la Ville de Paris ParisTech
- 18:00 Langmuir films as bioinspired materials of cellular membranes to investigate the cytotoxic effects of lactones** **A.P4.24**  
Matheus Elias Rosa<sup>1</sup>, Geanne Alexandra Alves Conserva<sup>2</sup>, João Henrique Ghilardi Lago<sup>2</sup>, Luciano Caseli<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal do ABC
- 18:00 Synthesis of hollow spheres of Y<sub>2</sub>O<sub>3</sub> doped with europium ions for future applications as drug delivery systems** **A.P4.25**  
MAYLURA MORAIS CALDAS<sup>1</sup>, Sandra de Cássia Pereira<sup>2,1</sup>, Alberthmeiry Teixeira de Figueiredo<sup>1</sup>, Cristiano Morita Barrado<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás - Regional Catalão, <sup>2</sup>Universidade Federal de Goiás



- 18:00 Photothermal therapy of cells derived from mammary carcinoma using gold shell-isolated nanoparticles** **A.P4.26**  
Mirella Boaro Kobal<sup>1</sup>, Sabrina Aléssio Camacho<sup>2</sup>, Maria Julia Bistaffa<sup>1</sup>, Karina Alves Toledo<sup>1</sup>, Pedro Henrique Benites Aoki<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>São Paulo State University
- 18:00 Sugar Decoration of Polyplexes: A Nonviral Vector Alternative for Gene Delivery** **A.P4.27**  
Morgana Sofia Zilse<sup>1</sup>, Ismael Casagrande Bellettini<sup>2</sup>, Maitê Thainara Barth<sup>2</sup>, Fernando C. Giacomelli<sup>3</sup>, Maria Cristina Carlan da Silva<sup>2</sup>, Lindomar Albuquerque<sup>3</sup>, Alex Alavarse<sup>3</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Federal de Santa Catarina, <sup>3</sup>Universidade Federal do ABC
- 18:00 Development of chitosan-coated liposomes for encapsulation of octylmethoxycinnamate for application in sunscreen formulations** **A.P4.28**  
Natalia Ruben Castro<sup>1</sup>, Cristal Santos Cerqueira Pinto<sup>1</sup>, Claudia Regina Elias Mansur<sup>1</sup>, Elisabete Pereira dos Santos<sup>1</sup>, Vania Emerich Bucco de Campos<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Fundação Centro Universitário Estadual da Zona Oeste, Faculdade de Farmácia
- 18:00 Synthesis of Enhanced Red Upconversion Luminescence ZnO:Al<sup>3+</sup>:Yb<sup>3+</sup>:Er<sup>3+</sup> nanoparticles** **A.P4.29**  
Nathalia Cristina Rissi<sup>1</sup>, Bianca Martins Estevao<sup>2,3</sup>, Valtencir Zucolotto<sup>3,1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Instituto de Física de São Carlos - USP
- 18:00 Computational Simulations of carbon nanotubes as nano-carriers for temozolomide** **A.P4.30**  
Nicolas Ferreira Martins<sup>1</sup>, Naiara Letícia Marana<sup>2</sup>, Julio Ricardo Sambrano<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>3</sup>São Paulo State University
- 18:00 Inclusion of phenylethylamine and piperine onto cationic  $\beta$ cyclodextrin-based polymers and his conjugation to gold nanostars. A new multicharge drug delivery system for potential uses in theranostics** **A.P4.31**  
Orlando Donoso<sup>1</sup>, Nicolás Yutronic<sup>1</sup>, Rodrigo Sierpe<sup>1</sup>; <sup>1</sup>Universidad de Chile
- 18:00 Triclosan electrochemical detection in tooth paste by means of gold nanoparticle-polyionic liquid composite electrode** **A.P4.33**  
Priscila Rios Teixeira<sup>1</sup>, Leonardo Giordano Paterno<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 18:00 Mesoporous silica/Eu<sup>3+</sup>-doped hydroxyapatite/ P(MAA) applied as drug delivery system for antitumoral drugs and diagnosis** **A.P4.34**  
Rafaela Caroline Rodrigues dos Apostolos<sup>1</sup>, Gracielle Andrade Ferreira<sup>1</sup>, Edésia Martins Barros Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 18:00 The solvent effect on the assembly of biosensors investigated by surface-sensitive techniques** **A.P4.35**  
Rafael de Oliveira Pedro<sup>1</sup>, Paulo Augusto Raymundo-Pereira<sup>1</sup>, Osvaldo Novais de Oliveira Jr<sup>1</sup>, Paulo Barbeitas Miranda<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 18:00 Phytase blended with conjugated copolymers as Langmuir-Blodgett films to enhance the bioelectronic properties of biosensors** **A.P4.36**  
Rebeca da Rocha Rodrigues<sup>1</sup>, Luciano Caseli<sup>1</sup>, Laura Oliveira Péres<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo

- 18:00 CORE/SHELL CoFe<sub>2</sub>O<sub>4</sub>@Ag obtained by microwave-assisted solvothermal method for antimicrobial applications** **A.P4.37**  
Mikaelly Daiany Ferreira Borges<sup>1</sup>, Regina Ferreira Ribeiro<sup>1</sup>, Igor Alexandre Torres Ribeiro<sup>1</sup>, Francisco S. M. Sinfrônio<sup>1</sup>, Fernando Carvalho Silva<sup>1</sup>, Alan Silva de Menezes<sup>2</sup>, Clenilton Costa dos Santos<sup>2</sup>, Luciana M. R. Alencar<sup>2</sup>; <sup>1</sup>Federal University of Maranhão, <sup>2</sup>Universidade Federal do Maranhão
- 18:00 Silver nanoparticle impregnated carbon material improves bone repair and protects against bone infections in the experimental model of bone lesion** **A.P4.38**  
Paulo Henrique Boulitreau Assirati<sup>1</sup>, Patricia Almeida Mattos<sup>2</sup>, Marilia Lucas Del Bel<sup>1</sup>, Bianca Martins Brito<sup>1</sup>, Gisele Aparecida Amaral-Labat<sup>3</sup>, Guilherme Frederico Bernardo Lenz e Silva<sup>2</sup>, Rodrigo Labat Marcos<sup>1</sup>; <sup>1</sup>Universidade Nove de Julho, <sup>2</sup>Escola Politécnica de Universidade de São Paulo, <sup>3</sup>University of São Paulo
- 18:00 Development of vesicles with oleic acid and protic ionic liquids to be use as antifungal vehicle** **A.P4.39**  
ROGERIO FREITAS DOS SANTOS<sup>1</sup>, ROBERTA DA SILVA BUSSAMARA RODRIGUES<sup>1</sup>; <sup>1</sup>Instituto de Química - UFRGS
- 18:00 Highly concentrated silver nanoparticles in an non-aqueous media using unusual reducing agent** **A.P4.40**  
Roselaine da Silva oliveira<sup>1</sup>, Fernanda Ferraz Camilo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 18:00 Low-cost evaluation device for shelf life of metal nanoparticles for medical applications** **A.P4.41**  
Julia Luise Melo Carneiro<sup>1</sup>, Vinicius Mariani Lenart<sup>1</sup>, Sergio Leonardo Gómez<sup>2</sup>, Rozane Fátima Turchiello<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade Estadual de Ponta Grossa
- 18:00 Gold nanoparticles as photothermal agents in biomembrane model systems** **A.P4.42**  
Sabrina Aléssio Camacho<sup>1</sup>, Mirella Boaro Kobal<sup>2</sup>, Pedro Henrique Benites Aoki<sup>2</sup>, Osvaldo Novais de Oliveira Jr.<sup>3,4,5</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universidade de São Paulo, <sup>4</sup>Instituto de Física de São Carlos - USP, <sup>5</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 18:00 Prospective study on applied nanotechnology in medicine** **A.P4.43**  
Sabrina Anicácia de Brito Correia<sup>1</sup>, Vitoria Regina Sousa Bispo<sup>1</sup>, Albert Santos Silva<sup>1</sup>, Daniella Stepheny Carvalho Andrade<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 Synthesis of Pullulan-g-PCL amphiphilic copolymer via click chemistry, for application in drug delivery systems** **A.P4.44**  
Layde Teixeira de Carvalho<sup>1</sup>, Rodolfo Minto de Moraes<sup>2</sup>, Maria Luiza da Silva Paula<sup>1</sup>, Talita Martins Lacerda<sup>1</sup>, Julio César dos Santos<sup>1</sup>, Simone Medeiros<sup>1</sup>, Amilton Martins Santos<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena - Universidade de São Paulo, <sup>2</sup>Escola de Engenharia de Lorena - USP
- 18:00 Characterization of silica nanoparticles synthesized by sol-gel method.** **A.P4.45**  
Vanessa Maruyama<sup>1</sup>, Anderson Rodrigo Fornelli<sup>1</sup>, Talita Fogaça de Oliveira<sup>2,1</sup>, Tiago Dutra Galvão<sup>2,1</sup>, Rodrigo Nagata<sup>1</sup>, Paulo Parreira<sup>2</sup>, Geovana Souza Ferreira Nogueira<sup>2</sup>; <sup>1</sup>Universidade Pitágoras Unopar, <sup>2</sup>Universidade Estadual de Londrina
- 18:00 Cassava derived biomass carbon with higher degree of graphitization and its composite with ZnO nanorods for electrochemical biosensors** **A.P4.46**  
Beatriz Aparecida Vessali<sup>1</sup>, Aline Macedo Faria<sup>1</sup>, Talita Mazon<sup>1</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer

- 18:00 Polycaprolactone electrospun nanofibers modified with graphene oxide: physical chemical study and interaction with living cells** **A.P4.47**  
Thiers Massami Uehara<sup>1</sup>, Fabrício A. dos Santos<sup>2</sup>, Vanessa Priscila Scagion<sup>1,3</sup>, Ieda Maria Martinez Paino<sup>4</sup>, Daniel Souza Corrêa<sup>1</sup>, Valtencir Zucolotto<sup>2</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>4</sup>Instituto de Física de São Carlos - USP
- 18:00 Perspectives on the use of nanomaterials in nanodiagnosis: A Technological Prospection** **A.P4.48**  
Valdivânia Albuquerque do Nascimento<sup>1</sup>, Rejane Teixeira do Nascimento<sup>1</sup>, Lucas Wendell Gonzaga Magalhães<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 Development of a potencial drug nanocarrier for cancer treatment based on superparamagnetic nanoparticles and pillar[5]arenes** **A.P4.49**  
Vinicius Gomes da Costa Madriaga<sup>1</sup>, Tamires Soares Fernandes<sup>1</sup>, Evelyn Christyan da Silva Santos<sup>2</sup>, Flávio Garcia<sup>2</sup>, Vanessa Nascimento<sup>1</sup>, Célia Machado Ronconi<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense, <sup>2</sup>Brazilian Center for Research in Physics
- 18:00 Vibrational characterization of Artepillin C: Fourier-transform infrared (FTIR), Raman and surface-enhanced Raman scattering (SERS) studies** **A.P4.50**  
Wallance Moreira Pazin<sup>1</sup>, Tibebe Lemma<sup>2</sup>, Leonardo Negri Furini<sup>3</sup>, Carlos José Leopoldo Constantino<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente, <sup>2</sup>Universidade Estadual Paulista, Campus de Presidente Prudente, <sup>3</sup>Universidade Estadual Paulista

## WEDNESDAY, SEPTEMBER 25

### Poster presentations

#### *SESSION A.P5 (11:00 - 12:30)*

- 11:00 Growth-controlled ZrO<sub>2</sub> nanocrystals produced by solvothermal synthesis** **A.P5.1**  
Mayara Silva Santos<sup>1</sup>, Jair Carlos Checon Freitas<sup>1</sup>, Cleocir José Dalmaschio<sup>1</sup>; <sup>1</sup>Universidade Federal do Espírito Santo
- 11:00 Design and characterization of NiFe<sub>2</sub>O<sub>4</sub> for medical applications** **A.P5.2**  
Gabriela Silva Goulart<sup>1</sup>, Marcelo Machado Viana<sup>2</sup>, Angela Barrera de Brito<sup>3</sup>, Cláudia Karina Barbosa de Vasconcelos<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica de Minas Gerais, <sup>2</sup>Universidade Federal de Minas Gerais, <sup>3</sup>Universidade Federal de Lavras
- 11:00 Cytotoxicity and luminescence imaging of CHO-k1 cells with Europium(III) complexes grafted on silica nanoparticles** **A.P5.3**  
Alessandra Mara Garbosa Mutti<sup>1</sup>, João Antonio Oliveira Santos<sup>1</sup>, Bruno César dos Santos<sup>1</sup>, Dalita G. S. M. Cavalcante<sup>1</sup>, Aldo Eloizo Job<sup>2,3</sup>, Ana Maria Pires<sup>1</sup>, Sergio Antonio Marques Lima<sup>4,1</sup>; <sup>1</sup>Faculdade de Ciências e Tecnologia da UNESP, Campus de Presidente Prudente, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universidade Estadual Paulista, Campus de Presidente Prudente, <sup>4</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente

- 11:00 Oxidative stress responses of *Danio rerio* exposed to copper oxide nanorods** A.P5.4  
Adriaine da Silva Mansano<sup>1</sup>, Jaqueline Pérola Souza<sup>1</sup>, Francine Perri Venturini<sup>1</sup>, Valtencir Zucolotto<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 11:00 The effects of combined graphene oxide and organophosphorus insecticide on *Danio rerio* liver cell line** A.P5.5  
Francine Perri Venturini<sup>1</sup>, Priscila Rodrigues Siqueira<sup>2</sup>, Adriaine da Silva Mansano<sup>3</sup>, Jaqueline Pérola Souza<sup>3</sup>, Valtencir Zucolotto<sup>1,3</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 11:00 Synthesis and Characterization of Gold Nanoparticles with Methylene Blue** A.P5.6  
Alex Rodrigues Praça<sup>1</sup>, Jéssica Aparecida Magalhães<sup>1</sup>, Suellen Rosa dos Santos<sup>1</sup>, Dayane Batista Tada<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 11:00 Controlling parameters and characteristics of electrochemical biosensors for enhanced detection of 8-hydroxy-2'-deoxyguanosine** A.P5.7  
Aline Macedo Faria<sup>1</sup>, Elisa Mauro Peixoto Prado<sup>1</sup>, Cristiane Battesini Adamo<sup>1</sup>, Alexandre Flacker<sup>1</sup>, Elson Longo<sup>2,3</sup>, Talita Mazon<sup>1</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>3</sup>Universidade Federal de São Carlos
- 11:00 Influence of anatase titanium dioxide on mechanical behavior of vegetal polyurethane** A.P5.8  
Amanda Pereira dos Santos da Costa<sup>1</sup>, Ana Paula de Moura<sup>1</sup>, Flaminio Cesar Pereira Sales<sup>1</sup>, Romeu Rony Cavalcante da Costa<sup>1</sup>, YURI VINICIUS BRUSCHI DE SANTANA<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - câmpus Cornélio Procópio
- 11:00 Green synthesis of silver nanoparticles employing aqueous extract from *Myrciaria cauliflora* seeds** A.P5.9  
Bianca Siqueira Schweigert<sup>1</sup>, Ana Carolina Mendes Hacke<sup>1</sup>, Dhésmon Lima<sup>1</sup>, Luma Clarindo Lopes<sup>1</sup>, Romaiana Picada Pereira<sup>1</sup>, Christiana Andrade Pessoa<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa
- 11:00 Characterization and cytotoxic evaluation of aflatoxins and their structural changes produced by a thermal-alkaline process, using two different heating sources** A.P5.10  
Anai Zavala-Franco<sup>1</sup>, Gerónimo Arámbula-Villa<sup>1</sup>, Patricia Ramírez-Noguera<sup>2</sup>, Martin Adelaido Hernández-Landaverde<sup>1</sup>, Alma Guadalupe Vázquez-Durán<sup>2</sup>, Abraham Méndez-Albores<sup>2</sup>; <sup>1</sup>Centro de Investigación y de Estudios Avanzados, <sup>2</sup>Universidad Nacional Autónoma de México-Facultad de Estudios Superiores Cuautitlán
- 11:00 Effect of photoirradiation on the structure and antibacterial activity of silver vanadate nanostructures** A.P5.11  
Ana Paula de Melo Monteiro Modesto<sup>1</sup>, Carlos Henrique Zanini Martins<sup>1</sup>, Ana Carolina Cauz<sup>2</sup>, Marcelo Brocchi<sup>2</sup>, Oswaldo Luiz Alves<sup>1</sup>; <sup>1</sup>INSTITUTE OF CHEMISTRY/UNICAMP, <sup>2</sup>Institute of Biology-Unicamp
- 11:00 Langmuir films as bioinspired materials to study the interaction of nitrofurantoin with cellular membrane models** A.P5.12  
André Campos Machado<sup>1</sup>, Luciano Caseli<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo

- 11:00 Evaluation of the antioxidant effect of reduced graphene oxide on the DPPH• radical** **A.P5.13**  
 Mariza P Melo<sup>1</sup>, Silvana Marina Piccoli Pugine<sup>1</sup>, Antonio Márcio Scatolini<sup>1</sup>, Luci Cristina de Oliveira Vercik<sup>1</sup>, Eliana Cristina da Rigo Rigo<sup>2</sup>, Andrés Vercik<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Faculdade de Zootecnia e Engenharia de Alimentos
- 11:00 Development of an innovative pectin-based formulation containing polymeric nanocapsules for topical application** **A.P5.14**  
Andrey Silva Morawski<sup>1</sup>, Rafaela P Gazzi<sup>1</sup>, Luiza Abrahão Frank<sup>1</sup>, Adriana Raffin Pohlmann<sup>1</sup>, Silvia Guterres<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 11:00 Preparation and characterization of polyelectrolyte BSA nanoparticles as a drug carrier for phthalocyanine drug** **A.P5.15**  
 Mariana Ribeiro Farah Mazzilli<sup>1</sup>, Maria Cristina Modesto Clementino<sup>1</sup>, Alexandro Silva Abreu<sup>2</sup>, Janicy Arantes Carvalho<sup>2</sup>, Milton Beltrame Junior<sup>1</sup>, Andreza Ribeiro Simioni<sup>1</sup>; <sup>1</sup>Universidade do Vale do Paraíba, <sup>2</sup>Universidade de São Paulo
- 11:00 Synthesis and characterization of polyelectrolyte coated PLGA nanoparticles for photodynamic therapy protocols** **A.P5.16**  
 Maria Cristina Modesto Clementino<sup>1</sup>, Mariana Ribeiro Farah Mazzilli<sup>1</sup>, Janicy Arantes Carvalho<sup>2</sup>, Alexandro Silva Abreu<sup>2</sup>, Milton Beltrame Junior<sup>1</sup>, Andreza Ribeiro Simioni<sup>1</sup>; <sup>1</sup>Universidade do Vale do Paraíba, <sup>2</sup>Universidade de São Paulo
- 11:00 Influence of microwave irradiation in the synthesis of zinc oxide nanoparticles by hydrothermal method** **A.P5.17**  
 Fabiana Navas Reis<sup>1</sup>, Éder José Guidelli<sup>2</sup>, Angela Kinoshita<sup>1</sup>; <sup>1</sup>Universidade do Sagrado Coração, <sup>2</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto
- 11:00 Use of pseudoboehmite for drug delivery system of simvastatin** **A.P5.18**  
 MARCOS ANTONIO AGUENA HERRERA VICENTE<sup>1</sup>, Antônio Hortêncio Munhoz Jr.<sup>1</sup>, Leila Figueiredo de Miranda<sup>1</sup>, Bruno Filipe Carmelino Cardoso Sarmiento<sup>2</sup>, Ayrton Bernussi<sup>3</sup>, Rene Olivier<sup>4</sup>, Roberto Rodrigues Ribeiro<sup>1</sup>, Denison Angelotti Moraes<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie, <sup>2</sup>i3S - Institute for Investigation and Innovation in Health, <sup>3</sup>Texas Tech University, <sup>4</sup>Instituto de Pesquisas Energeticas e Nucleares
- 11:00 Silver nanoparticle solutions synthesis and its bactericide effect, aiming applications in human and canine epiderme** **A.P5.19**  
Arthur Da Rocha Albertini<sup>1</sup>, Guilherme Frederico Bernardo Lenz e Silva<sup>1</sup>, Rodrigo Labat-Marcos<sup>2</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo, <sup>2</sup>Universidade Nove de Julho
- 11:00 Synthesis and Characterization of Multiferroic Thin Films Based on Bismuth Ferrite** **A.P5.20**  
 Marcos Aparecido dos Santos Mariano<sup>1</sup>, Yanela Mendez González<sup>2</sup>, Atair Carvalho da Silva<sup>1</sup>, José de los Santos Guerra<sup>3</sup>; <sup>1</sup>Federal University of Uberlândia, <sup>2</sup>Universidad de la Habana, <sup>3</sup>Universidade Federal de Uberlândia
- 11:00 Nano-sized garnets for application in magnetic hyperthermia** **A.P5.21**  
Barbara Sartorelli Caldeira<sup>1</sup>, Alexandre Zirpoli Simões<sup>1</sup>, Elson Longo<sup>2</sup>, Filiberto Gonzalez García<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universidade Federal de Itajubá
- 11:00 Development of a paper-based electrochemical board sensor for application in biosensors** **A.P5.22**  
Beatriz Aparecida Vessalli<sup>1</sup>, Talita Mazon<sup>1</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer

- 11:00 CdSe and CsPbX<sub>3</sub> nanocrystals: comparison and recent improvements in synthesis methods and stability** **A.P5.23**  
Beatriz Mourinho de Almeida Prado<sup>1</sup>, João Batista Souza Junior<sup>1</sup>, Leyre Gómez Navascués<sup>2</sup>, Tom Gregorkiewicz<sup>2</sup>, Laudemir Carlos Varanda<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>University of Amsterdam / Universiteit van Amsterdam
- 11:00 New copolymers of pMMA and pMAA to polymeric vesicles formation** **A.P5.24**  
Beatriz Steckelberg Watanabe<sup>1</sup>, Cláudia Santos Salim<sup>1</sup>, Fábio Herbst Florenzano<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena - USP
- 11:00 Lignin extracted from orange stem waste is an excellent nanoparticle precursor for biological application.** **A.P5.25**  
 Deyvid Souza Porto<sup>1</sup>, Bianca Martins Estevao<sup>2</sup>, Paula Maria Pincela Lins<sup>2</sup>, Nathalia Cristina Rissi<sup>2</sup>, Maria Fatima das Graças Fernandes da Silva<sup>1</sup>, Valtencir Zucolotto<sup>2</sup>; <sup>1</sup>Departamento de Química - Universidade Federal de São Carlos, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 11:00 SBA15 nanosystems containing proton "sponge" for tumor hypoxia conditions** **A.P5.26**  
Bianca Martins Estevão<sup>1</sup>, Nathalia Cristina Rissi<sup>1</sup>, Edson José Comparetti<sup>1</sup>, Valtencir Zucolotto<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 11:00 LaSrMnO nanoparticles characterization using SAXS technique** **A.P5.27**  
Brian Camilo Noguera Riascos<sup>1</sup>, Jenny Alejandra Mera Córdoba<sup>1</sup>, Guillermo Arturo Muñoz<sup>2</sup>, Marcela Beatriz Fernández van Raap<sup>2</sup>, Diego Fernando Coral<sup>1</sup>; <sup>1</sup>Institución Universitaria Centro de Estudios Superiores María Goretti, <sup>2</sup>Instituto de Física La Plata
- 11:00 Stability of nanodiamonds in mueller hinton culture medium** **A.P5.28**  
Carolina Ramos Hurtado<sup>1,2</sup>, Rafaela Campos Queiroz<sup>1,2</sup>, Cristiane Costa Wachesk<sup>2</sup>, Erenilda Ferreira Macedo<sup>2</sup>, Gabriela Ramos Hurtado<sup>3</sup>, Katia Conceição<sup>2</sup>, Vladimir Jesus Trava-Airoldi<sup>4</sup>, Dayane Batista Tada<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade Federal de São Paulo, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>Instituto Nacional de Pesquisas Espaciais
- 11:00 Biosynthesis of gold nanoparticles by different fractions of Brazilian red propolis extract** **A.P5.29**  
Caroline Eloisa Apolinário Botteon<sup>1</sup>, Priscyla Daniely Marcato Gaspari<sup>1</sup>; <sup>1</sup>Faculdade de Ciências Farmacêuticas de Ribeirão Preto
- 11:00 Hetero-organization of Dicationic Ionic Liquids and Neutral Active Pharmaceutical Ingredients in Solid and Liquid State** **A.P5.30**  
Caroline Raquel Bender<sup>1</sup>, Carla Andressa de Almeida Farias<sup>2</sup>, Marcos Antonio Villetti<sup>2</sup>, Marcos Antonio Pinto Martins<sup>2</sup>, Clarissa Piccinin Frizzo<sup>2</sup>; <sup>1</sup>Fundação Universidade Federal do Pampa, <sup>2</sup>Universidade Federal de Santa Maria
- 11:00 Evaluation of the mutagenic potential of nanofibrous of poli (butileno adipato-co-tereftalato)/polypyrrole scaffolds of the bone marrow of Wistar rats with analysis of micronuclei in peripheral blood** **A.P5.31**  
 Conceição de Maria Vaz Elias<sup>1</sup>, Antonio Luiz Martins Maia Filho<sup>2</sup>, Laryssa Roque da Silva<sup>2</sup>, Fernanda Roberta Marciano<sup>3</sup>, Anderson Oliveira Lobo<sup>3</sup>; <sup>1</sup>Universidade Brasil, <sup>2</sup>Universidade Estadual do Piauí, <sup>3</sup>Universidade Federal do Piauí

- 11:00 Production of diamond nanoparticles HFCVD synthesized from laser ablation for drug delivery** **A.P5.32**  
Cristiane Costa Wachesk<sup>1</sup>, Rebeca Falcão Correia<sup>2</sup>, Carolina Ramos Hurtado<sup>3,1</sup>, Rafaela Campos Queiroz<sup>3,1</sup>, Erenilda Ferreira Macedo<sup>1</sup>, Getúlio Vasconcelos<sup>4,5</sup>, Dayane Batista Tada<sup>1</sup>, Vladimir Jesus Trava-Airoidi<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>4</sup>Instituto de Aeronáutica e Espaço, <sup>5</sup>Instituto de Estudos Avançados
- 11:00 Toxicological evaluation of ultrasmall citrate-coated cobalt and nickel ferrite nanoparticles** **A.P5.33**  
Daniele Alves Fagundes<sup>1</sup>, Patrícia Mariana Alves Caetano<sup>1</sup>, Joice Yoko D Alessandro Idehara<sup>1</sup>, Liliam Viana Leonel<sup>1</sup>, Luis Eugenio Fernandez-Outon<sup>2</sup>, Raquel Gouvea dos Santos<sup>1</sup>, José Domingos Ardisson<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 11:00 Boron nitride nanotubes associated with magnetic particles for applications as drug delivery systems and magnetohyperthermia** **A.P5.34**  
Daniele Amato Moreira Nazar<sup>1</sup>, WELLINGTON MARCOS MASCULINO SILVA<sup>1</sup>, Edésia Martins Barros Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 11:00 Radiotoxicity of gold nanoparticles in human glioma cells** **A.P5.35**  
Danieli Born Guerra<sup>1</sup>, Elisa Magno Nunes Oliveira<sup>1</sup>, Fellipe Almeida Alves<sup>1</sup>, Pedro Vargas<sup>1</sup>, Fernanda Morrone<sup>1</sup>, Daniela Estácio<sup>2</sup>, Patrícia Sbaraini<sup>2</sup>, André Fay<sup>2</sup>, Ricardo Meurer Papaléo<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio Grande do Sul, <sup>2</sup>Hospital São Lucas
- 11:00 Synthesis and characterization of hybrid nanostructured lipid carriers aiming a controlled release of bioactives** **A.P5.36**  
Débora Ribeiro Antunes<sup>1</sup>, Alex Otávio Sanches<sup>1</sup>, Leonardo F Fraceto<sup>2</sup>, Estefania Vangelie Ramos Campos<sup>3</sup>, Renato Grillo<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia de Ilha Solteira - UNESP, <sup>2</sup>Instituto de Ciência e Tecnologia - Câmpus de Sorocaba, <sup>3</sup>Centro de Ciências Naturais e Humanas - UFABC
- 11:00 Photothermal effect in conjugated polymers/fullerene heterojunctions nanoparticles** **A.P5.37**  
Deize Corradi grodniski<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>, Marlus Koehler<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 11:00 Silver-hydroxyapatite nanocomposites against *Candida krusei* isolated from a clinical sample** **A.P5.38**  
Bianca Gottardo<sup>1</sup>, João Paulo Zen Siqueira<sup>2</sup>, Mario Henrique Paziani<sup>3</sup>, Marcia Regina von Zeska Kress<sup>3</sup>, Margarete Tereza Almeida<sup>2</sup>, Diogo Paschoalini Volanti<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus São José do Rio Preto, <sup>2</sup>Faculdade de Medicina de São José do Rio Preto, <sup>3</sup>Faculdade de Ciências Farmacêuticas de Ribeirão Preto
- 11:00 Selective cancer treatment by combination of hyperthermia and photodynamic therapy drugs loaded in low-density nanoemulsion** **A.P5.39**  
Diogo Silva Pellosi<sup>1</sup>, Paulo César Morais<sup>2</sup>, Antonio Claudio Tedesco<sup>3</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade de Brasília, <sup>3</sup>Universidade de São Paulo

- 11:00 Evaluating the relationship between drying process with the graphene oxide physicochemical properties and impacts on its nanotoxicity** **A.P5.40**  
Djalma Lucas de Sousa Maia<sup>1</sup>, Leandro Carneiro Fonseca<sup>2</sup>, Fabrício de Souza Delite<sup>3</sup>, Francine Coa<sup>3</sup>, Diego Stefani Teodoro Martinez<sup>3</sup>, Oswaldo Luis Alves<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>INSTITUTE OF CHEMISTRY/UNICAMP, <sup>3</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)
- 11:00 Effects of gemcitabine and paclitaxel delivery by cell membrane-derived nanoparticles on pancreatic cancer cells and monocytes.** **A.P5.41**  
Edson José Comparetti<sup>1</sup>, Valtencir Zucolotto<sup>1,2</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 11:00 Influence of nickel hydroxide nanoparticles in self-assemble structure of fibroin** **A.P5.42**  
Eduardo Ruben do Nascimento<sup>1</sup>, Wendel Andrade Alves<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Optical, structural and biocompatible properties of silver doped sodium titanate nanoparticles** **A.P5.43**  
Mirella Sousa Vieira<sup>1</sup>, Eliete Almeida Alvin<sup>2</sup>, Jerusa M. de Oliveira<sup>2</sup>, Matheus Vinicius da Silva<sup>2</sup>, JOÃO PAULO SANTOS DE CARVALHO<sup>2</sup>, Uéslen Rocha Silva<sup>2</sup>, Carlos Jacinto<sup>2</sup>, Eiripedes Alves da Silva Filho<sup>2</sup>, Noelio Oliveira Dantas<sup>2</sup>, Lucas Anhezini de Araújo<sup>2</sup>, Anielle Christine Almeida Silva<sup>2</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Universidade Federal de Alagoas
- 11:00 Biological, structural and luminescent properties of EU<sup>3+</sup> DOPED TiO<sub>2</sub> nanocrystals for fluorescent imaging in drosophila melanogaster** **A.P5.44**  
JOÃO PAULO SANTOS DE CARVALHO<sup>1</sup>, Eliete Almeida Alvin<sup>1</sup>, Wagner Ferreira da Silva<sup>1</sup>, Jerusa M. de Oliveira<sup>1</sup>, Uéslen Rocha Silva<sup>1</sup>, Eiripedes Alves da Silva Filho<sup>1</sup>, Carlos Jacinto<sup>1</sup>, Noelio Oliveira Dantas<sup>1</sup>, Lucas Anhezini de Araujo<sup>1</sup>, Anielle Christine Almeida Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Alagoas
- 11:00 Liposomes loaded with magic-sized quantum dots and flavonoid compounds: characterization, biocompatibility and monitoring in biological systems** **A.P5.45**  
Eliete Almeida Alvin<sup>1</sup>, Amanda Evelyn da Silva<sup>1</sup>, Samaysa de Lima Lins<sup>1</sup>, Morgana Vital de Araújo<sup>1</sup>, JOÃO PAULO SANTOS DE CARVALHO<sup>1</sup>, Tânia M. Sarmiento Silva<sup>2</sup>, Uéslen Rocha Silva<sup>1</sup>, Carlos Jacinto<sup>1</sup>, Celso de Amorim Camara<sup>2</sup>, Magna Suzana Alexandre-Moreira<sup>1</sup>, Fabiane Caxico de Abreu Galdino<sup>1</sup>, Noelio Oliveira Dantas<sup>1</sup>, Anielle Christine Almeida Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Alagoas, <sup>2</sup>Universidade Federal Rural de Pernambuco
- 11:00 Study of structural, optical and magnetic properties of CEO<sub>2</sub> nanoparticles doped with Gd** **A.P5.46**  
Emanoel José Ferreira da Conceição<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 11:00 X-ray attenuation analysis with plumbing glass shielding and baquelite** **A.P5.47**  
Emiliane Advíncula Malheiros<sup>1</sup>, Roberto Paulo Barbosa Ramos<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 11:00 Gold nanoparticles anchored with two quinoxaline derivatives for targeting PIK3 $\alpha$**  **A.P5.48**  
Janine Araújo<sup>1</sup>, Fabrício Gava Menezes<sup>1</sup>, HELOIZA FERNANDA OLIVEIRA DA SILVA ATHAYDE<sup>1</sup>, Davi S Vieira<sup>1</sup>, Sérgio Ruschi Bergamachi Silva<sup>1</sup>, Adailton João Bortoluzzi<sup>2</sup>, Celso Sant'Anna<sup>3</sup>, Mateus Eugenio<sup>3</sup>, Jannyely M Neri<sup>1</sup>, Luiz Henrique Gasparotto<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Federal de Santa Catarina, <sup>3</sup>National Institute of Metrology



- 11:00 Development and characterization of polymeric PLGA-nanocapsules to entrapment of Amitraz and Fipronil drugs for veterinary use** **A.P5.49**  
 Roberto Popolim<sup>1</sup>, Gabriela Aparecida Galves Freitas<sup>1</sup>, Camila Fernanda Amantino<sup>1</sup>, Fernando Lucas Primo<sup>1</sup>; <sup>1</sup>Faculdade de Ciências Farmacêuticas de Araraquara - FCFAR
- 11:00 Development characterization of polymeric PLGA-nanocapsules to entrapment of anthraquinona from biotechnological production: *in vitro* cytotoxicity** **A.P5.50**  
 Camila Fernanda Amantino<sup>1</sup>, Luciana Guimarães Munhoz<sup>1</sup>, Antonio Claudio Tedesco<sup>2</sup>, Fernando Lucas Primo<sup>1</sup>; <sup>1</sup>Faculdade de Ciências Farmacêuticas de Araraquara - FCFAR, <sup>2</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto
- 11:00 *In vitro* cytotoxicity evaluation of stable nanoemulsions containing copaiba oil and coenzyme Q10 on human fibroblast cells** **A.P5.51**  
Fiammetta Nigro<sup>1</sup>, Cristal Santos Cerqueira Pinto<sup>1</sup>, André Linhares Rossi<sup>2</sup>, Veronica Silva Cardoso<sup>3</sup>, Alane Vermelho<sup>3</sup>, Leonardo Rimrichter<sup>3</sup>, Eduardo Ricci Júnior<sup>3</sup>, Elisabete Pereira dos Santos<sup>3</sup>, Claudia Regina Elias Mansur<sup>1</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ, <sup>2</sup>Brazilian Center for Research in Physics, <sup>3</sup>Universidade Federal do Rio de Janeiro
- 11:00 A new hybrid organic-inorganic polyoxidovanadate with an open cage structure** **A.P5.52**  
Gabriel Barros Baptistella<sup>1</sup>, Francielli Sousa Santana<sup>1</sup>, David Lewis Hughes<sup>2</sup>, Jaisa Fernandes Jaísa<sup>1</sup>, Eduardo Lemos de Sá<sup>1</sup>, Giovana Gioppo Nunes<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>School of Chemistry, University of East Anglia, Norwich, NR47TJ, UK
- 11:00 Characterization of a potential PLGA-ALA nanoparticle system to improve the treatment of deeper skin cancers.** **A.P5.53**  
Geisiane Rosa da Silva<sup>1</sup>, Amanda Luizetto dos Santos<sup>2</sup>, Marinalva Cardoso dos Santos<sup>3</sup>, Sandra Cruz dos Santos<sup>3</sup>, Vania Rodrigues de Lima<sup>3</sup>, Natalia Mayumi Inada<sup>1,4</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Nanomed - Inovação em Nanotecnologia, <sup>3</sup>Universidade Federal do Rio Grande, <sup>4</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 11:00 Citotoxicity of dehydrodieugenol investigated by means of langmuir films as biomembrane inspired materials** **A.P5.54**  
Giulia Elisa Guimarães Gonçalves<sup>1</sup>, Samuel Santos de Oliveira<sup>2</sup>, João Henrique Ghilardi Lago<sup>2</sup>, Luciano Caseli<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal do ABC
- 11:00 The influence of temperature in amine functionalized gold nanoparticle** **A.P5.55**  
Gleice Conceição Mendonça Germano<sup>1</sup>, Larissa M. B. Soares<sup>2</sup>, Isabel Carvalho Carvalho<sup>1</sup>, Greice K. B. Costa<sup>3</sup>; <sup>1</sup>Department of physics, Pontifical Catholic University of Rio de Janeiro - PUC-Rio, <sup>2</sup>Universidade Federal do Rio de Janeiro, <sup>3</sup>Universidade Federal Rural do Rio de Janeiro
- 11:00 Understanding the cytotoxic effects of gamma-terpineol through bioinspired materials of cellular membranes** **A.P5.56**  
Guilherme Nunez Nunez<sup>1</sup>, Patrícia Sartorelli<sup>1</sup>, Luciano Caseli<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 11:00 Bioinspired materials as cellular membrane models to study the cytotoxic effects of vancomycin** **A.P5.57**  
Heung Jin Santana<sup>1</sup>, Luciano Caseli<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo

- 11:00 Temperature response of PDMAEMA-b-PS aggregates: anions effects** **A.P5.58**  
 Carolina Melo da Silva<sup>1</sup>, Igor Wallace Ferreira da Silva<sup>1</sup>, Milton Walsinir Lima Junior<sup>1</sup>, Valdomiro Vagner de Souza<sup>2</sup>, Fabio Herbst Florenzano<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena - USP, <sup>2</sup>Universidade de São Paulo
- 11:00 Synthesis and characterization of nanocomposite MCM-41/AuNRs for bioapplication in photohyperthermia for cancer treatment** **A.P5.59**  
Isabela Barreto da Costa Januário Meireles<sup>1</sup>, Edésia Martins Barros Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 11:00 Surface PEGylation of hybrid mesoporous silica nanoparticles with incorporated Ir(III) complexes for Photodynamic Therapy** **A.P5.60**  
Isabella Pinazo Geremias<sup>1</sup>, Bianca Martins Estevão<sup>1</sup>, Raquel Riciati do Couto Vilela<sup>2</sup>, Kassio Papi da Silva Zanoni<sup>1</sup>, Maria Costa<sup>1</sup>, Andrea Simone Stucchi de Camargo<sup>3</sup>, Valtencir Zucolotto<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>3</sup>Instituto de Física de São Carlos - USP
- 11:00 Evaluation of ascorbic acid as  $\beta$ -amyloid aggregation inhibitor** **A.P5.61**  
Isabella Sampaio do Nascimento<sup>1</sup>, Felipe Quatroni<sup>2</sup>, Valtencir Zucolotto<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP, <sup>2</sup>Universidade Federal de São Carlos
- 11:00 Encapsulation of *Piper nigrum* essential oil in biodegradable gelatin and PCL nanoparticles** **A.P5.62**  
Ítalo Carvalho da Costa<sup>1</sup>, Sidney Gomes Azevedo<sup>1</sup>, Edgar Aparecido Sanches<sup>1</sup>, Henrique Duarte da Fonseca Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 11:00 Lipid langmuir monolayers as bioinspired materials to investigate the interaction and nanotoxicity of the antineoplastic compound anastrozole** **A.P5.63**  
Jefferson Carnevalle Rodrigues<sup>1</sup>, Luciano Caseli<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 11:00 Fluorescence modulation of chlorin by conjugation with metallic and bimetallic nanoparticles** **A.P5.64**  
Jéssica Aparecida Magalhães<sup>1</sup>, Adjaci Fernandes Uchoa<sup>2</sup>, Helena Couto Junqueira<sup>3</sup>, Dayane Batista Tada<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Anhembí Morumbi, <sup>3</sup>Universidade de São Paulo
- 11:00 Synthesis and characterization of Ag (III) doped L-Asparagine single crystals.** **A.P5.65**  
João Gomes Oliveira Neto<sup>1</sup>, Jacivan Viana Marques<sup>1</sup>, Ian Felipe Sousa Reis<sup>1</sup>, Otávio Cândido Neto<sup>1</sup>, Gabriel Cirqueira Santos<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 11:00 The influences of ph on the functionalization process of copper-doped hydroxyapatite nanoparticles with folate: synthesis and releasing assays** **A.P5.66**  
 Elisa Maria da Cunha Mercês<sup>1</sup>, Marcelo Fernandes Cipreste<sup>1</sup>, Edésia Martins Barros Sousa<sup>1</sup>, João Lucas Isidoro Dos Santos<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 11:00 Synthesis and characterization of copper (II) complex with 1,10-phenanthroline and Glycine: an apoptosis inductor.** **A.P5.67**  
 João Gomes de Oliveira Neto<sup>1</sup>, Kamila Rodrigues Abreu<sup>1</sup>, Ian Felipe Sousa Reis<sup>1</sup>, MARINA COSTA RAMOS<sup>1</sup>, Francisco Ferreira Sousa<sup>2</sup>, Aramys Silva Reis<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Universidade Federal do Pará

**11:00 Fluorescence studies of Photogem®(PG)-halloysite nanotubes (HNT) films for Photodynamic Therapy (PDT) applications. A.P5.68**

Matheus Gomes Kosinski<sup>1</sup>, ALINE ORVALHO PEREIRA<sup>1</sup>, Natalia Mayumi Inada<sup>2</sup>, Vanderlei Salvador Bagnato<sup>2</sup>, José Roberto Tozoni<sup>3,4</sup>, Alexandre Marletta<sup>3</sup>, Patricia Targon Campana<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>Universidade Federal de Uberlândia, <sup>4</sup>UFU

**11:00 Theranostic nanomaterials coated with cell membrane for nanomedicine applications A.P5.69**

Paula Maria Pincela Lins<sup>1</sup>, Juliana Cancino Bernardi<sup>1</sup>, Valtencir Zucolotto<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)



# **SYMPOSIUM B - Biological, biopolymer-based and bio-inspired materials**

## **Symposium organizers:**

Nico Bruns (University of Strathclyde)

Rafael Libanori (ETH Zurich)

Gilberto Siqueira (EMPA)

Sara Velasquez (University of Strathclyde)

Classius Ferreira da Silva (Universidade Federal de São Paulo)

Mariana Agostini de Moraes (Universidade Federal de São Paulo)

Marisa Masumi Beppu (UNICAMP)

Thomas Crouzier (KTH Royal Institute of Technology)



# MONDAY , SEPTEMBER 23

\* Invited Lecture

## *SESSION B.01.D1 (09:30 - 10:30) - Room Pérsico*

- 09:30 Research on bio-based materials in the era of Artificial Intelligence** **B.O1.D1.1\***  
Oswaldo Novais de Oliveira Jr<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP
- 10:00 A Green 3D Scaffolds based on Chitosan with Thiol Group as a Model for Adsorption of Hazardous Organic Dye Pollutants** **B.O1.D1.2**  
Fernanda G L Medeiros Borsagli<sup>1</sup>, ALESSANDRO BORSAGLI<sup>2</sup>; <sup>1</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri, <sup>2</sup>Pontifícia Universidade Católica de Minas Gerais
- 10:15 Stimuli-responsive amphiphilic polymer conetwork microcapsules** **B.O1.D1.3**  
Sara Tatiana R. Velasquez<sup>1</sup>, André Studart<sup>2</sup>, Nico Bruns<sup>1</sup>; <sup>1</sup>University of Strathclyde, <sup>2</sup>Swiss Federal Institute of Technology / Eidgenössische Technische Hochschule ETH Zürich

## *SESSION B.02.D1 (11:00 - 12:00) - Room Pérsico*

- 11:00 The 3D bioprinting technology and its perspectives in Brazil** **B.O2.D1.1\***  
Ana Luiza Garcia Millás<sup>1</sup>, Pedro Xavier Rodriguez Massager<sup>1</sup>; <sup>1</sup>3D Biotechnology Solutions
- 11:30 Mechanical-Chemical Coupling Effects in Soft Biomaterials: examples in Temporomandibular Joint Discs and Hybrid-Natural Rubber membranes** **B.O2.D1.2**  
Rodney Marcelo do Nascimento<sup>1,2,3</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>Université de Lorraine
- 11:45 physical properties of thermo-hydro-mechanically (THM) flattened and densified bamboo** **B.O2.D1.3**  
Marzieh Kadivar<sup>1</sup>, Christian Gauss<sup>1</sup>, Samuel Charca<sup>2</sup>, Khosrow Ghavami<sup>3</sup>, Holmer Savastano Junior<sup>4</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidad de Ingeniería y Tecnología, UTEC, <sup>3</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>4</sup>University of São Paulo

## *SESSION B.03.D1 (14:00 - 16:15) - Room Pérsico*

- 14:00 Bioinspired hierarchical nanocellulose foams** **B.O3.D1.1\***  
Tingting Wu<sup>1</sup>, Zhihui Zeng<sup>1</sup>, Gilberto Siqueira<sup>1</sup>, Gustav Nyström<sup>1</sup>; <sup>1</sup>Swiss Federal Laboratories for Materials Science and Technology
- 14:30 Hybrid supraparticles with highly localized functional domains enabled by cellulose nanofibrils** **B.O3.D1.2**  
Bruno Dufau Mattos<sup>1</sup>, Luiz G. Greca<sup>1</sup>, Blaise Leopold Tardy<sup>1</sup>, Orlando J Rojas<sup>1</sup>; <sup>1</sup>Aalto University / Aalto-yliopisto

- 14:45 Electrochemical properties of sustainable gels for application in electrochromic devices** **B.O3.D1.3**  
 Raphael Dorneles Caldeira Balboni<sup>1</sup>, Victoria Goulart<sup>1</sup>, Camila Monteiro Cholang<sup>1</sup>, Izabel Moraes Caldeira<sup>1</sup>, Fabiele Collovini Tavares<sup>2</sup>, Wladimir Hernandez Flores<sup>3</sup>, Robson Andrezza<sup>1</sup>, Agnieszka Pawlicka<sup>4</sup>, César Antonio Oropesa Avellaneda<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Instituto de Química - UFRGS, <sup>3</sup>Universidade Federal do Pampa, <sup>4</sup>Instituto de Química de São Carlos- USP
- 15:00 Microwave-assisted periodate oxidation and characterization of bacterial cellulose** **B.O3.D1.4**  
Luisa Macedo Vasconcelos<sup>1</sup>, Niedja Fittipaldi Vasconcelos<sup>1</sup>, Rodrigo Silveira Vieira<sup>1</sup>, Diego Lomonaco Vasconcelos de Oliveira<sup>1</sup>, Morsyleide de Freitas Rosa<sup>2</sup>, Maria de Fátima Borges<sup>2</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Embrapa
- 15:15 Antimicrobial aerogels based on natural polysaccharides** **B.O3.D1.5**  
Caio Gomide Otoni<sup>1,2</sup>, Daiane Batista Silva<sup>1</sup>, Mateus Borba Cardoso<sup>3</sup>, Juliana da Silva Bernardes<sup>3</sup>, Orlando J Rojas<sup>4</sup>, Watson Loh<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>4</sup>Aalto University / Aalto-yliopisto
- 15:30 Rheological and structural properties of NFC-Graphite dispersions under different microfluidization conditions** **B.O3.D1.6**  
Cibele Carneiro Pessan<sup>1</sup>, Juliana da Silva Bernardes<sup>2</sup>, Silvia Helena Prado Bettini<sup>1</sup>, Edson Roberto Leite<sup>1,2</sup>; <sup>1</sup>Federal University of São Carlos, <sup>2</sup>Brazilian Nanotechnology National Laboratory
- 15:45 Assembly of nano-polysaccharides and plant polyaromatics at interfaces** **B.O3.D1.7\***  
Orlando J Rojas<sup>1</sup>, Long Bai<sup>1</sup>, Blaise Leopold Tardy<sup>1</sup>, Luiz G. Greca<sup>1</sup>, Bruno D. Mattos<sup>1</sup>, Konrad Klockars<sup>1</sup>, Wenchao Xiang<sup>1</sup>, Siqi Huan<sup>1</sup>, Tero Kämäräinen<sup>1</sup>; <sup>1</sup>Aalto University / Aalto-yliopisto

## TUESDAY, SEPTEMBER 24

\* Invited Lecture

### *SESSION B.O1.D2 (09:30 - 10:30) - Room Pérsico*

- 09:30 Tuning and characterizing the degree of order in nanocellulose** **B.O1.D2.1\***  
Germán Salazar-Alvarez<sup>1</sup>; <sup>1</sup>Stockholm University / Stockholms universitet
- 10:00 UV-absorbing properties of visibly transparent and semitransparent nanocomposites based on all-lignocellulosic nanostructures** **B.O1.D2.2**  
Camilla Henriques Maia de Camargos<sup>1</sup>, Camila Alves Rezende<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 10:15 Transitions from liquid crystalline suspensions of cellulose nanocrystals to multi-scaled, hierarchically-structured films and aerogels** **B.O1.D2.3**  
Blaise Leopold Tardy<sup>1</sup>, Anurodh Tripathi<sup>1</sup>, Bruno Mattos<sup>1</sup>, Luiz Greca<sup>1</sup>, Konrad Klockars<sup>1</sup>, Tero Kämäräinen<sup>1</sup>, Orlando Rojas<sup>1</sup>; <sup>1</sup>Aalto University / Aalto-yliopisto



### **SESSION B.02.D2 (11:00 - 12:00) - Room Pérsico**

- 11:00 High organic packing using recombinant proteins undergoing conformational transition** **B.O2.D2.1\***  
Hortense LE FERRAND<sup>1</sup>; <sup>1</sup>Nanyang Technological University
- 11:30 Synthesis of silk fibroin microparticles and incorporation in alginate membranes** **B.O2.D2.2**  
Yasmin Broso Abranches<sup>1</sup>, Bruno Thorihara Tomoda<sup>1</sup>, Fabiana Perrechil Bonsanto<sup>1</sup>, Mariana Agostini Moraes<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 11:45 Hierarchical Self-Assembly of Peptides and its Applications in Bionanotechnology: Focus in biosensors for detection of pesticides.** **B.O2.D2.3**  
Barbara Bianca Gerbelli<sup>1</sup>, Rodrigo Silva Nascimento Mancini<sup>1</sup>, Mariano Venanzi<sup>2</sup>, Wendel Andrade Alves<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>University of Rome Tor Vergata

### **SESSION B.03.D2 (14:00 - 16:15) - Room Pérsico**

- 14:00 Gradient Architectures and Tunable Mechanics in Biologically-inspired, Supramolecular Semi-Interpenetrating Networks** **B.O3.D2.1\***  
LaShanda Korley<sup>1</sup>, Chase B Thompson<sup>1</sup>; <sup>1</sup>University of Delaware
- 14:30 Poly(acrylic acid)/ polypyrrole interpenetrated polymer network for biomimetic artificial muscles** **B.O3.D2.2**  
GIORGIO MARQUES MILANI<sup>1</sup>, Mathilde Julienne Gisèle Champeau Ferreira<sup>1</sup>, Everaldo Carlos Venancio<sup>1</sup>, Christiane Bertachini Lombello<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 14:45 Hybrid superhydrophobic nanocomposite films bioinspired on foliar surfaces for antibacterial application** **B.O3.D2.3**  
Elibe Silva Souza Negreiros<sup>1</sup>, Rosely Maier-Queiroz<sup>1</sup>, Lizeth Carolina Mojica Sánchez<sup>1</sup>, Nicole Barrera<sup>1</sup>, Norma Buarque de Gusmão<sup>1</sup>, Petrus Santa-Cruz<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 15:00 Drop-On-Demand (DoD) printable fluids bioinspired on iridescence mechanism of Paracheirodon genus fishes** **B.O3.D2.4**  
Karina Maria Silva<sup>1</sup>, Lizeth Carolina Mojica Sánchez<sup>1</sup>, Petrus Santa-Cruz<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 15:15 Bio-inspired optical materials derived from crosslinkable silk protein and crosslinked polymers** **B.O3.D2.5**  
Livia Bast<sup>1,2</sup>, Nico Bruns<sup>1,2</sup>; <sup>1</sup>Université de Fribourg / Universität Freiburg, <sup>2</sup>University of Strathclyde
- 15:30 Bioinspired passive antibacterial coating based on biofilms inhibition by hierarchical structures** **B.O3.D2.6**  
Rosely Maier-Queiroz<sup>1</sup>, Elibe Silva Souza Negreiros<sup>1</sup>, Isaias José dos Santos Neto<sup>1</sup>, Nicole Barrera<sup>1</sup>, Norma Buarque de Gusmão<sup>1</sup>, Petrus Santa-Cruz<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 15:45 Bio-inspired 3D printed nanocellulose materials** **B.O3.D2.7\***  
Tanja Zimmermann<sup>1</sup>, Gilberto Siqueira<sup>1</sup>, Michael K. Hausmann<sup>1</sup>, Olivier Fourmann<sup>1</sup>, André Studart<sup>2</sup>; <sup>1</sup>Swiss Federal Laboratories for Materials Science and Technology, <sup>2</sup>Swiss Federal Institute of Technology / Eidgenössische Technische Hochschule ETH Zürich

## WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

### *SESSION B.01.D3 (09:30 - 10:30) - Room Pérsico*

- 09:30 From Bioinspired Nanoreactors to Malaria Diagnostics via Biocatalytic Polymer Synthesis** **B.O1.D3.1\***  
Nico Bruns<sup>1</sup>; <sup>1</sup>University of Strathclyde
- 10:00 Functionalized waste polysaccharides as biocatalysts for greener destruction of pesticides** **B.O1.D3.2**  
José Guilherme Lopes Ferreira<sup>1</sup>, Willian Hideki Takarada<sup>1</sup>, Ana Luiza Lourenço Manginelli<sup>1</sup>, Mariana Oliveira<sup>1</sup>, Aline Grein Iankovski<sup>2</sup>, Marco A. S. Oliveira<sup>3</sup>, Fernanda Fogagnoli Simas Tosin<sup>1</sup>, Bruno Campos da Silva<sup>1</sup>, Izabel Cristina Riegel-Vidotti<sup>1</sup>, Elisa S Orth<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Universidade Estadual de Maringá
- 10:15 Gold nanoparticles stabilized by chitosan and its use as nanocatalyst for hydrogenation reactions** **B.O1.D3.3**  
Anike Hübner Virgili<sup>1</sup>, Leandro Luza<sup>1</sup>, Jesum Fernandes<sup>2</sup>, Tania Maria Haas Costa<sup>3</sup>, Edilson Valmir Benvenutti<sup>1</sup>, Eliana Weber de Menezes<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>University of Nottingham, <sup>3</sup>Instituto de Química - UFRGS

### *SESSION B.02.D3 (11:00 - 12:00) - Room Pérsico*

- 11:00 Melt extruded polymer nanofibers for regenerative medicine** **B.O2.D3.1\***  
Jon Pokorski<sup>1</sup>; <sup>1</sup>University of California San Diego
- 11:30 Biological valve for the treatment of structural heart disease** **B.O2.D3.2**  
Guilherme Agreli<sup>1</sup>, Beatriz Ambrozini<sup>2</sup>, Antonio Carlos Guastaldi<sup>2</sup>; <sup>1</sup>Products and Features, <sup>2</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil
- 11:45 Electrospun polylactic acid cytotoxicity for tissue engineering applications** **B.O2.D3.3**  
Felipe Nogueira Ambrosio<sup>1</sup>, Luis Marcelo G da Silva<sup>1</sup>, Ana Paula Romani<sup>1</sup>, Christiane Bertachini Lombello<sup>1</sup>, Everaldo Carlos Venancio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

### *SESSION B.03.D3 (14:00 - 16:15) - Room Pérsico*

- 14:00 LbL Nanocoatings Based on Natural Macromolecules: a platform to explore interaction with cells** **B.O3.D3.1\***  
Marisa Masumi Beppu<sup>1</sup>, Rogério Aparecido Bataglioli<sup>1</sup>, João Batista Maia Rocha Neto<sup>1</sup>, Thiago Bezerra Taketa<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 14:30 Photodynamic therapy: from molecular effects in model systems toward photodynamic efficiency in cell culture** **B.O3.D3.2**  
Lucas Gontijo Moreira<sup>1</sup>, Maria Julia Bistaffa<sup>1</sup>, Alexandre Mendes de Almeida Junior<sup>1</sup>, Bryan Alfenas Borges<sup>1</sup>, Karina Alves Toledo<sup>1</sup>, Pedro Henrique Benites Aoki<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Assis

- 14:45 Crosslinked PCL/PEG/GelMA electrospun nanofibers reduced biofilm formation** **B.O3.D3.3**  
 Nara Silva Soares<sup>1</sup>, Luciana Maria Hollanda<sup>2</sup>, Conceição de Maria Vaz Elias<sup>1</sup>,  
 Daiana Ferreira Silva<sup>2</sup>, Eduarda Bezerra Pereira<sup>2</sup>, Wesley Xavier Santana<sup>2</sup>,  
 Anderson Oliveira Lobo<sup>3</sup>, Fernanda Roberta Marciano<sup>3</sup>; <sup>1</sup>Universidade  
 Brasil, <sup>2</sup>Universidade Tiradentes, <sup>3</sup>Universidade Federal do Piauí
- 15:00 Analysis and Discrimination of Biological materials by Optical Spectroscopy Associated with Multivariate Analysis** **B.O3.D3.4**  
 Ana Carolina Maranni<sup>1</sup>, Gustavo Sander Larios<sup>1</sup>, Bruno Marangoni<sup>1</sup>, Cicero Rafael  
 Cena<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso do Sul
- 15:15 Characterization and biological activity of chitosan microparticles loaded with essential oils** **B.O3.D3.5**  
 LÁYSA ROCHA LIMA<sup>1</sup>, Arcelina Pacheco Cunha<sup>1</sup>, Daniela Ribeiro Alves<sup>2</sup>, Ana  
 Livya Moreira Rodrigues<sup>2</sup>, Fábila Karine Andrade<sup>1,3</sup>, Rodrigo Silveira  
 Vieira<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Universidade Estadual do  
 Ceará, <sup>3</sup>Embrapa
- 15:30 Obtention and Characterization of Bilayer Membranes Composed of PLGA and Calcium Phosphates for Application in Guided Bone Regeneration** **B.O3.D3.6**  
Vivian Inês dos Santos<sup>1</sup>, Marcio Celso Fredel<sup>1</sup>, Claudia Merlini<sup>1</sup>, Águedo  
 Aragonés<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 15:45 Evading the foreign body reaction with immune-modulating mucin hydrogels** **B.O3.D3.7\***  
 Hongji Yan<sup>1</sup>, Cedric Seignez<sup>2</sup>, Morgan Hjorth<sup>1</sup>, Benjamin Winkeljann<sup>3</sup>, Oliver  
 Lieleg<sup>3</sup>, Mia Phillipson<sup>2</sup>, Thomas Crouzier<sup>4</sup>; <sup>1</sup>Royal Institute of Technology /  
 Kungliga Tekniska Högskolan, <sup>2</sup>Uppsala University / Uppsala  
 Universitet, <sup>3</sup>Technische Universität München, <sup>4</sup>AlbaNova University Center,  
 Royal Institute of Technology and Stockholm University

## THURSDAY, SEPTEMBER 26

\* Invited Lecture

### *SESSION B.O1.D4 (09:30 - 11:00) - Room Pérsico*

- 09:30 Soft Magnetic Actuators with Complex Motion and High Energy Density** **B.O1.D4.1**  
Julia Andrea Carpenter<sup>1</sup>, Thomas Benjamin Eberle<sup>1</sup>, ahmad Rafsanjani<sup>1</sup>, André  
 Studart<sup>1</sup>; <sup>1</sup>Swiss Federal Institute of Technology / Eidgenössische Technische  
 Hochschule ETH Zürich
- 09:45 Disordered structures under the ordered context: hypromellose-loaded drug for bioapplication characterized by PDF analysis** **B.O1.D4.2**  
Vinícius Danilo Nonato Bezzon<sup>1</sup>, Gabriel Lima Barros Araujo<sup>2</sup>, Fabio Furlan  
 Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>University of São Paulo
- 10:00 Cellulose films containing silver nanoparticles and its application to catalyze *p*-nitrophenol reduction** **B.O1.D4.3**  
Arthur Matsudo Garcia<sup>1</sup>, Fernanda Ferraz Camilo<sup>1</sup>, Tereza da Silva  
 Martins<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo

- 10:15 Development and characterization of antioxidant pectin microparticles with extract from grape peels** **B.O1.D4.4**  
 Keyle Torres Guedes<sup>1</sup>, KARINA DA SILVA CHAVES<sup>1</sup>, Ricardo Stefani<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso
- 10:30 From bioinspiration to biofabrication: superhydrophobic surfaces for the production of nanocellulose-based 3D biofilms** **B.O1.D4.5**  
Luiz G. Greca<sup>1</sup>, Janika Lehtonen<sup>1</sup>, Blaise Leopold Tardy<sup>1</sup>, Bruno Dufau Mattos<sup>1</sup>, Mahdi Rafiee<sup>1</sup>, Alp Karakoc<sup>1</sup>, Orlando J Rojas<sup>1</sup>; <sup>1</sup>Aalto University / Aalto-yliopisto
- 10:45 Hybrid additive manufacturing with bioinspired surfaces for Industry 4.0** **B.O1.D4.6**  
Petrus Santa-Cruz<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

## MONDAY , SEPTEMBER 23

### Poster presentations

#### *SESSION B.P2 (18:00 - 19:30)*

- 18:00 Biopolymers in 3D printing for medical application** **B.P2.1**  
Drielle Viana Vieira<sup>1</sup>, Jorge Vicente Lopes da Silva<sup>2</sup>, Karla Loyola de Oliveira Arantes<sup>1</sup>; <sup>1</sup>Faculdade do Centro Leste, <sup>2</sup>Centro de Tecnologia da Informação Renato Archer
- 18:00 Droplet microfluidics as a potential tool for microencapsulation of non-viral vector - A gene therapy approach** **B.P2.2**  
Bruna Gregatti de Carvalho<sup>1</sup>, Sang Won Han<sup>2</sup>, Lucimara Gaziola de la Torre<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal de São Paulo
- 18:00 Evaluation of an optimized bamboo sandwich panel using layers of two different bamboo functional elements** **B.P2.3**  
Marzieh Kadivar<sup>1</sup>, Christian Gauss<sup>1</sup>, Gonzalo Marmol<sup>1</sup>, Carlos Fioroni<sup>2</sup>, Adriana.D. Sa<sup>2</sup>, Holmer Savastano Junior<sup>2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>University of São Paulo
- 18:00 Synthesis of Hydrolyzed Collagen-Siloxane Based Hydrogels** **B.P2.4**  
Ariane Moracci Yoshitake<sup>1</sup>, Ligia Passos Maia<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Optimization of centrifugal spinning process parameters in the generation of Poli(acetato de vinila) e Pullulan nanofibers for the Engineering of Skin Tissues** **B.P2.5**  
Leonardo de Souza<sup>1</sup>, Marco Aurélio Vichi Oliveira<sup>2</sup>, Alex Alavarse<sup>2</sup>, Jean -Jacques Bonvent<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidade Federal do ABC (UFABC) - Centro de Ciências Naturais e Humanas (CCNH)
- 18:00 Nanostructured materials as platforms for non-invasive electrochemical biosensors** **B.P2.6**  
 Samuel G. Torres<sup>1</sup>, Elisângela N. Santos<sup>1</sup>, Debora Terezia Balogh<sup>2</sup>, Rafaela C. Sanfelice<sup>3</sup>, Adriana Pavinatto<sup>1</sup>; <sup>1</sup>Universidade Brasil, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Universidade Federal do Triângulo Mineiro

- 18:00 Chitosan-based glycerol plasticized membranes properties aiming tissue engineering applications** **B.P2.7**  
 Joiciara G. Caroni<sup>1</sup>, Alexia V. A. Mattos<sup>2</sup>, Kelly R. Fernandes<sup>3</sup>, Debora Terezia Balogh<sup>4</sup>, Ana Cláudia Muniz Renno<sup>5</sup>, Mônica H. Okura<sup>2</sup>, Ana Cláudia Granato Malpass<sup>2</sup>, Rafaela C. Sanfelice<sup>2</sup>, Adriana Pavinatto<sup>1</sup>; <sup>1</sup>Universidade Brasil, <sup>2</sup>Universidade Federal do Triângulo Mineiro, <sup>3</sup>Universidade Federal de São Carlos, <sup>4</sup>Universidade de São Paulo, <sup>5</sup>Universidade Federal de São Paulo
- 18:00 Antibacterial activity of nanocomposite containing silver nanoparticles and natural gums** **B.P2.8**  
Albert Santos Silva<sup>1</sup>, Idglan Sá Lima<sup>1</sup>, Lucas Mateus de Lima Neris<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>, Josy Antevéli Osajima<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 Hydrogel of chicha gum (*Sterculia striata*) associated with nerolidol: antibacterial activity study** **B.P2.9**  
 Idglan Sá Lima<sup>1</sup>, Albert Santos Silva<sup>1</sup>, Maria Onaira Gonçalves Ferreira<sup>1</sup>, Humberto Medeiros Barreto<sup>1</sup>, Alessandra Braga Ribeiro<sup>1</sup>, Josy Antevéli Osajima<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 The role of toluidine blue binding mechanisms on the photo-induced permeability of lipid monolayers** **B.P2.10**  
Alexandre Mendes de Almeida Junior<sup>1</sup>, Osvaldo Novais de Oliveira Jr<sup>2</sup>, Pedro Henrique Benites Aoki<sup>1</sup>; <sup>1</sup>Faculdade de Ciências e Letras de Assis, <sup>2</sup>Instituto de Física de São Carlos - USP
- 18:00 Antifungal activity against *Ganoderma applanatum* of a stable suspension of lignin and thymol** **B.P2.11**  
ALINE KROLOW SOARES<sup>1</sup>, Pedro Henrique Gonzalez de Cademartori<sup>1</sup>, PAULA ZANATTA<sup>2</sup>, Darci Alberto Gatto<sup>3</sup>, Washington Luiz Esteves Magalhães<sup>1,4</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Federal de Santa Catarina, <sup>3</sup>Universidade Federal de Pelotas, <sup>4</sup>Embrapa Florestas
- 18:00 Mechanical behavior of bio-vegetal polyurethane foam doped with vermiculite** **B.P2.12**  
 Wires Costa Machado<sup>1</sup>, Amanda Pereira dos Santos da Costa<sup>1</sup>, Flaminio Cesar Pereira Sales<sup>1</sup>, Miguel Felipe Galera da Silva<sup>1</sup>, Ana Paula de Moura<sup>2</sup>, Romeu Rony Cavalcante da Costa<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - câmpus Cornélio Procópio, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Influence of CNC modified with PEG 300 and PEG1000 on morphology and thermal properties of PLA** **B.P2.13**  
 Gelsoneide da Silva Gois<sup>1</sup>, Carlos Henrique Alves de França<sup>1</sup>, Amélia Severino Ferreira e Santos<sup>2</sup>, Eliton S. Medeiros<sup>2</sup>, Juliano Elvis Oliveira<sup>3</sup>, Yeda Medeiros Bastos de Almeida<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Universidade Federal da Paraíba, <sup>3</sup>Universidade Federal de Lavras
- 18:00 FTIR spectroscopic analysis of *Escherichia coli* and *Salmonella enterica* cultures to discrimination tests** **B.P2.14**  
Ana Carolina Maranni<sup>1</sup>, Cicero Rafael Cena<sup>1</sup>, Juliane Francielle Tutija<sup>1</sup>, Gustavo Sander Larios<sup>1</sup>, Cassia Rejane Brito Leal<sup>1</sup>, Bruno Marangoni<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso do Sul
- 18:00 Tuning wettability of thin films formed by biopolymers and clay** **B.P2.15**  
Ana Gabrielli Lemos<sup>1</sup>, Osvaldo Freitas<sup>2</sup>, Kelly Francisco Francisco<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Araras, <sup>2</sup>Faculdade de Ciências Farmacêuticas de Ribeirão Preto

- 18:00 Characterization of fiber from fruit of *Ochroma pyramidale*** **B.P2.16**  
Ana Luisa Farias Rocha<sup>1</sup>, Bianca de Andrade Feitosa<sup>2</sup>, SUZAN XAVIER LIMA<sup>3</sup>,  
 Edgar Aparecido Sanches<sup>3</sup>, Paulo Victor Rodrigues Gomes<sup>3</sup>, Odiluzia Maria  
 Saldanha de Oliveira<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do  
 Amazonas, <sup>2</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo  
 (USP), <sup>3</sup>Universidade Federal do Amazonas
- 18:00 Study of the photoluminescent properties of Polyurethane-CaCO<sub>3</sub> composites for Bioapplications** **B.P2.17**  
Ana Paula de Moura<sup>1</sup>, Ênio Henrique Pires da Silva<sup>1</sup>, Flaminio Cesar Pereira  
 Sales<sup>1</sup>, Máximo Siu Li<sup>2</sup>, Romeu Rony Cavalcante da Costa<sup>1</sup>, Sayonara Andrade  
 Elizário<sup>3</sup>, Marcia Regina de Moura<sup>4</sup>; <sup>1</sup>Universidade Tecnológica Federal do  
 Paraná - câmpus Cornélio Procópio, <sup>2</sup>Instituto de Física de São Carlos (IFSC) -  
 Universidade de São Paulo (USP), <sup>3</sup>Universidade Federal da  
 Paraíba, <sup>4</sup>Universidade Estadual de São Paulo
- 18:00 Full Water-Soluble High Molecular Weight Chitosans: Preparation and Physicochemical Characterization** **B.P2.18**  
Anderson Fiamingo<sup>1,2</sup>, Sérgio Paulo Campana Filho<sup>1</sup>, Osvaldo Novais de Oliveira  
 Jr<sup>1,2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto de Física de São Carlos - USP
- 18:00 Bacterial cellulose /palygorskite clay biocomposites: Development and characterization of morphology, crystallinity and water vapor permeability.** **B.P2.19**  
Andréia Bagliotti Meneguim<sup>1</sup>, Guilherme Pacheco Pereira<sup>2</sup>, Hernane da Silva  
 Barud<sup>3,2</sup>, Edson Cavalcanti da Silva Filho<sup>4</sup>; <sup>1</sup>Instituto de Física de São Carlos  
 (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Universidade de Araraquara, <sup>3</sup>Centro  
 Universitário de Araraquara, <sup>4</sup>Universidade Federal do Piauí
- 18:00 The study of lipid rafts by the interaction between membrane models and chitosan** **B.P2.20**  
Andressa Ribeiro Pereira<sup>1</sup>, Anderson Fiamingo<sup>1</sup>, Sérgio Paulo Campana Filho<sup>1</sup>,  
 Osvaldo Novais de Oliveira Jr<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 18:00 Antibacterial properties of Chitosan/AuNP films obtained by drop-casting method** **B.P2.21**  
Anike Hübner Virgili<sup>1</sup>, Daniela Comparsi Laranja<sup>1</sup>, Patrícia Malheiros<sup>1</sup>, Marcelo  
 Barbalho Pereira<sup>1</sup>, Eliana Weber de Menezes<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio  
 Grande do Sul
- 18:00 Investigation of shot peptide action on lammelar phases** **B.P2.22**  
Barbara Bianca Gerbelli<sup>1</sup>, Wendel Andrade Alves<sup>1</sup>, Emerson Rodrigo Silva<sup>2</sup>,  
 Elisabeth Andreoli de Oliveira<sup>3</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidade  
 Federal de São Paulo, <sup>3</sup>Universidade de Brasília
- 18:00 Optimization of the properties of bovine pericardium used in heart valves** **B.P2.23**  
 Beatriz Ambrozini<sup>1</sup>, Guilherme Agreli<sup>2</sup>, Matheus Augusto Da Silva<sup>1</sup>, Antonio  
 Carlos Guastaldi<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista Instituto de Química,  
 Araraquara, 14800-060 Araraquara, SP, Brasil, <sup>2</sup>Products and Features Brasil  
 Pesquisa e Desenvolvimento LTDA
- 18:00 Use of bacterial cellulose in the improvement of barriers properties of pectin biofilm** **B.P2.24**  
Beatriz Braidoti<sup>1</sup>, Kely Silveira Bonfim<sup>1</sup>, Fauze Ahmad Aouada<sup>2</sup>, Marcia Regina  
 de Moura<sup>2</sup>; <sup>1</sup>Faculdade de Engenharia de Ilha Solteira - UNESP, <sup>2</sup>São Paulo State  
 University
- 18:00 Incorporation of hydrogel in the production of concrete** **B.P2.25**  
Benjamim Sipaúba Gonçalves Rubim<sup>1</sup>, Valéria Denise Barros Nunes<sup>1</sup>, João Batista  
 de Oliveira Libório Dourado<sup>1</sup>, Josy Antevéli Osajima<sup>1</sup>, Durcilene Alves Silva<sup>1</sup>,  
 Marcelo Barbosa Furtini<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí

- 18:00 Evaluation of the degree of swelling and toxicity of the hydrogel formed by cashew gum with clay** **B.P2.26**  
 Valéria Denise Barros Nunes<sup>1</sup>, Benjamim Sipaúba Gonçalves Rubim<sup>1</sup>, Danielle Benigno Andrade<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>, Idglan Sá Lima<sup>1</sup>, Durcilene Alves Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 On the permeabilization of lipid membranes photo-induced by the xanthene Rose Bengal** **B.P2.27**  
Bryan Alfenas Borges<sup>1</sup>, Sabrina Aléssio Camacho<sup>1</sup>, Pedro Henrique Benites Aoki<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>São Paulo State University
- 18:00 Films composed of polyvinyl alcohol, polyvinylpyrrolidone and poloxamer 407: in-vitro mucoadhesive analysis** **B.P2.28**  
Camila Felix Vecchi<sup>1</sup>, Marcos Luciano Bruschi<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 18:00 Catalytic reduction of 4-nitrophenol using gold nanoparticles decorated on cellulose films** **B.P2.29**  
Camila Rodrigues Cabreira<sup>1</sup>, Fernanda Ferraz Camilo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 18:00 Kinetics of nanostructures of L, L diphenylalanine peptides prepared by dissolution in acetic acid** **B.P2.30**  
Carla Carolina Silva Bandeira<sup>1</sup>, Letícia Marques Foiani<sup>1</sup>, H. S. Martinho<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Biomorphic Silicon Carbide nanofibers from bacterial nanocellulose** **B.P2.31**  
**Biomorphic Silicon Carbide nanofibers from bacterial nanocellulose**  
 Graciano Bay de Souza<sup>1</sup>, Daliana Muller<sup>1</sup>, Karina Cesca<sup>1</sup>, Dachamir Hotza<sup>1</sup>, Carlos Renato Rambo<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Effect of peanut skin on the development of biodegradable cassava starch-based composite** **B.P2.32**  
Caroline Martins Machado<sup>1</sup>, Patrícia Benelli<sup>1</sup>, Isabel Cristina Tessaro<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 18:00 Studies on the interaction between chitosan derivatives and type II collagen in Langmuir and Langmuir-Blodgett films** **B.P2.33**  
 Camila Alves Claudino da Silva<sup>1</sup>, Adriana Pavinatto<sup>1</sup>, Luciano Caseli<sup>1</sup>, Ceridório Lucinéia<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 18:00 Lipid-coated silver nanoparticles for application in biomimetic system** **B.P2.34**  
Cibely Silva Martin<sup>1</sup>, Mateus Dassie Maximino<sup>1</sup>, Priscila Alessio<sup>1</sup>, Carlos José Leopoldo Constantino<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista
- 18:00 Electrospun polyacid lactic and poly(lactide-co-glycolide) scaffolds for biomedical applications** **B.P2.35**  
 Bárbara Rebeca Alves Pereira<sup>1</sup>, Conceição de Maria Vaz Elias<sup>2</sup>, Fernanda Roberta Marciano<sup>1</sup>, Anderson Oliveira Lobo<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Brasil
- 18:00 Bone tissue engineering using mesenchymal stem cells by applying differentiation to osteoblast** **B.P2.36**  
Cristiano Ceron Jayme<sup>1</sup>, Leonardo Barcelos de Paula<sup>1</sup>, Antonio Claudio Tedesco<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 18:00 Thermal characterization of the Zea mays pericarp species using an open photoacoustic cell** **B.P2.37**  
Danilo Paula Kuritza<sup>1</sup>, Marcelo Akira Saito<sup>1</sup>, Alex Viana Alves<sup>1</sup>, Carlos Alberto Scapim<sup>1</sup>, Antonio Carlos Bento<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá

- 18:00 Ethylene scavenger package system based on chitosan-adsorbent coating Kraft paper** **B.P2.38**  
Deise Ochi Ochi<sup>1</sup>, Cristiana Maria Pedroso Yoshida<sup>1</sup>, Classius Ferreira da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 18:00 Barrier properties from biopolimeric films of chitosan and cassava starch with carnauba wax** **B.P2.39**  
Edna Maria Mendes Aroucha<sup>1</sup>, Francisco Leonardo Gomes de Menezes<sup>1</sup>, Francisco Klebson Gomes Santos<sup>1</sup>, Ricardo Henrique Lima Leite<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido
- 18:00 Effect of citric acid on mechanical properties and water absorption of poly(vinyl alcohol)/cellulose nanocrystals films** **B.P2.40**  
Ana Amelia Aragao Seixas<sup>1</sup>, Thiago P. M. Ferreira<sup>1</sup>, Eliton S. Medeiros<sup>1</sup>, Amélia Severino Ferreira e Santos<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba
- 18:00 Processing and spectroscopic characterization of *Nannotrigona testaceicornis* propolis films at Nafion<sup>®</sup> presence and absence.** **B.P2.41**  
Enzo José Baptista Junior Junior<sup>1</sup>, Gustavo Goes Serec<sup>1</sup>, ALINE ORVALHO PEREIRA<sup>1</sup>, Matheus Gomes Kosinski<sup>1</sup>, Tiago Maurício Francoy<sup>1</sup>, Patricia Targon Campana<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 18:00 Effect of nitrogen additives on xanthan-based gel polymer electrolyte applied on dye-sensitized solar cells** **B.P2.42**  
Fabiele Collovini Tavares<sup>1</sup>, Matheus Costa Oliveira<sup>1</sup>, EMERSON Kohlrausch<sup>1</sup>, Gustavo Roni Bolzan<sup>1</sup>, Jairton Dupont<sup>1</sup>, César Antonio Oropesa Avellaneda<sup>2</sup>, Marcos Jose Leite Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade Federal de Pelotas
- 18:00 Influence of three different initiators on the kinetic and morphological properties of the PAAm/CMC/Cloisite-Na<sup>+</sup> nanocomposite hydrogels** **B.P2.43**  
Carlos Roberto Ferreira Junior<sup>1</sup>, Fabício Cerizza Tanaka<sup>1</sup>, Renan da Silva Fernandes<sup>1</sup>, Uilian Gabaldi Yonezawa<sup>1</sup>, Marcia Regina de Moura<sup>1</sup>, Fauze Ahmad Aouada<sup>1</sup>; <sup>1</sup>São Paulo State University
- 18:00 Effect of different crosslinker agents on the hydrophilic and kinetic properties of alginate/starch-based responsive hydrogels** **B.P2.44**  
Renan da Silva Fernandes<sup>1</sup>, Marcia Regina de Moura<sup>1</sup>, Fauze Ahmad Aouada<sup>1</sup>; <sup>1</sup>São Paulo State University
- 18:00 An ecofriendly biodegradable packing using a green route by *Calotropis procera* (*C. procera*): a new frontier for development alternative to semiarid sustainable progress** **B.P2.45**  
Ana Júlia Martins Souza<sup>1</sup>, Max Pereira Gonçalves<sup>1</sup>, Patrícia Nirlane da Costa Souza<sup>1</sup>, Fernanda G L Medeiros Borsagli<sup>1</sup>; <sup>1</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri
- 18:00 Investigation of essential oils luminescence mechanisms and their applications in biological systems imaging** **B.P2.46**  
Fernando Aparecido Dias Radomski<sup>1</sup>, Celso Araújo Duarte<sup>1</sup>, Evaldo Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 Immobilization of laccase on cellulose nanofibers** **B.P2.47**  
Francine Ceccon Claro<sup>1</sup>, Caroline Jordão<sup>1</sup>, Patrícia Raquel Silva Zanoni<sup>2</sup>, Washington Luiz Esteves Magalhães<sup>1,2</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Embrapa Florestas



- 18:00 Development of a sunscreen based caroá (*Neoglaziovia variegata*) and mesoporous titania** **B.P2.48**  
Francisco Alberto Alberto Alencar Miranda<sup>1</sup>, VAEUDO VALDIMIRO OLIVEIRA<sup>2</sup>, Luzia Maria Castro Honório<sup>3</sup>, Luís Felipe Lima Matos<sup>3</sup>, Alessandra Braga Ribeiro<sup>3</sup>, Josy Antevéli Osajima<sup>3</sup>, Edson Cavalcanti da Silva Filho<sup>3</sup>; <sup>1</sup>Universidade Estadual do Maranhão, <sup>2</sup>Universidade Estadual do Piauí, <sup>3</sup>Universidade Federal do Piauí
- 18:00 Analysis of the mechanical properties of chitosan and graphene oxide film** **B.P2.49**  
Francisco Klebson Gomes Santos<sup>1</sup>, Cristiane Alves Paiva<sup>1</sup>, Francisco Leonardo Gomes de Menezes<sup>1</sup>, Ricardo Henrique Lima Leite<sup>1</sup>, Edna Maria Mendes Aroucha<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido
- 18:00 Systematic investigation of the defibrillation of cellulose fibers into nanofibrils assisted by single-step enzymatic treatment** **B.P2.50**  
Gabriela Leila Berto<sup>1,2</sup>, Bruno Dufau Mattos<sup>3</sup>, Orlando J Rojas<sup>3</sup>, Valdeir Arantes<sup>2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Escola de Engenharia de Lorena - USP, <sup>3</sup>Aalto University / Aalto-yliopisto
- 18:00 Influence of roughness parameters on the process of tumor cell adhesion** **B.P2.51**  
Gabriel Augusto Teixeira da Silveira<sup>1</sup>, Hernandes Faustino de Carvalho<sup>1</sup>, Marisa Masumi Beppu<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 18:00 Synthesis and characterization of protein-coated silver/silver bromide nanoparticles** **B.P2.52**  
Geomar Feitosa da Cruz<sup>1</sup>, Wanius José Garcia da Silva<sup>1</sup>; <sup>1</sup>Centro de Ciências Naturais e Humanas - UFABC
- 18:00 In-situ effect of the emerging pollutant 17 $\alpha$ -ethynylestradiol in Langmuir monolayers and giant vesicles as cell membrane models** **B.P2.53**  
Gilia Cristine Marques Ruiz<sup>1</sup>, Wallance Moreira Pazin<sup>2,1</sup>, Luis Fernando Carmo Morato<sup>1</sup>, Osvaldo Novais de Oliveira Jr<sup>3</sup>, Carlos José Leopoldo Constantino<sup>1</sup>; <sup>1</sup>Faculdade de Ciências e Tecnologia da UNESP, Campus de Presidente Prudente, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente, <sup>3</sup>Instituto de Física de São Carlos - USP
- 18:00 Films of Hydroxychloroquine Mobilized in Pectin: modified release study** **B.P2.54**  
Giovana C Zambuzi<sup>1</sup>, Osvaldo Freitas<sup>2</sup>, Kelly Francisco Francisco<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Araras, <sup>2</sup>Faculdade de Ciências Farmacêuticas de Ribeirão Preto
- 18:00 Morphological analysis of hydrophobicized woods with copaiba and melaleuca essential oil emulsion incorporated** **B.P2.55**  
Giovanna de Lima Oliveira<sup>1</sup>, Marcia Regina de Moura<sup>1</sup>, Fauze Ahmad Aouada<sup>1</sup>; <sup>1</sup>São Paulo State University
- 18:00 Bacterial cellulose membranes with palygorskite clay and effect on the release properties of metronidazole** **B.P2.56**  
Guilherme Pacheco Pereira<sup>1</sup>, Andréia Bagliotti Meneguini<sup>2</sup>, Edson Cavalcanti da Silva Filho<sup>3</sup>, Hernane da Silva Barud<sup>4,1</sup>; <sup>1</sup>Universidade de Araraquara, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>Universidade Federal do Piauí, <sup>4</sup>Centro Universitário de Araraquara
- 18:00 Surface modification of thermoplastic blends of PVA/Chitosan with blocked isocyanates.** **B.P2.57**  
Gustavo de Souza<sup>1</sup>, Ricardo Klaus Kramer<sup>1</sup>, Rafael Grande<sup>2</sup>, Antonio Jose Felix Carvalho<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Escola de Engenharia de São Carlos

- 18:00 Rheological investigation of crosslinked chondroitin sulfate and multi-arm functional PEG based hydrogel for bioprinting application** **B.P2.58**  
Gustavo Fernandes Sousa<sup>1</sup>, Erlanny Sousa Araújo<sup>1</sup>, Thiago Domingues Stocco<sup>2</sup>, Samson Afewerki<sup>3</sup>, Fernanda Roberta Marciano<sup>1</sup>, Anderson Oliveira Lobo<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Massachusetts Institute of Technology
- 18:00 A comparison between electro and rotary-jet spinning to produce polymeric fibers with incorporated nanohydroxyapatite and carbon nanotubes for bone tissue regeneration** **B.P2.59**  
 Mirian Michelle Machado de Paula<sup>1,2</sup>, Fernanda Roberta Marciano<sup>3</sup>, Marcus Corat<sup>4</sup>, Thomas Jay Webster<sup>5</sup>, Anderson Oliveira Lobo<sup>3</sup>, Gustavo Fernandes Sousa<sup>3</sup>; <sup>1</sup>Universidade do Vale do Paraíba, <sup>2</sup>State University of Campinas, <sup>3</sup>Universidade Federal do Piauí, <sup>4</sup>Universidade Estadual de Campinas, <sup>5</sup>Northeastern University
- 18:00 Photoluminescence studies of films from *Melipona bicolor* propolis, with and without Nafion® polymer.** **B.P2.60**  
 Gustavo Goes Serec<sup>1</sup>, Enzo José Baptista Junior Junior<sup>1</sup>, ALINE ORVALHO PEREIRA<sup>1</sup>, Matheus Gomes Kosinski<sup>1</sup>, Tiago Maurício Franco<sup>1</sup>, Patricia Targon Campana<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 18:00 FTIR spectroscopy applied to soybean seeds co-inoculated by *B. japonicum* bacteria discrimination** **B.P2.61**  
 Rayanne Barbosa da Silva<sup>1</sup>, Gustavo Sander Larios<sup>1</sup>, Matheus Cicero Ribeiro<sup>1</sup>, Bruno Marangoni<sup>1</sup>, Cicero Rafael Cena<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso do Sul
- 18:00 Propolis film forming systems for skin care and wound healing: film surface analysis** **B.P2.62**  
Hélen Cássia Rosseto<sup>1</sup>, Bento Pereira Cabral Júnior<sup>1</sup>, Lucas de Alcântara Sica de Toledo<sup>2</sup>, lizziane maria belloto de francisco<sup>1</sup>, Emerson Marcelo Giroto<sup>1</sup>, Marcos Luciano Bruschi<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Faculdade Integrado de Campo Mourão
- 18:00 Propolis film forming systems for skin care and wound healing: percutaneous penetration analysis** **B.P2.63**  
Hélen Cássia Rosseto<sup>1</sup>, Lidiane Vizioli de Castro Hoshino<sup>1</sup>, Lucas de Alcântara Sica de Toledo<sup>2</sup>, lizziane maria belloto de francisco<sup>1</sup>, Marcos Luciano Bruschi<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Faculdade Integrado de Campo Mourão
- 18:00 Comparative and structural analysis of the fuselage of an aircraft manufactured from biocomposites** **B.P2.64**  
Hemilly Kerem Gomes de Santos Santos<sup>1</sup>, Jordan Araújo Silva<sup>1</sup>, Gilvan Moreira Paz<sup>1</sup>, Ayrton de Sá Brandim<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Piauí
- 18:00 Study of peek bioactivity to improve osteointegration** **B.P2.65**  
 Isadora Leão<sup>1</sup>, Maria de Fátima Vieira Marques<sup>1</sup>, Alexandre Mello<sup>2</sup>, Jose Jonathan Rubio Arias<sup>1</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ, <sup>2</sup>Centro Brasileiro de Pesquisas Físicas (CBPF)
- 18:00 Synthesis, characterization and electrochemical behavior of gold, platinum and palladium bionanocomposites** **B.P2.66**  
 Franciele de Matos Morawski<sup>1</sup>, João Paulo Winiarski<sup>1</sup>, Cristiane Luisa Jost<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

- 18:00 Cellulose acetate electrospun fibers for salicylic acid controlled releasing** **B.P2.67**  
Joao Vinicios Wirbitzki Silveira<sup>1</sup>, Bruna Almeida Rocha<sup>1</sup>, Romulo Luiz Mendes Souza<sup>1</sup>, Ianca Thais Peixe<sup>1</sup>, Flavio Henrique Almeida de Meira<sup>1</sup>, Agnes Batista Meireles<sup>1</sup>, Libardo Andrés González-Torres<sup>1</sup>; <sup>1</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri
- 18:00 Mechanical and Thermal Characterization of Natural Intralaminar Hybrid Composites Comparing Epoxy and Polyester Resins** **B.P2.68**  
jorge de souza e silva neto<sup>1</sup>, Daniel Kioshi Kawasaki Cavalvanti<sup>1</sup>, Rosemere de Araújo Alves Lima<sup>1</sup>, Ricardo Alexandre Amar de Aguiar<sup>1</sup>, Mariana Doina Banea<sup>1</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca
- 18:00 Biodegradable cassava starch-based foams incorporated with cassava inner bark: effect of the addition of different plasticizers** **B.P2.69**  
Juliana Both Engel<sup>1</sup>, Caroline Martins Machado<sup>1</sup>, Rodrigo Schild Valega Fernandes<sup>1</sup>, Patrícia Benelli<sup>1</sup>, Isabel Cristina Tessaro<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 18:00 A comparison of the effect of curcumin irradiation on Langmuir monolayers containing bacterial and mammal lipids** **B.P2.70**  
Karen Jochelavicius<sup>1</sup>, Osvaldo Novais de Oliveira Jr<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP
- 18:00 Evaluation of pirarucu processing for the production of hydroxyapatite and collagen fiber biocomposites** **B.P2.71**  
KARYANE MEAZZA<sup>1</sup>, Jean Carlos Silva Andrade<sup>1</sup>, Ana Alice Oliveira Barros<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 18:00 Kinetics of epidermal growth factor release from mucin gel** **B.P2.72**  
Laise Maia Lopes<sup>1</sup>, Mariana Agostini Moraes<sup>2</sup>, Marisa Masumi Beppu<sup>1</sup>, Thomas Crouzier<sup>3</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal de São Paulo, <sup>3</sup>AlbaNova University Center, Royal Institute of Technology and Stockholm University
- 18:00 Study of antimicrobial properties of nanocellulose films and silver nanoparticles** **B.P2.73**  
Cassiano Heitor Medeiros<sup>1</sup>, Larissa Mariana Mendes Matsuda<sup>1</sup>, Gabriela Fiori Silva<sup>1</sup>, Iolanda Cristina Silveira Duarte<sup>1</sup>, Junior Aparecido Menezes<sup>1</sup>, Nilson C Cruz<sup>2</sup>, Elidiane Cipriano Rangel<sup>2</sup>, Adriana Oliveira Delgado-Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>2</sup>Universidade Estadual Paulista
- 18:00 Thermodynamic characterization of an amphiphilic copolymer based on temperature and composition- in aqueous solutions** **B.P2.74**  
Letícia Streck<sup>1</sup>, Pedro Italo Cruz<sup>1</sup>, José Luís Cardozo Fonseca<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 18:00 New hydrogels based on hyperbranched oligoglycerols obtained with the crosslinking agents glutaraldehyde, citric acid, and oxalic acid** **B.P2.75**  
Bianca Andrade Campos<sup>1</sup>, Ligia Passos Maia<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Intestinal cell viability and evaluation of radical scavenging activity of Brazilian propolis by-product** **B.P2.76**  
lizziane maria belloto de francisco<sup>1</sup>, Diana Pinto<sup>2</sup>, Hélien Cássia Rosseto<sup>1</sup>, Lucas de Alcântara Sica de Toledo<sup>1</sup>, Rafaela Said dos Santos<sup>1</sup>, Bruno Sarmento<sup>2</sup>, Maria Beatriz P.P. oliveira<sup>2</sup>, Francisca Rodrigues<sup>2</sup>, Marcos Luciano Bruschi<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade do Porto

- 18:00 Effects of the photosensitizer Eosin decyl ester on photo-oxidation of unsaturated lipid monolayers as mimetic systems of bacteria membranes** **B.P2.77**  
Lucas Gontijo Moreira<sup>1</sup>, Alexandre Mendes de Almeida Junior<sup>1</sup>, Wilker Caetano<sup>2</sup>, Pedro Henrique Benites Aoki<sup>3</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Estadual de Maringá, <sup>3</sup>Universidade Estadual Paulista
- 18:00 Use of polyethylene glycol as neomaterial for release of the vital cellular dye acridine orange** **B.P2.78**  
Luciana do Carmo Paulino Silva<sup>1</sup>, Carolina Lilibeth Carvalho de Pinho<sup>1</sup>, Patrícia Gelli Feres de Marchi<sup>1</sup>, Eduardo Luzia França<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso
- 18:00 Effect of Epidermal Growth Factor on blood mononuclear cells and MCF-7 cells in the presence of SIgA adsorbed on the polyethylene glycol microsphere** **B.P2.79**  
Carolina Lilibeth Carvalho de Pinho<sup>1</sup>, Luciana do Carmo Paulino Silva<sup>1</sup>, Patrícia Gelli Feres de Marchi<sup>1</sup>, Mahmi Fujimori<sup>1</sup>, Eduardo Luzia França<sup>1</sup>, Adenilda Cristina Honório França<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso
- 18:00 Production and characterization of carrageenan biofilms incorporated with jaboticaba peels extract** **B.P2.80**  
Luisa Bataglin Avila<sup>1</sup>, Thamiris Martiny<sup>2</sup>, Caroline Moraes<sup>1</sup>, Marcílio Morais<sup>1</sup>, Gabriela Rosa<sup>1</sup>; <sup>1</sup>Universidade Federal do Pampa, <sup>2</sup>Universidade Federal de Santa Maria
- 18:00 Use of x-ray microtomography in porous structure characterization of titanium implants** **B.P2.81**  
KARINA ANDRESSA ALVES SEDANS<sup>1</sup>, Fabiano Moreno Peres<sup>1</sup>, Odney Carlos Brondino<sup>2</sup>, Avacir Casanova Andrello<sup>3</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Londrina, <sup>2</sup>Universidade Tecnológica Federal do Paraná, <sup>3</sup>Universidade Estadual de Londrina

## TUESDAY , SEPTEMBER 24

### Poster presentations

#### *SESSION B.P4 (18:00 - 19:30)*

- 18:00 Study of the incorporation of refractory clay in the biopolymer PLA - thermal and mechanical analysis** **B.P4.1**  
Letícia Heldt Rabelo<sup>1</sup>, Juliano Marini<sup>2</sup>, Sylma Carvalho Maestrelli<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Universidade Federal de São Carlos
- 18:00 Preparation and characterization of polyamide 11 membrane for waste water treatment** **B.P4.2**  
Rayanne Penha Wandenkolken Lima<sup>1</sup>, Eloi Alves da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Espírito Santo
- 18:00 Natural rubber based asymmetric membrane fabricated by solution blow spinning technique** **B.P4.3**  
Vítor Paulo Vieira Costa<sup>1,2</sup>, Danilo Martins dos Santos<sup>1</sup>, Rafaela Silveira Andre<sup>1</sup>, Daniel Souza Corrêa<sup>1,2</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos

- 18:00 Production and characterization of polymeric film produced from corn starch** B.P4.4  
Jailton Romão Viana<sup>1</sup>, Lídia Correia Aquino<sup>1</sup>, Jhonatam de Oliveira Carvalho<sup>2</sup>, Sérgio Alves de Azevedo<sup>2</sup>, Alysson Steimacher<sup>1</sup>, Franciana Pedrochi<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão
- 18:00 Carrageenan/Locust/AuNPs/divinylsulfone membranes: effect of plasma treatment** B.P4.5  
Rachel Faverzani Magnago<sup>1</sup>, Igor Fagundes Valezan<sup>1</sup>, Paola Egert Ortiz<sup>1</sup>, Heloisa Regina Turatti Silva<sup>1</sup>, Allan Seeber<sup>2</sup>, Wladimir Hernandez Flores<sup>2</sup>, André Gundel<sup>2</sup>, LUIZ ALBERTO KANIS<sup>1</sup>; <sup>1</sup>Universidade do Sul de Santa Catarina, <sup>2</sup>Universidade Federal do Pampa
- 18:00 Use of polyethylene glycol as neomaterial for release of the vital cellular dye acridine orange** B.P4.6  
Luciana do Carmo Paulino Silva<sup>1</sup>, Carolina Lilibeth Carvalho de Pinho<sup>1</sup>, Patrícia Gelli Feres de Marchi<sup>1</sup>, Eduardo Luzia França<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso
- 18:00 Crosslinking of cellulose acetate membranes from rice husk** B.P4.7  
Luizildo Pitol Filho<sup>1</sup>, Ana Carolina de Oliveira<sup>1</sup>, Francielle Girardi-Alves<sup>1</sup>; <sup>1</sup>Universidade do Vale do Itajaí
- 18:00 Effect of MFC size-concentration in the structure of PVA hydrogels** B.P4.8  
Gabriel Goetten de Lima<sup>1</sup>, Bruno Dias Ferreira<sup>1</sup>, Mailson Matos<sup>1</sup>, Washington Luiz Esteves Magalhães<sup>1,2</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Embrapa Florestas
- 18:00 Novel antimicrobial film from MFC and yerba-mate for food packaging** B.P4.9  
Meysam Aliabadi<sup>1</sup>, Gabriel Goetten de Lima<sup>2</sup>, Mailson Matos<sup>2</sup>, Washington Luiz Esteves Magalhães<sup>2,3</sup>; <sup>1</sup>Gorgan University of Agriculture and Natural Resources, <sup>2</sup>Universidade Federal do Paraná, <sup>3</sup>Embrapa Florestas
- 18:00 A molecular dynamics simulation of poly(vinyl alcohol) functionalized with RGD tripeptide** B.P4.10  
Maira Theisen<sup>1,2</sup>, Hubert Karl Stassen<sup>2</sup>, Rosane Michele Duarte Soares<sup>2</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Instituto de Química - UFRGS
- 18:00 Novel cryogel composing of MFC/Chitosan and PVA for biomedical applications** B.P4.11  
Gabriel Goetten de Lima<sup>1</sup>, Bruno Bernardi Aggio<sup>1</sup>, Marcelo Jorge Cavalcanti de Sá<sup>2</sup>, Washington Luiz Esteves Magalhães<sup>1,3</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Federal de Campina Grande, <sup>3</sup>Embrapa Florestas
- 18:00 Blending biocompatible ceramics with chitosan in polycaprolactone via twin-screw extrusion** B.P4.12  
Marcelo Jorge Cavalcanti de Sá<sup>1,2</sup>, Gabriel Goetten de Lima<sup>3,2</sup>, Declan M. Devine<sup>2</sup>; <sup>1</sup>Universidade Federal de Campina Grande, <sup>2</sup>Athlone Institute of Technology, <sup>3</sup>Universidade Federal do Paraná
- 18:00 New edible films containing kale puree and sodium alginate: hydrophilic properties** B.P4.13  
Elaine F. R. de Oliveira<sup>1</sup>, Fauze Ahmad Aouada<sup>2</sup>, Henriette Monteiro Cordeiro de Azeredo<sup>3</sup>, Marcia Regina de Moura<sup>2</sup>; <sup>1</sup>Faculdade de Engenharia de Ilha Solteira - UNESP, <sup>2</sup>São Paulo State University, <sup>3</sup>Embrapa Instrumentação
- 18:00 Employment of cellulose microfibrillated for increasing mechanical properties of biofilms** B.P4.14  
Pamela Thais Sousa Melo<sup>1</sup>, Hernane da Silva Barud<sup>2,3</sup>, Fauze Ahmad Aouada<sup>4</sup>, Marcia Regina de Moura<sup>4</sup>; <sup>1</sup>Faculdade de Engenharia de Ilha Solteira - UNESP, <sup>2</sup>Centro Universitário de Araraquara, <sup>3</sup>Universidade de Araraquara, <sup>4</sup>São Paulo State University

- 18:00 Experimental parameters evaluation for size distribution of nanochitosan particles using dynamic light scattering** **B.P4.15**  
Marcos Antonio Polinarski<sup>1</sup>, Lázaro José Gasparrini<sup>2</sup>, Felipe Eduardo Bueno Silva<sup>2</sup>, Eliane Soares da Silva<sup>2</sup>, Bruna Machado<sup>2</sup>, Laressa Caciano<sup>2</sup>, Helton José Alves<sup>2,1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná, <sup>2</sup>Universidade Federal do Paraná
- 18:00 Determination of rheological interaction parameter of polymeric systems composed of poloxamer 407 and hydroxypropyl methylcellulose** **B.P4.16**  
Marcos Luciano Bruschi<sup>1</sup>, Jéssica Bassi da Silva<sup>1</sup>, Sabrina Barbosa Ferreira<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 18:00 Mechanical properties of binary polymeric systems containing hydroxypropyl methylcellulose and poloxamer 407** **B.P4.17**  
Marcos Luciano Bruschi<sup>1</sup>, Jéssica Bassi da Silva<sup>1</sup>, Sabrina Barbosa Ferreira<sup>1</sup>, Rafaela Said dos Santos<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 18:00 Freeze-Thaw Silk Fibroin Scaffolds containing Aloe vera Extract** **B.P4.18**  
 Camila Lopes<sup>1</sup>, Bruno Thorihara Tomoda<sup>1</sup>, Mariana Agostini Moraes<sup>1</sup>, Priscilla Carvalho Veggi<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 18:00 Adipose derived stem cells associated with red propolis and natural rubber modified with plasma and silver** **B.P4.19**  
 Charlene Silvestrin Celi Garcia<sup>1</sup>, Ana Elisa Dotta Maddalozzo<sup>1</sup>, Paulo Miguel Garcia<sup>1</sup>, Daniela Steffens<sup>1</sup>, Marcelo Giovanela<sup>1</sup>, João Pêgas Henriques<sup>1</sup>, Cesar Aguzzoli<sup>2</sup>, Janaina da Silva Crespo<sup>1</sup>, Mariana Roesch Ely<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul, <sup>2</sup>University of Caxias do Sul
- 18:00 Controlled release of N-source fertilizer by castor oil-based poly(urethane) coatings** **B.P4.20**  
**Controlled release of N-source fertilizer by castor oil-based poly(urethane) coatings**  
Marisa Gomes da Silva<sup>1</sup>, Ricardo Bortoletto-Santos<sup>2</sup>, Wagner Luiz Polito<sup>3</sup>, Cauê Ribeiro Oliveira<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Embrapa Instrumentação, <sup>3</sup>Instituto de Química de São Carlos-USP
- 18:00 Biolarvicide based on biodegradable polymeric nanoparticles against *Aedes aegypti*** **B.P4.21**  
MAXWALDO DA SILVA RABELO<sup>1</sup>, Sidney Gomes Azevedo<sup>1</sup>, jessica montenegro santana silva<sup>1</sup>, Larissa Medeiros Oliveira<sup>1</sup>, André Correia Oliveira<sup>1</sup>, Edgar Aparecido Sanches<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 18:00 Biodegradable polymeric composite from peach palm residues: preparation and characterization** **B.P4.22**  
 Francielen Paola Sá<sup>1</sup>, Mirela Angelita Artner<sup>2</sup>, Mailson Matos<sup>2</sup>, Washington Luiz Esteves Magalhães<sup>2,1</sup>; <sup>1</sup>Embrapa Florestas, <sup>2</sup>Universidade Federal do Paraná
- 18:00 Silica/titania based material for enzyme immobilization** **B.P4.23**  
Natalia Carminatti Ricardi<sup>1</sup>, Leliz Ticona Arenas<sup>1</sup>, Edilson Valmir Benvenuti<sup>1</sup>, Elí Emanuel Esparza Flores<sup>1</sup>, Plinho Francisco Hertz<sup>1</sup>, Tania Maria Haas Costa<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 18:00 Hyperbranched polyglycerol based hydrogel as a system for controlled drug release** **B.P4.24**  
Natalia Cristina Borges<sup>1</sup>, Lucas Szmgel Moda<sup>1</sup>, Ligia Passos Maia<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Evaluation of chitosan and sodium tripolyphosphate concentrations in the production of nanocapsules by response surface methodology** **B.P4.25**  
Natalia Cristina Silva<sup>1</sup>, Tais Teo de Barros<sup>2</sup>, Odilio B. G. Assis<sup>2</sup>, Milena Martelli Tosi<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Embrapa Instrumentação

- 18:00 Comparison between kraft lignin and lignosulfonate as reinforcement in the in situ methyl methacrylate miniemulsion polymerization** **B.P4.26**  
Noêmi Rodrigues Lovato Assumpção<sup>1</sup>, Liliane Maria Ferrareso Lona<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 18:00 Encapsulation of neem oil in PLGA nanoparticles obtained via miniemulsion/solvent evaporation technique** **B.P4.27**  
 Joice Palma Bigon<sup>1</sup>, Juliana Duarte Zotelli Boaventura<sup>1</sup>, Noêmi Rodrigues Lovato Assumpção<sup>1</sup>, Liliane Maria Ferrareso Lona<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 18:00 Sponges based on Polymeric Chitosan for biomedical application: Control and stagnation of bleeding and wound healing.** **B.P4.28**  
Oscar Antonio Nino Santisteban<sup>1</sup>, Guilherme Molinari Sacco<sup>1</sup>, Jose Geraldo Nery<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>São Paulo State University
- 18:00 Bovine Serum Albumin (BSA) conformational studies and interaction with NAFION® polymer under different physicochemical conditions by circular dichroism and fluorescence spectroscopies.** **B.P4.29**  
 Luiz Filipe Tsarbopoulos de Resende<sup>1</sup>, Alexandre Marletta<sup>2</sup>, Patricia Targon Campana<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade Federal de Uberlândia
- 18:00 Coating with chitosan-based edible films for mechanical/biological protection and shelf-life extension of strawberries** **B.P4.30**  
Rafaela C. Sanfelice<sup>1</sup>, Adriana Pavinatto<sup>2</sup>, Alexia V. A. Mattos<sup>1</sup>, Ana Cláudia Granato Malpass<sup>1</sup>, Mônica H. Okura<sup>1</sup>, Debora Terezia Balogh<sup>3</sup>; <sup>1</sup>Universidade Federal do Triângulo Mineiro, <sup>2</sup>Universidade Brasil, <sup>3</sup>Universidade de São Paulo
- 18:00 Preparation and mechanical properties of emulsive systems composed of carbomer 934P, natural oils and propolis extract** **B.P4.31**  
Rafaela Said dos Santos<sup>1</sup>, Jéssica Bassi da Silva<sup>1</sup>, Marcos Luciano Bruschi<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 18:00 Filaments from chitin nanofibers and alginate obtained by interfacial complexation** **B.P4.32**  
Rafael Grande<sup>1</sup>, Long Bai<sup>2</sup>, Ling Wang<sup>2</sup>, Wenchao Xiang<sup>2</sup>, Olli Ikkala<sup>2</sup>, Antonio Jose Felix Carvalho<sup>3</sup>, Orlando J Rojas<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Aalto University / Aalto-yliopisto, <sup>3</sup>Escola de Engenharia de São Carlos
- 18:00 Antimicrobial scaffolds based on regenerated cellulose@silver nanoparticles as potential tools for tissue engineering** **B.P4.33**  
Rafael Miguel Sábio<sup>1</sup>, Thais Regina Bombarda<sup>2</sup>, Guilherme Pacheco Pereira<sup>2</sup>, Andréia Bagliotti Meneguim<sup>1</sup>, Robson Rosa da Silva<sup>1</sup>, Wilton Rogério Lustri<sup>2</sup>, Flávia Aparecida Resende<sup>2</sup>, Hernane da Silva Barud<sup>2</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Universidade de Araraquara
- 18:00 Time-resolved IR spectroscopic studies of Channelrhodopsin-1 and cysteine variants** **B.P4.34**  
Raiza Nara Antonelli Maia<sup>1</sup>, Maria Walter<sup>1</sup>, Ramona Schlesinger<sup>1</sup>, Joachim Heberle<sup>1</sup>; <sup>1</sup>Freie Universität Berlin
- 18:00 X-Ray Diffraction using Synchrotron Radiation and Thermal Analysis in Pure and Doped Monohydrate L-Asparagine Crystals with Manganese ions under High Temperatures** **B.P4.35**  
Raul Costa Oliveira<sup>1</sup>, Cláudio M.R. Remédios<sup>1</sup>; <sup>1</sup>Federal University of Pará
- 18:00 Alginate and carboxymethyl cellulose-based films incorporated with cellulose nanocrystals from cotton textile waste** **B.P4.36**  
Renato Poli Mari<sup>1</sup>, Jessica Jenifer Sornas<sup>1</sup>, Andrea C. K. Bierhalz<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

- 18:00 Development of hydrogels containing lamellar nanoparticles for slow release of fertilizers** **B.P4.37**  
 Marcela Pfeifer<sup>1</sup>, Flavio Augusto Cavadas Andrade<sup>1</sup>, Ricardo Bortoletto-Santos<sup>2</sup>, Cauê Ribeiro Oliveira<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Embrapa Instrumentação
- 18:00 Biodegradable oil-based polymeric coatings on urea fertilizer: N release kinetics transformations of urea in soil** **B.P4.38**  
Ricardo Bortoletto-Santos<sup>1</sup>, Gelton G F Guimarães<sup>2</sup>, Vanderlei Roncato<sup>3</sup>, Diego Fernandes da Cruz<sup>3</sup>, Wagner Luiz Polito<sup>3</sup>, Cauê Ribeiro Oliveira<sup>1</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Empresa de Pesquisa Agropecuária e Extensão Rural de Santa Catarina, <sup>3</sup>Instituto de Química de São Carlos-USP
- 18:00 Preparation and characterization of electric insulator composite** **B.P4.39**  
Roberto Viana de Sales<sup>1</sup>, Gabriel Sá de Sena<sup>2</sup>, Adenilson Oliveira dos Santos<sup>3,4</sup>, Fernando Mendes<sup>5,6,7,8,9</sup>, Ana Angélica Mathias Macêdo<sup>2,1</sup>; <sup>1</sup>Federal Institute of Maranhão, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>3</sup>Universidade Federal do Maranhão, <sup>4</sup>Federal University of Maranhão, <sup>5</sup>Instituto Politécnico de Coimbra, <sup>6</sup>Universidade de Coimbra, <sup>7</sup>Polytechnic Institute of Coimbra, Coimbra Health School., <sup>8</sup>University of Coimbra, <sup>9</sup>Institute for Clinical and Biomedical Research
- 18:00 Bioactive coating using *Aspergillus niger*: a strategy to improve the efficiency of multinutrients fertilizers** **B.P4.40**  
Rodrigo Klaic<sup>1</sup>, Ricardo Bortoletto-Santos<sup>1</sup>, Vinicius Ferraz Majaron<sup>2</sup>, Marisa Gomes da Silva<sup>2</sup>, Cristiane Sanchez Farinas<sup>1</sup>, Cauê Ribeiro Oliveira<sup>1</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos
- 18:00 Hydrogel of chicha gum modified and its antimicrobial properties** **B.P4.41**  
Rodrigo Prado Feitosa<sup>1</sup>, Alexandro de Sousa Sá<sup>1</sup>, Pollyana Trigueiro<sup>1</sup>, Josy Anteveli Osajima<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 Textural profile analysis properties of emulgels containing curcumin** **B.P4.42**  
Sabrina Barbosa Ferreira<sup>1</sup>, Jéssica Bassi da Silva<sup>1</sup>, Raquel Guttierrez Gomes<sup>1</sup>, Marcos Luciano Bruschi<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 18:00 Mechanical properties of emulgels containing curcumin: softness and syringeability** **B.P4.43**  
Sabrina Barbosa Ferreira<sup>1</sup>, Jéssica Bassi da Silva<sup>1</sup>, Raquel Guttierrez Gomes<sup>1</sup>, Marcos Luciano Bruschi<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 18:00 Fungus-mediated green synthesis of silver nanoparticles** **B.P4.44**  
Scarlett Lalesca Santos de Lima<sup>1</sup>, Fulvia Soares<sup>1</sup>, Lilia Ferreira de Moura Costa<sup>1</sup>, Claudilene Ribeiro Chaves<sup>1</sup>; <sup>1</sup>Universidade Federal da Bahia
- 18:00 Self-assembly nanocarriers based on pullulan-graft-poly( $\epsilon$ -caprolactone) copolymers for controlled release of Indomethacin** **B.P4.45**  
 Layde Teixeira de Carvalho<sup>1</sup>, Maria Luiza da Silva Paula<sup>1</sup>, Rodolfo Minto de Moraes<sup>1</sup>, Talita Martins Lacerda<sup>1</sup>, Julio César dos Santos<sup>1</sup>, Amilton Martins Santos<sup>1</sup>, Simone Medeiros<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena - Universidade de São Paulo
- 18:00 Development and properties evaluation of chitosan-based membranes containing antifungal terbinafine** **B.P4.46**  
Stéfani Laise Silva<sup>1</sup>, Adalberto Enumo Junior<sup>1</sup>, Alexandre Luis Parize<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Hybrid starch/silica films with improved mechanical properties** **B.P4.47**  
Tania Maria Haas Costa<sup>1</sup>, Camila Horst<sup>2</sup>, Simone Hickmann Flores<sup>2</sup>; <sup>1</sup>Instituto de Química - UFRGS, <sup>2</sup>Universidade Federal do Rio Grande do Sul



- 18:00 Manufacture and characterization of biocomposite plates formed of poly (LACTIC COGLYCOLIC ACID) (PLGA) with calcium phosphate (CA/P) for fracture fixation of bone** **B.P4.48**  
Thaiane Balestreri Knopf<sup>1</sup>, Claudia Merlini<sup>1</sup>, Águedo Aragonés<sup>1</sup>, Marcio Celso Fredel<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Characterization of Membranes of Bacterial Cellulose obtained from Kombucha** **B.P4.49**  
Thais Soares de Góes<sup>1</sup>, Aparecido Junior de Menezes<sup>1</sup>, Marcelo de Assunção Pereira-da-Silva<sup>2,3</sup>, Iolanda Cristina Silveira Duarte<sup>1</sup>, Vinícius de Leles Almagro<sup>1</sup>, Adriana Oliveira Delgado-Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>2</sup>Centro Universitário Central Paulista, <sup>3</sup>Instituto de Física de São Carlos - USP
- 18:00 Synthesis of an organic-organic hybrid material based on bacterial and synthetic polymer, PHBV-co-PU: A new system for drug carriers.** **B.P4.50**  
Tiago Augusto Ribeiro Rodrigues<sup>1</sup>, Marli Luiza Tebaldi<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 18:00 Synthesis of the Fe-Co alloy from hybrid spheres using carboxymethylcellulose as template** **B.P4.51**  
Felipe Fernandes Barbosa<sup>1</sup>, Marco A. Morales<sup>1</sup>, Tiago Pinheiro Braga<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 18:00 Preparation and characterization of epicuticular wax films** **B.P4.52**  
Marco Antônio de Carvalho Faria<sup>1</sup>, Marcos da Silva Sousa<sup>2</sup>, Kevin Figueiredo dos Santos<sup>3</sup>, Tiego José Cardoso de Oliveira<sup>1</sup>, João Victor Pereira Valverde<sup>1</sup>, NARA CRISTINA DE SOUZA<sup>1</sup>, JOSMARY RODRIGUES SILVA<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso, <sup>2</sup>Universidade Federal de Pernambuco, <sup>3</sup>Universidade de São Paulo
- 18:00 Prospective study of the Use of Biopolymers as Food & Beverage Outlets Protectors for Conservation of Fruits in natura and minimally Processed** **B.P4.53**  
Humberto Denys De Almeida Silva<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>2</sup>, Hitalo de Jesus Bezerra da Silva<sup>2</sup>, Moisés das Virgens Santana<sup>2</sup>; <sup>1</sup>Faculdade do Vale do Itapecurú, <sup>2</sup>Universidade Federal do Piauí
- 18:00 Effect of nanoparticles and garlic essential oil in the hydrophilicity of edible biofilms based on pectin** **B.P4.54**  
Vanessa Solfa Santos Santos<sup>1</sup>, Fauze Ahmad Aouada<sup>2</sup>, Marcia Regina de Moura<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>São Paulo State University
- 18:00 A strategy to improve the efficiency of granular urea using microorganisms bound to bioactive coating** **B.P4.55**  
Vinicius Ferraz Majaron<sup>1</sup>, Marisa Gomes da Silva<sup>1</sup>, Ricardo Bortoletto-Santos<sup>2</sup>, Rodrigo Klačic<sup>2</sup>, Amanda S Giroto<sup>2</sup>, Gelton G F Guimarães<sup>3</sup>, Wagner Luiz Polito<sup>4</sup>, Cristiane Sanchez Farinas<sup>2</sup>, Cauê Ribeiro Oliveira<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Embrapa Instrumentação, <sup>3</sup>Empresa de Pesquisa Agropecuária e Extensão Rural de Santa Catarina, <sup>4</sup>Instituto de Química de São Carlos-USP
- 18:00 Thermal stability and morphology of gellan gum and clay nanocomposites for use as solid polymer electrolyte** **B.P4.56**  
Willian Robert Caliman<sup>1</sup>, Franciani Sentanin<sup>1</sup>, Rodrigo C Sabadini<sup>2</sup>, Carla Schmitt Cavalheiro<sup>1</sup>, Agnieszka Pawlicka<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade do Minho

**18:00 Synthesis and characterization of biodegradable polymeric nanoparticles for essential oil encapsulation of *Piper nigrum*** B.P4.57

Yuri Gabriel Gomes Figueiredo<sup>1</sup>, Sidney Gomes Azevedo<sup>1</sup>, MAXWALDO DA SILVA RABELO<sup>1</sup>, Edgar Aparecido Sanches<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas

# **SYMPOSIUM C - Advanced Materials and Surface Treatments for Biological, Dental and Medical Applications**

## **Symposium organizers:**

Carlos Roberto Grandini, FBSE (UNESP/Bauru)  
Ana Paula Rosifini Alves Claro (UNESP/Guaratinguetá)  
Paulo Noronha Lisboa Filho (UNESP/Bauru)  
Rossana Mara da Silva Moreira Thiré (UFRJ/COPPE)  
Rodrigo Silveira Vieira (Universidade Federal do Ceará)



# MONDAY , SEPTEMBER 23

\* Invited Lecture

## *SESSION C.01.D1 (09:30 - 10:30) - Room Atlântico*

- 09:30 Engineering Material Surfaces for Blood Contacting Medical Devices** C.O1.D1.1\*  
Ketul C Popat<sup>1</sup>; <sup>1</sup>Colorado State University
- 10:00 An integrated strategy for Engineering novel nanofiber: Enhanced properties and good candidate for abdominal hernia repair** C.O1.D1.2  
Samson Afewerki<sup>1,2</sup>, Samarah Vargas Harb<sup>3</sup>, Nicole Bassous<sup>4</sup>, Sushila Maharjan<sup>2</sup>, Guilherme Ruiz-Sparza<sup>2</sup>, Thomas Jay Webster<sup>4</sup>, Carla Tim<sup>5</sup>, Bartolomeu Cruz Viana<sup>6</sup>, Marcus Corat<sup>7</sup>, Fernanda Roberta Marciano<sup>6</sup>, Anderson Oliveira Lobo<sup>6</sup>, Gustavo Fernandes Sousa<sup>6</sup>; <sup>1</sup>Massachusetts Institute of Technology, <sup>2</sup>Harvard Medical School, <sup>3</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil, <sup>4</sup>Northeastern University, <sup>5</sup>Universidade Brasil, <sup>6</sup>Universidade Federal do Piauí, <sup>7</sup>Universidade Estadual de Campinas
- 10:15 Surface Modifications of New Titanium Alloys for Biomedical Applications - Bulk and Surface Properties** C.O1.D1.3  
Ana Paula Rosifini Alves Claro<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá

## *SESSION C.02.D1 (11:00 - 12:00) - Room Atlântico*

- 11:00 TiO<sub>2</sub> based material as novel strategies for caries treatment** C.O2.D1.1  
EDUARDO THADEU RODRIGUES<sup>1</sup>; <sup>1</sup>Universidade do Vale do Rio dos Sinos
- 11:15 Novel zirconia-bioactive glass scaffolds for bone regeneration** C.O2.D1.2  
Bruno Henriques<sup>1</sup>, Paula Gouveia<sup>1</sup>, Joana Mesquita Guimarães<sup>2</sup>, Maria Elisa Galarraga<sup>1</sup>, Júlio C M Souza<sup>3</sup>, Filipe Samuel Silva<sup>2</sup>, Marcio Celso Fredel<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade do Minho, <sup>3</sup>Cooperativa de Ensino Superior, Politécnico e Universitário
- 11:30 Production and characterization of ceramic scaffolds to mesenchymal cells growth by freeze casting process** C.O2.D1.3  
Lais Soares Vieira<sup>1</sup>, Alyssoon Martins Almeida Silva<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 11:45 Carefully designed nanocomplexes based on carbon nanotubes and gold nanorods wrapped with aptamers** C.O2.D1.4  
Estefânia Mara do Nascimento Martins<sup>1</sup>, Mariana Botelho Barbosa<sup>1</sup>, Polyane Reis dos Santos<sup>1</sup>, Luiz Orlando Ladeira<sup>2</sup>, Antero Silva Ribeiro de Andrade<sup>1</sup>, Adelina Pinheiro Santos<sup>1</sup>, Clascídia A. Furtado<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais

## *SESSION C.03.D1 (14:00 - 16:15) - Room Atlântico*

- 14:00 From the basic of cell adhesion to high-tech sensors** C.O3.D1.1\*  
Hernandes F Carvalho<sup>1</sup>; <sup>1</sup>Institute of Biology-Unicamp

- 14:30 The Effect of Nanoscale Surface Electrical Properties of Biodegradable PEDOT-co-PDLLA Conducting Polymers on Protein Adhesion Investigated by Atomic Force Microscopy** C.O3.D1.2  
Aruã Clayton Da Silva<sup>1</sup>, Michael Higgins<sup>2</sup>, Susana Ines Cordoba de Torresi<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>University of Wollongong
- 14:45 Antimicrobial activity and cytotoxicity to tumor cells of nitric oxide donor and silver nanoparticles containing PVA/PEG films for topical applications** C.O3.D1.3  
Wallace Rosado Rolim<sup>1</sup>, Joana Claudio Pieretti<sup>1</sup>, Débora Liliane de Souza Renó<sup>1</sup>, Mônica Helena Monteiro Nascimento<sup>1</sup>, Bruna Araujo Lima<sup>2</sup>, Felipe Nogueira Ambrosio<sup>1</sup>, Christiane Bertachini Lombello<sup>1</sup>, Marcelo Brocchi<sup>2</sup>, Ana Carolina Santos de Souza<sup>1</sup>, Amedea Barozzi Seabra<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidade Estadual de Campinas
- 15:00 Aloe Vera aqueous extract as an alternative to synthesize silver nanoparticles for medical applications** C.O3.D1.4  
Jean Araujo das Neves Silva<sup>1</sup>, Franz Acker Lobianco<sup>1,2</sup>, Fernanda Resende Locatelli<sup>3</sup>, Ariane De Jesus Sousa Batista<sup>1</sup>, Bruna Nunes Teixeira<sup>1</sup>, Rossana Mara da Silva Moreira Thiré<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro/COPPE, <sup>2</sup>Universidade Federal do Rio de Janeiro/Escola Politécnica, <sup>3</sup>Universidade Federal do Rio de Janeiro
- 15:15 Study of release of drugs from nanostructured PCL biomaterials obtained by electrospinning** C.O3.D1.5  
Javier Mauricio Anaya Mancipe<sup>1</sup>, Agnes Chacor de Figueiredo<sup>1</sup>, Roberta Helena Mendonça<sup>2</sup>, Marcos Lopes Dias<sup>3</sup>, Rossana Mara da Silva Moreira Thiré<sup>4</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Universidade Federal Rural do Rio de Janeiro, <sup>3</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ, <sup>4</sup>Universidade Federal do Rio de Janeiro/COPPE
- 15:30 Production and characterization of polymeric nanospun fibers by Solution Blow Spinning for bioactive compounds encapsulation** C.O3.D1.6  
Aline Luiza Machado Carlos<sup>1</sup>, Rossana Mara da Silva Moreira Thiré<sup>1</sup>, Marcos Lopes Dias<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro/COPPE, <sup>2</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ
- 15:45 Antibacterial Surface Based on New Epoxy-Amine Networks From Ionic Liquid Monomers** C.O3.D1.7  
Sébastien Livi<sup>1</sup>, Luanda C.V. Lins<sup>1</sup>, Larissa Brentano Capeletti<sup>2</sup>, Mateus B Cardoso<sup>2</sup>, Jerome Baudoux<sup>3</sup>; <sup>1</sup>Institut National des Sciences Appliquées de Lyon, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>University of Caen
- 16:00 Bisphosphonate-Biofunctionalized Titanium Surfaces for Dental Applications** C.O3.D1.8  
Paulo Noronha Lisboa Filho<sup>1</sup>, Carolina Simão Albano<sup>2</sup>, Erika Soares Bronze-Uhle<sup>1</sup>, Luciana Daniele Trino<sup>1</sup>, Leonardo Gonçalves Dias<sup>1</sup>, Willian Fernando Zambuzzi<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>2</sup>Universidade Estadual Paulista - Instituto de Biociências de Botucatu

## TUESDAY, SEPTEMBER 24

\* Invited Lecture

**SESSION C.01.D2 (09:30 - 10:30) - Room Atlântico**

- 09:30 Injectable Hydrogels for Treating musculoskeletal injury and pain** C.O1.D2.1\*  
Lakshmi S. Nair<sup>1</sup>; <sup>1</sup>University of Connecticut
- 10:00 3D Printed Poly(acrylic acid)/Pluronic® F127/Cellulose Nanocrystal-Hydrogels for Nitric Oxide Delivery** C.O1.D2.2  
Murilo Izidoro Santos<sup>1</sup>, Laura Caetano Escobar da Silva<sup>1</sup>, Maria do Carmo Gonçalves<sup>1</sup>, Marcelo Ganzarolli De Oliveira<sup>1</sup>; <sup>1</sup>Instituto de Química (IQ) - Universidade Estadual de Campinas (Unicamp)
- 10:15 Papain immobilized in calcium alginate membrane for wound dressing** C.O1.D2.3  
Raimundo Nonato Fernandes Moreira Filho<sup>1,2</sup>, Fábila Karine Andrade<sup>1,2</sup>, Morsyleide Freitas Rosa<sup>1,2</sup>, Rodrigo Silveira Vieira<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Embrapa

**SESSION C.02.D2 (11:00 - 12:00) - Room Atlântico**

- 11:00 Shot peening surface treatment effect in 316L stainless steel surface modification** C.O2.D2.1  
Eloana Patrícia Ribeiro<sup>1</sup>, Stella Kresiak Farneze<sup>1</sup>, Antonio Augusto Couto<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energeticas e Nucleares
- 11:15 Effect of chemical and thermal treatment on Ti-CP for surface optimization and osseointegration enhancement** C.O2.D2.2  
Marcelo Gabriel de Oliveira<sup>1</sup>, Polyana Alves Radi<sup>2</sup>, Gabriela Malaspina<sup>2</sup>, Danieli Aparecida Pereira Reis<sup>2</sup>, Adriano Gonçalves Reis<sup>1</sup>; <sup>1</sup>Instituto de Ciência e Tecnologia - Campus de São José dos Campos, <sup>2</sup>Universidade Federal de São Paulo
- 11:30 Obtaining of Ti-13Nb-13Zr powder from chips of the alloy using HDH process** C.O2.D2.3  
Persio Mozart Pinto<sup>1</sup>, Mariana Oleone Marinho de Castro<sup>1</sup>, Bento Ferreira<sup>1</sup>, André Luiz Carvalho de Rezende Silva<sup>1</sup>, Durval Rodrigues Jr.<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena - USP
- 11:45 Growth of multicomponent oxides on biomedical Ti-based alloys by plasma-electrolytic oxidation** C.O2.D2.4  
Diego Rafael Nespeque Correa<sup>1</sup>, Livia Sottovia<sup>2</sup>, Nilson C. Cruz<sup>2</sup>, Elidiane C. Rangel<sup>2</sup>, Carlos Roberto Grandini<sup>2</sup>, Luís Augusto Rocha<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>São Paulo State University

**SESSION C.03.D2 (14:00 - 16:15) - Room Atlântico**

- 14:00 Low cost personalized bioprinter for testing various biomaterial inks for 3D bioprinting** C.O3.D2.1\*  
Janaina de Andréa Dernowsek<sup>1,2</sup>, Alessandro Zaguini Queiroz<sup>3</sup>, Elisabeth Pizoni<sup>4</sup>, Silviene Novikoff<sup>5</sup>, Jorge Vicente Lopes da Silva<sup>1</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer, <sup>2</sup>INCT-Regenera, <sup>3</sup>BioEdTech - Centro de Capacitação, Desenvolvimento e Inovação em Bioimpressão de Tecidos, <sup>4</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil, <sup>5</sup>Universidade Federal de São Paulo

- 14:30 Growth of nanopores by electrochemical anodizing on Ti-6Al-4V ELI alloy scaffolds made by additive manufacturing** **C.O3.D2.2**  
Guilherme Arthur Longhitano<sup>1,2</sup>, Maria Aparecida Larosa<sup>1,2</sup>, Cecília Amélia de Carvalho Zavaglia<sup>1,2</sup>, André Luiz Jardini<sup>1,2</sup>, Rubens Maciel Filho<sup>1,2</sup>, Maria Angeles Arenas<sup>3</sup>, Ana Conde<sup>3</sup>, Juan José Damborenea<sup>3</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>National Institute of Biofabrication, <sup>3</sup>Centro Nacional de Investigaciones Metalúrgicas
- 14:45 From Porous to Dense Nanostructured  $\beta$ -Ti alloys through High-Pressure Torsion: Advanced Characterization** **C.O3.D2.3**  
Conrado Ramos Moreira Afonso<sup>1</sup>, Vicente Amigó Borrás<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidad Politécnica de Valencia
- 15:00 Twinning disclosure under fatigue loading of a fully beta Ti-Mo system** **C.O3.D2.4**  
Leonardo Contri Campanelli<sup>1</sup>, Cesar Adolfo Escobar Claros<sup>1</sup>, Brenda Juliet Martins Freitas<sup>1</sup>, Paulo Sergio Carvalho Pereira da Silva<sup>1</sup>, Claudemiro Bolfarini<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 15:15 Tribocorrosion behavior of Ti-10Nb alloy for biomaterial applications** **C.O3.D2.5**  
Aline Rossetto Luz<sup>1</sup>, Tuany Kasiorowski<sup>2</sup>, Carlos Roberto Grandini<sup>3,4</sup>, Carlos Mauricio Lepiensi<sup>5</sup>, Neide Kazue Kuromoto<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Pontifícia Universidade Católica do Paraná, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>São Paulo State University, <sup>5</sup>Universidade Tecnológica Federal do Paraná
- 15:30 Structural, Mechanical, and Tribological Characterization of Ti-Nb-Mo Ternary  $\beta$  Alloy Coatings** **C.O3.D2.6**  
Ernesto David Gonzalez<sup>1</sup>, Angelo Luiz Gobbi<sup>2</sup>, Newton Kiyoshi Fukumasu<sup>3</sup>, Conrado Ramos Moreira Afonso<sup>4</sup>, Pedro Augusto de Paula Nascente<sup>4</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Universidade de São Paulo, <sup>4</sup>Universidade Federal de São Carlos
- 15:45 Development of Ti-Zr-Nb based High Entropy Alloys for biomedical application** **C.O3.D2.7**  
Tayná Cristina Germano da Silva<sup>1</sup>, Matheus Ferreira Gomes<sup>1</sup>, Rafaella M Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 16:00 Some novel beta metastable Ti-based alloys, without cytotoxic elements, for biomedical applications** **C.O3.D2.8**  
Carlos Roberto Grandini<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

## WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

### *SESSION C.O1.D3 (09:30 - 10:30) - Room Atlântico*

- 09:30 Two Decades of Commercializing Nanomedicine for Medical Devices** **C.O1.D3.1\***  
Thomas Jay Webster<sup>1</sup>; <sup>1</sup>Northeastern University



**10:00 Polymer covering effect on Sodium Cefazolin release from TiNTs** **C.O1.D3.2**  
Anna Paulla Simon<sup>1</sup>, Carlise Hannel Ferreira<sup>1</sup>, Vidiany Aparecida Queiroz Santos<sup>2,1</sup>, Andressa Rodrigues<sup>3</sup>, Janaina Soares Santos<sup>3</sup>, Francisco Trivinho Strixino<sup>3</sup>, Patricia Teixeira Marques<sup>1</sup>, Henrique Emilio Zorel Junior<sup>1</sup>, Mariana S Sikora<sup>1</sup>; <sup>1</sup>Federal University of Technology - Paraná, <sup>2</sup>Faculdade de Pato Branco, <sup>3</sup>Universidade Federal de São Carlos - Campus Sorocaba

**10:15 A Perspective on Chiral Plasmonics Biosensing** **C.O1.D3.3**  
Willian Azevedo e Paiva Marques<sup>1</sup>, Kamilla Rodrigues Cruz<sup>1</sup>, Osvaldo Novais de Oliveira Jr<sup>2</sup>, JORGE RICARDO MEJIA SALAZAR<sup>1</sup>; <sup>1</sup>Instituto Nacional de Telecomunicações, <sup>2</sup>Universidade de São Paulo

### **SESSION C.O2.D3 (11:00 - 12:00) - Room Atlântico**

**11:00 Functional metal-carbynoid nanostructures for biological applications** **C.O2.D3.1**  
Tommaso Del Rosso<sup>1</sup>, Tahir Tahir<sup>1</sup>, Marco Cremona<sup>1</sup>, Anna Laurenzana<sup>2</sup>, Mario Del Rosso<sup>2</sup>, Gabriella Fibbi<sup>2</sup>, Leonard Francis Deepak<sup>3</sup>, Sandra Landi<sup>4</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Università degli Studi di Firenze, <sup>3</sup>International Iberian Nanotechnology Laboratory, <sup>4</sup>National Institute of Metrology

**11:15 Study of the powder metallurgy technique to obtain magnesium alloys** **C.O2.D3.2**  
Viviane do Socorro da Costa<sup>1</sup>, Persio Mozart Pinto<sup>1</sup>, André Luiz Carvalho de Rezende Silva<sup>1</sup>, Durval Rodrigues Jr.<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena - USP

**11:30 Optimized-Surface Wettability: A New Experimental-3D Modeling Approach Predicting Favorable Biomaterial-Cell Interactions** **C.O2.D3.3**  
Rodney Marcelo do Nascimento<sup>1,2,3</sup>, Udi Sarig<sup>4</sup>, Nilson C Cruz<sup>5</sup>, Vanessa Carvalho<sup>6</sup>, Camille Eyssartier<sup>3</sup>, Larbi Siad<sup>7</sup>, Jean-François Ganghoffer<sup>3</sup>, Antônio Carlos Hernandez<sup>2</sup>, Rachid Rahouadj<sup>3</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>Université de Lorraine, <sup>4</sup>Technion Israel Institute of Technology, <sup>5</sup>Universidade Estadual Paulista, <sup>6</sup>Universidade Estadual de São Paulo, <sup>7</sup>Université de Reims Champagne-Ardenne

**11:45 Rotary jet spun polyurethane-protein membranes for cardiovascular tissue engineering** **C.O2.D3.4**  
Isabella Caroline Pereira Rodrigues<sup>1</sup>, Karina Danielle Pereira<sup>2,1</sup>, André Luiz Jardini<sup>3</sup>, Augusto Ducati Luchessi<sup>2,1</sup>, Eder Socrates Najar Lopes<sup>3,4</sup>, Laís Pellizzer Gabriel<sup>3,1</sup>; <sup>1</sup>Faculdade de Ciências Aplicadas, Unicamp, <sup>2</sup>Universidade Estadual Paulista - Campus Rio Claro, <sup>3</sup>National Institute of Biofabrication, <sup>4</sup>Faculdade de Engenharia Mecânica, Unicamp

## **MONDAY, SEPTEMBER 23**

### **Poster presentations**

**SESSION C.P2 (18:00 - 19:30)**

- 18:00 Study of the porosity variation of hydroxyapatite using different types of polyethylene glycol** C.P2.1  
Beatriz Pinetti Angonese<sup>1</sup>, Marcio Florian<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Design of advanced biomedical Ti-based alloy with bioactive and osseointegrative capabilities** C.P2.2  
Jhuliane Elen Torrento<sup>1</sup>, Luís Augusto Rocha<sup>1</sup>, Carlos Roberto Grandini<sup>1</sup>, Diego Rafael Nespeque Correa<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 18:00 Response surface methodology as a innovative tool for scaling up green synthesis of silver nanoparticles** C.P2.3  
Julia Moreira Pupe<sup>1,2</sup>, Cíntia Caetano Bonatto<sup>3</sup>, Luciano Paulino Silva<sup>1,2</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>EMBRAPA, Centro Nacional de Pesquisa de Recursos Genéticos e Biotecnologia, <sup>3</sup>Tecsinapse
- 18:00 Impedimetric immunosensor based on 3-n-propyl(2-amino-4-aminomethyl)pyridinium silsesquioxane-functionalized gold nanoparticles towards the clinical diagnosis of Chagas disease** C.P2.4  
Dhésmon Lima<sup>1</sup>, Luma Clarindo Lopes<sup>1</sup>, Luana Gonçalves<sup>1</sup>, Ariane Caroline Ribicki<sup>1</sup>, Sérgio Toshio Fujiwara<sup>1</sup>, Christiana Andrade Pessoa<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa
- 18:00 Functionalization of titanates nanorods to improve dispersion in polymethylmethacrylate based nanocomposites** C.P2.5  
Diego Morais da Silva<sup>1,2</sup>, Beatriz Rossi Canuto de Menezes<sup>2</sup>, Thaís Larissa do Amaral Montanheiro<sup>2</sup>, Gilberto Petraconi Filho<sup>2</sup>, Gilmar Patrocínio Thim<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Instituto Tecnológico de Aeronáutica
- 18:00 Growth of TiO<sub>2</sub> nanotubes and corrosion behavior of the Ti-35Nb-4Zr alloy** C.P2.6  
Alberto Zanesco Fatichi<sup>1</sup>, Mariana Gerardi Mello<sup>2</sup>, Rubens Caram<sup>1</sup>, Alessandra Cremasco<sup>2</sup>; <sup>1</sup>Faculdade de Engenharia Mecânica, Unicamp, <sup>2</sup>Faculdade de Ciências Aplicadas, Unicamp
- 18:00 Dental commercial implant study after surface treatment by plasma eletrolytic oxidation in cylindrical reactor** C.P2.7  
Ana Karenina de Oliveira Paiva<sup>1</sup>, Paulo Victor de Azevedo Guerra<sup>1</sup>, Ângelo Roncalli Oliveira Guerra<sup>1</sup>, João Marcos Teixeira Lacerda<sup>2</sup>, João Paulo Queiroz dos Santos<sup>2</sup>, Andréa Santos Pinheiro de Melo<sup>1</sup>, Ricardo Alexandro Medeiros Valentim<sup>1</sup>, Custódio Leolpodino de Brito Guerra Neto<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Norte
- 18:00 Influence of agitation on the TiO<sub>2</sub> nanotubes growth in pure titanium surface** C.P2.8  
Ana Lúcia do Amaral Escada<sup>1</sup>, Bárbara Lois Mathias<sup>2</sup>, Ana Paula Rosifini Alves Claro<sup>2</sup>; <sup>1</sup>Universidade Estadual de São Paulo - Campus Guaratinguetá, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá
- 18:00 Effects of Chlorhexidine /Polydopamine Surface Treatment on Ti-7.5Mo Alloy on Candida albicans and Staphylococcus aureus biofilm formation** C.P2.9  
Ana Lúcia do Amaral Escada<sup>1</sup>, Giovana Bette Francisco<sup>1</sup>, Cristiane Aparecida Pereira<sup>2</sup>, Ana Paula Rosifini Alves Claro<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá, <sup>2</sup>Universidade Estadual Paulista - Campus de São José dos Campos

- 18:00 Compositional Library of Ti-Nb-Zr Ternary Alloy Thin Films** **C.P2.10**  
 Ana Luiza de Castro<sup>1</sup>, Ernesto David Gonzalez<sup>1</sup>, Angelo Luiz Gobbi<sup>2</sup>, Leonardo Cabral Gontijo<sup>3</sup>, Conrado Ramos Moreira Afonso<sup>4</sup>, Pedro Augusto de Paula Nascente<sup>4</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>4</sup>Universidade Federal de São Carlos
- 18:00 Functionalization of a nanotubular TiO<sub>2</sub> layer and SLA surface with Ca-P compounds by electrodeposition method** **C.P2.11**  
Ana Paula dos Reis Weitzel<sup>1,2</sup>, Elisa Marchezini Rodrigues<sup>2</sup>, Fernanda de Paula Oliveira<sup>2</sup>, Eduardo Henrique Martins Nunes<sup>1</sup>, Maximiliano Delany Martins<sup>2</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 18:00 Polyvinyl alcohol/Bioactive glasses hybrid scaffolds containing cobalt as a potential strategy for Angiogenesis** **C.P2.12**  
ANDRÉIA GROSSI SANTOS DE LAIA<sup>1</sup>, Breno Rocha Barrioni<sup>1</sup>, MARCOS AUGUSTO DE SÁ<sup>1</sup>, Marivalda Magalhães Pereira<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 18:00 Surface treated electrospun polycaprolactone fibers as a substrate for tissue engineering** **C.P2.13**  
Anna Toledo<sup>1</sup>, Bruna Santos Ramalho<sup>2</sup>, Leandra Santos Baptista<sup>2</sup>, Ana Maria Blanco Martinez<sup>2</sup>, Marcos Lopes Dias<sup>1</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ, <sup>2</sup>Universidade Federal do Rio de Janeiro
- 18:00 Electrochemical passivity of Ti6Al4V alloys coated with Diamond like carbon modified** **C.P2.14**  
Augusto Versteeg<sup>1</sup>, Lázaro Aleixo dos Santos<sup>1</sup>, Anelise Schmidt<sup>2</sup>, Vladimir Jesus Trava-Airoldi<sup>3</sup>, Silvia Mesquita Tamborim<sup>4</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade Federal do Pampa, <sup>3</sup>Instituto Nacional de Pesquisas Espaciais, <sup>4</sup>Instituto de Química - UFRGS
- 18:00 Biomechanical analysis of dental implants coated with bioactive glass using the finite elements method** **C.P2.15**  
 Douglas Fabris<sup>1</sup>, Júlio César Matias Souza<sup>2</sup>, Filipe Samuel Silva<sup>2</sup>, Marcio Celso Fredel<sup>1</sup>, Bruno Henriques<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade do Minho
- 18:00 Corrosion behaviour of a Ti-15Zr-15Mo alloy functionalized by micro-arc oxidation** **C.P2.16**  
Caio Castanho Xavier<sup>1,2</sup>, Carlos Roberto Grandini<sup>3,1,2</sup>, Ana Maria Pinto<sup>4</sup>, Alexandra Alves<sup>4</sup>, Paulo Noronha Lisboa Filho<sup>5,2</sup>, Luís Augusto Rocha<sup>3,1</sup>, Fatih Toptan<sup>4</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Institute of Biomaterials, Tribocorrosion and Nanomedicine, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>Universidade do Minho, <sup>5</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru
- 18:00 Effects of the chitosan associated with photobiomodulation for osteoarthritis treatment** **C.P2.17**  
 Soraia Salman<sup>1</sup>, Cintia Cristina Santi Martignago<sup>2</sup>, Juliana Carolina Tarocco<sup>1</sup>, Eduardo Trevisan<sup>1</sup>, Livia Assis<sup>1</sup>, Carla Roberta Tim<sup>1</sup>; <sup>1</sup>Universidade Brasil, <sup>2</sup>Universidade Federal de São Carlos
- 18:00 Corrosion analysis of Ti c.p. coated with hydroxyapatite and natural bactericide in mouthwashes** **C.P2.18**  
 Brenda Fernanda Gaspar de Souza<sup>1</sup>, Carolina Cruz Ferreira<sup>1</sup>, Lucíola Lucena de Sousa<sup>1</sup>, Yasmin Maria Vilela Souza e Silva<sup>1</sup>, Daniela Sachs<sup>2</sup>, Patricia Capellato<sup>2</sup>, Neide Aparecida Mariano<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Universidade Federal de Itajubá

- 18:00 Functional oxygen generating nanogels for cartilage tissue engineering applications** **C.P2.19**  
Caterine Yesenia Carrasco Montesdeoca<sup>1</sup>, Samson Afewerki<sup>2,3</sup>, Fernanda Roberta Marciano<sup>1</sup>, Marcus A.F. Corat<sup>4</sup>, Mirian Michelle Machado de Paula<sup>4</sup>, Anderson Oliveira Lobo<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Massachusetts Institute of Technology, <sup>3</sup>Harvard Medical School, <sup>4</sup>State University of Campinas
- 18:00 Stable scaffolds of xanthan and chitosan mineralized in situ by calcium phosphate** **C.P2.20**  
Aline Evangelista Aguiar<sup>1</sup>, MARIANA de OLIVEIRA SILVA<sup>1</sup>, CELSO APARECIDO BERTRAN<sup>1</sup>; <sup>1</sup>INSTITUTE OF CHEMISTRY/UNICAMP
- 18:00 45S5 bioglass scaffolds to repair bone tissue damages** **C.P2.21**  
MARIANA de OLIVEIRA SILVA<sup>1</sup>, CELSO APARECIDO BERTRAN<sup>1</sup>; <sup>1</sup>INSTITUTE OF CHEMISTRY/UNICAMP
- 18:00 Physical-chemical characterization of Si<sub>3</sub>N<sub>4</sub>-TiO<sub>2</sub> ceramic nanocomposites obtained to biomedical applications** **C.P2.22**  
Celso Ricardo Sona Filho<sup>1</sup>, Rodrigo Teixeira Bento<sup>1</sup>, Cecilia Chaves Guedes e Silva<sup>1</sup>, Marina Fuser Pillis<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energeticas e Nucleares
- 18:00 Synthesis of titanium nanotube and application as support in the immobilization of enzymes for catalysis** **C.P2.23**  
cristiane Pilissão<sup>1</sup>, Juliane Bessoni Kosciuk<sup>1</sup>; <sup>1</sup>Federal University of Technology - Paraná
- 18:00 Synthesis of Nb<sub>2</sub>O<sub>5</sub> nanotubes by hydrothermal method** **C.P2.24**  
cristiane Pilissão<sup>1</sup>, Thays Cordeiro<sup>1</sup>, Roberta Rizzo Domingues<sup>1</sup>; <sup>1</sup>Federal University of Technology - Paraná
- 18:00 Cellular growth effects on mechanical/corrosion resistances of a Zn-1wt.%Cu ALLOY** **C.P2.25**  
Crystopher Cardoso Brito<sup>1</sup>, Talita Almeida Vida<sup>2</sup>, Fábio Ruiz Simões<sup>3</sup>, Thiago Soares Lima<sup>2</sup>, Noé Cheung<sup>2</sup>, Amauri Garcia<sup>2</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Faculdade de Engenharia Mecânica, Unicamp, <sup>3</sup>Universidade Federal de São Paulo
- 18:00 Material surface characterization by ToF-SIMS** **C.P2.26**  
Sthefany Selhorst<sup>1</sup>, Daniel Eduardo Weibel<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 18:00 Laser surface modified NITinol shape memory alloy** **C.P2.27**  
David Macedo Dias<sup>1</sup>, Maria Margareth da Silva<sup>1</sup>, Osmar De Sousa Santos<sup>2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Universidade Federal de Lavras
- 18:00 Effect of carbazol derivatives on degree of conversion of Bis-GMA/TEGDMA dental resins** **C.P2.28**  
Diérickson Sousa Cordeiro<sup>1</sup>, Murillo Martins Leite<sup>1</sup>, Lawrence Gonzaga Lopes<sup>1</sup>, Tatiana Duque Martins<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 18:00 Inorganic-organic hybrid systems for controlled drug release** **C.P2.29**  
Fabírcia Castro Silva<sup>1</sup>, Caio Carvalho Coêlho<sup>1</sup>, Luciano Clécio Brandão Lima<sup>1</sup>, Josy Antevelli Osajima<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 Development of an automated surface treatment system of titanium samples with hydroxyapatite** **C.P2.30**  
Eduardo Costa Estambasse<sup>1</sup>, Flávio Anutnes Ferreira<sup>1</sup>, César Renato Foschini<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>2</sup>Universidade Estadual Paulista

- 18:00 Hydroxyapatite incorporation into polyamide membranes** **C.P2.31**  
 Lauany Mazzon Pontes<sup>1</sup>, Emerson Henrique de Faria<sup>1</sup>, Katia Jorge Ciuffi<sup>1</sup>, Lucas Alonso Rocha<sup>1</sup>, Eduardo José Nassar<sup>1</sup>, Jorge Vicente Lopes da Silva<sup>2</sup>, Marcelo Fernandes Oliveira<sup>2</sup>, Izaque Alves Maia<sup>2</sup>; <sup>1</sup>Universidade de Franca, <sup>2</sup>Centro de Tecnologia da Informação Renato Archer
- 18:00 Evaluation of the biocompatibility of ceramic paste of calcium phosphates** **C.P2.32**  
 Carla Rosana Gonzaga da Silva Cardoso<sup>1</sup>, Andrés Vercik<sup>1</sup>, Mariza P Melo<sup>1</sup>, Silvana Marina Piccoli Pugine<sup>1</sup>, Antonio Márcio Scatolini<sup>1</sup>, Luci Cristina de Oliveira Vercik<sup>1</sup>, Eliana Cristina da Rigo Rigo<sup>1</sup>; <sup>1</sup>Faculdade de Zootecnia e Engenharia de Alimentos
- 18:00 Effect of hydroxyapatite nanoparticles silanization on the preparation of nanocomposites of Hydroxyurethane polydimethylsiloxane with hydroxyapatite** **C.P2.33**  
Elton Faria de Souza Lima<sup>1,2</sup>, Hidetake Imasato<sup>3</sup>, ÉDER TADEU GOMES CAVALHEIRO<sup>3</sup>, Lidiane Cristina Costa<sup>4</sup>, Marcelo Luiz CALEGARO<sup>3</sup>, Virginia da Conceição Amaro Martins<sup>3</sup>, Ana Maria de Guzzi Plepis<sup>3</sup>, Edilson Valmir Benvenuti<sup>5</sup>, Márcio Luiz dos Santos<sup>6</sup>, Ubirajara Pereira Rodrigues Filho<sup>3</sup>; <sup>1</sup>Departamento de Química e Física Molecular, <sup>2</sup>Instituto de Química de São Carlos - Universidade de São Paulo, <sup>3</sup>Instituto de Química de São Carlos-USP, <sup>4</sup>Universidade Federal de São Carlos, <sup>5</sup>Universidade Federal do Rio Grande do Sul, <sup>6</sup>Universidade Anhanguera de São Paulo, Biotecnologia e Inovação em Saúde e Mestrado em Farmácia.
- 18:00 Bioactivity study of Co-Cr alloys doped with tantalum for biomedical applications** **C.P2.34**  
EMANUELLA CARVALHO DOS SANTOS<sup>1</sup>, Beatriz da Silva Batista<sup>1</sup>, Ruana Cardoso Lima<sup>1</sup>, Luciana M. R. Alencar<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1</sup>, Franciana Pedrochi<sup>1</sup>, Larissa Otubo<sup>2</sup>, Rossano Lang<sup>3</sup>, Luzeli Moreira da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Instituto de Pesquisas Energeticas e Nucleares, <sup>3</sup>Universidade Federal de São Paulo
- 18:00 Synthesis and structural properties of Co<sub>72-x</sub>Ta<sub>x</sub>Cr<sub>28</sub>(x = 2, 4, 6 and 10wt%) ALLOYS** **C.P2.35**  
EMANUELLA CARVALHO DOS SANTOS<sup>1</sup>, NATALHA DA SILVA ROCHA<sup>1</sup>, Ronaldo Andrade de Araújo<sup>1</sup>, Ronilson Lima Souza<sup>1</sup>, KARINY PEREIRA DA SILVA<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1</sup>, Luzeli Moreira da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 18:00 Comparative study on the corrosion of hot forged Ti-10Mo-20Nb alloy and Ti-based alloys commercially available** **C.P2.36**  
 Patrick Lima Vieira<sup>1</sup>, Lucas Batista Silva<sup>1</sup>, Luiz Felipe Costa<sup>1</sup>, Diêgo Fernandes Mudesto<sup>1</sup>, Emanuel Santos Jr.<sup>1</sup>, Sinara Borborema Gabriel<sup>2</sup>, Monique Osório Talarico Conceição<sup>2</sup>; <sup>1</sup>Centro Universitário de Volta Redonda, <sup>2</sup>Universidade do Estado do Rio de Janeiro
- 18:00 Influence of the Deep Cryogenic Treatment at the Stabilization of Martensitic Transformation Temperatures of the Smart Material Alloy Cu-14Al-4Ni.** **C.P2.37**  
Emmanuel Pacheco Rocha Lima<sup>1</sup>, Pedro Cunha de Lima<sup>2</sup>, Marcelo Nava<sup>3</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia da Bahia, <sup>3</sup>Instituto Federal da Bahia

- 18:00 Analysis of surface roughness as a function of structural solidification parameters after a Sn-Sb solder alloy necking process** **C.P2.38**  
 Gleidson Silva Figueiredo<sup>1</sup>, Maria Adrina Paixão de Souza da Silva<sup>2</sup>, Cibele Vieira Arão da Silva<sup>2</sup>, Mateus dos Santos Reis<sup>2</sup>, André Cruz da Costa Maciel<sup>2</sup>, Paulo Lourenço Monteiro Junior<sup>2</sup>, Ezayne Sanaely da Silva Frihani Roni<sup>2</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Federal University of Pará
- 18:00 Mechanical analysis in Ti-Mo-xZr alloys as a function of zirconium and oxygen concentration.** **C.P2.39**  
Fábio Bossoi Vicente<sup>1</sup>, Carlos Roberto Grandini<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade Estadual Paulista
- 18:00 Preparation and Microstructural Characterization of Zr-Ti alloys** **C.P2.40**  
Fernanda de Freitas Quadros<sup>1</sup>, Pedro Akira Bazaglia Kuroda<sup>1</sup>, Carlos Roberto Grandini<sup>2,1,3</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Institute of Biomaterials, Tribocorrosion and Nanomedicine
- 18:00 Development of Ti-25Ta-Zr Alloys With Low Elastic Modulus For Biomedical Applications** **C.P2.41**  
 Pedro Akira Bazaglia Kuroda<sup>1</sup>, Fernanda de Freitas Quadros<sup>1</sup>, Carlos Roberto Grandini<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru
- 18:00 A comparative study *in vitro* of surface modified titanium implants: nanotubular TiO<sub>2</sub> versus SLA surface treatment** **C.P2.42**  
Fernanda de Paula Oliveira<sup>1</sup>, Victoria Lopes Abdo<sup>1</sup>, Tatiane Cristine Silva de Almeida<sup>1</sup>, Elisa Marchezini Rodrigues<sup>1</sup>, Maximiliano Delany Martins<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 18:00 Zirconia surface modifications for implant dentistry** **C.P2.43**  
 Fernanda Haverroth Schünemann 14255<sup>1</sup>, Maria Elisa Galarraga<sup>1</sup>, Ricardo Magini<sup>1</sup>, Marcio Celso Fredel<sup>1</sup>, Filipe Samuel Silva<sup>2</sup>, Júlio César Matias Souza<sup>2</sup>, Yu Zhang<sup>3</sup>, Bruno Alexandre Henriques<sup>1</sup>, Julia Ce de Andrade Pinto<sup>4</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade do Minho, <sup>3</sup>New York University, <sup>4</sup>UFSC - Cermat e Linden Nanotechnology
- 18:00 Antimicrobial activity and *in vitro* biocompatibility of copper surface prepared by cold gas spray** **C.P2.44**  
Fernando Santos da Silva<sup>1</sup>, Ana Carolina Alves de Paula e Silva<sup>2</sup>, Paula Aboud Barbugli<sup>2</sup>, Nuria Cinca<sup>3</sup>, Sergi Dosta<sup>3</sup>, Irene Garcia Cano<sup>3</sup>, Jose Maria Guilemany<sup>3</sup>, Carlos Eduardo Vergani<sup>2</sup>, Assis Vicente Benedetti<sup>1</sup>; <sup>1</sup>Instituto de Química - Universidade Estadual Paulista, <sup>2</sup>Faculdade de Odontologia de Araraquara-UNESP, <sup>3</sup>Universitat de Barcelona
- 18:00 Rapid synthesis of self-organized and highly bioactive TiO<sub>2</sub> nanotubes** **C.P2.45**  
 Bruna Lemes Silva<sup>1</sup>, Emanuely Francescon Belusso<sup>1</sup>, Andressa Rodrigues<sup>2</sup>, Janaina Soares Santos<sup>2</sup>, Francisco Trivinho Strixino<sup>2</sup>, Mariana S Sikora<sup>1</sup>; <sup>1</sup>Federal University of Technology - Paraná, <sup>2</sup>Universidade Federal de São Carlos - Campus Sorocaba
- 18:00 Modification of wettability and bioactivity of TiO<sub>2</sub>NT prepared in SBF-based electrolyte** **C.P2.46**  
 Emanuely Francescon Belusso<sup>1</sup>, Bruna Lemes Silva<sup>1</sup>, Andressa Rodrigues<sup>2</sup>, Janaina Soares Santos<sup>2</sup>, Francisco Trivinho Strixino<sup>2</sup>, Mariana S Sikora<sup>1</sup>; <sup>1</sup>Federal University of Technology - Paraná, <sup>2</sup>Universidade Federal de São Carlos - Campus Sorocaba

- 18:00 Processing and characterization of poly(ethylmethacrylate) and poly(methylmethacrylate) scaffolds containing curcumin as a model for drug delivery systems.** C.P2.47  
Francisco van Riel Neto<sup>1</sup>, Erick Piovesan<sup>1</sup>, Patricia Targon Campana<sup>2</sup>, Fernando Henrique Cristovan<sup>3</sup>, Alexandre Marletta<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Universidade Federal de Jataí
- 18:00 Deposition of Calcium Phosphate Coating in Titanium-Niobium Alloy by Biomimetic Method** C.P2.48  
Francis Faria Goulart<sup>1</sup>, Roseli Marins Balestra<sup>1</sup>, Alexandre Antunes Ribeiro<sup>2</sup>, Débora Vieira Way<sup>2</sup>; <sup>1</sup>Universidade Federal de São João Del Rei, <sup>2</sup>Instituto Nacional de Tecnologia
- 18:00 Hydrotalcite/hydroxyapatite composites with high bacterial activity against clinical bacteria. A new alternative to prevent osteomyelitis diseases** C.P2.49  
Geolar Fetter<sup>1</sup>, Veronica Segura-Perez<sup>1</sup>, Marta Lobo-Sanchez<sup>1</sup>, Franchescoli D Velazquez-Herrera<sup>1</sup>, Eric Reyes-Cervantes<sup>1</sup>; <sup>1</sup>Benemerita Universidad Autonoma de Puebla
- 18:00 Magnetic bio-composites for hyperthermia treatment of tumors** C.P2.50  
Geovana Lira Santana<sup>1</sup>, Murilo C. Crovace<sup>2</sup>, Adilson J A de Oliveira<sup>1</sup>, Edgar Dutra Zanutto<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Universidade Federal de São Carlos
- 18:00 Influence of manganese on the mechanical properties of Ti-15Mo-Mn system alloys** C.P2.51  
Giovana Collombaro Cardoso<sup>1</sup>, Mariana Luna Lourenço<sup>1</sup>, Carlos Roberto Grandini<sup>2,3</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>São Paulo State University
- 18:00 Functionalization of poly(acrylonitrile-co-vinyl acetate) fibers (PANVA) by the incorporation of polyaniline-Ag nanocomposites** C.P2.52  
Giulia Maria Rodrigues Alvares<sup>1</sup>, Felipe Nogueira Ambrosio<sup>1</sup>, Hugo Gajardoni de Lemos<sup>1</sup>, Luis Marcelo G da Silva<sup>1</sup>, Fernanda Dias da Silva<sup>1</sup>, Christiane Bertachini Lombello<sup>1</sup>, Everaldo Carlos Venancio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Machinability of Hypoperitectic Sn-2.0wt%Sb Alloy Solidified in a Horizontal Directional Device by Tool Wear Criterion** C.P2.53  
Gleidson Silva Figueiredo<sup>1</sup>, Maria Adrina Paixão de Souza da Silva<sup>2</sup>, Nádia Silva Cosmo<sup>2</sup>, Paulo Victor Soares<sup>2</sup>, Rangel Vasconcelos da Silva Pinto<sup>2</sup>, Tamires Isabela Botelho<sup>2</sup>, Otávio Fernandes Lima da Rocha<sup>3</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Federal University of Pará, <sup>3</sup>Federal Institute of Education, Science and Technology of Pará
- 18:00 Ti-6Al-4V ELI scaffolds made by additive manufacturing for mimicking human's bone mechanical properties** C.P2.54  
Guilherme Arthur Longhitano<sup>1,2</sup>, Maria Aparecida Larosa<sup>1,2</sup>, André Luiz Jardini<sup>1,2</sup>, Cecília Amélia de Carvalho Zavaglia<sup>1,2</sup>, Rubens Maciel Filho<sup>1,2</sup>, Maria Angeles Arenas<sup>3</sup>, Ana Conde<sup>3</sup>, Juan José Damborenea<sup>3</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>National Institute of Biofabrication, <sup>3</sup>Centro Nacional de Investigaciones Metalúrgicas
- 18:00 Characterization of Polyether-ether-ketone (PEEK) processed by injection molding** C.P2.55  
Gustavo Ferrari<sup>1</sup>, Izabelle De Mello Grindi<sup>1</sup>, Gean Vitor Salmoria<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

- 18:00 Micro-Raman characterization of Layer-by-Layer films containing titania and poly (sodium 4-styrenesulfonate) for dental implants application.** **C.P2.56**  
Igor Lebedenco Kitagawa<sup>1</sup>, Paulo Noronha Lisboa Filho<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru
- 18:00 Composites based on polycaprolactone/carbon nanotubes/hydroxyapatite: Evaluation of thermogravimetric and calorimetric characteristics** **C.P2.57**  
Isabella Carneiro Gonçalves<sup>1</sup>, Luis Claudio Mendes<sup>1</sup>, Sibeled Piedade Cestari<sup>1</sup>, Kaio Alves Brayner Pereira<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ
- 18:00 Development of a New Beta Ti-Based Alloy for Biomedical Applications** **C.P2.58**  
Israel Ramos Rodrigues<sup>1</sup>, Renan Eduardo de Lima Lopes<sup>1</sup>, Carlos Roberto Grandini<sup>2,3</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>São Paulo State University
- 18:00 Deposition of hydroxiapatite coatings with talc incorporation for biomedical purposes** **C.P2.59**  
Jaqueline Soares<sup>1</sup>, Laureana Moreira Mota<sup>1</sup>, Daniel Nilson Nunes Nicomedes<sup>1</sup>, Ana Barbara Batista<sup>1</sup>, Ana Paula Moreira Barboza<sup>1</sup>, Rebecca Vasconcellos<sup>2</sup>, Nathanael Vieira Medrado<sup>2</sup>, Érika Costa de Alvarenga<sup>3</sup>, Giovanna Machado<sup>4</sup>, Karyne Ramos de Campos Juste<sup>5</sup>, Cláudia Karina Barbosa de Vasconcelos<sup>6</sup>, Ronaldo Junio Campos Batista<sup>1</sup>, Taise Matte Manhabosco<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Universidade Federal de Minas Gerais, <sup>3</sup>Universidade Federal de São João Del Rei, <sup>4</sup>Centro de Tecnologias Estratégicas do Nordeste, <sup>5</sup>Instituto SENAI de Inovação em Engenharia de Superfícies, <sup>6</sup>Pontifícia Universidade Católica de Minas Gerais
- 18:00 Plasmonic metasurfaces for enhanced chiroptical effects** **C.P2.60**  
John James Hernández Sarría<sup>1</sup>, Osvaldo Novais de Oliveira Jr.<sup>2,3,1</sup>, JORGE RICARDO MEJIA SALAZAR<sup>4</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Instituto de Física de São Carlos - USP, <sup>4</sup>Instituto Nacional de Telecomunicações

## WEDNESDAY, SEPTEMBER 25

### Poster presentations

#### *SESSION C.P6 (18:00 - 19:30)*

- 18:00 Incorporation of essential oil in polymer film for Ti coating for application as biomaterial** **C.P6.1**  
Carolina Cruz Ferreira<sup>1</sup>, Yasmin Maria Vilela Souza e Silva<sup>1</sup>, Lucíola Lucena de Sousa<sup>1</sup>, Brenda Fernanda Gaspar de Souza<sup>1</sup>, Daniela Sachs<sup>2</sup>, Patricia Capellato<sup>2</sup>, Maria Gabriela Nogueira Campos<sup>3</sup>, Neide Aparecida Mariano<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Universidade Federal de Itajubá, <sup>3</sup>University of Central Florida



- 18:00 PNB<sub>9</sub>O<sub>25</sub>-CaNb<sub>2</sub>O<sub>6</sub>-β-TCP bioceramics: structural and cell viability studies** C.P6.2  
 Taiana Gabriela Bonadio Bonadio<sup>1</sup>, Mychelle Vianna Pereira Companhoni<sup>2</sup>, Celso Vataru Nakamura<sup>2</sup>, Tânia Ueda-Nakamura<sup>2</sup>, Eduardo Azzolini Volnistem<sup>2</sup>, Jaciele Marcia Rosso<sup>2</sup>, Mauro Luciano Baesso<sup>2</sup>, Valdirlei Fernandes Freitas<sup>1</sup>, Departamento de Física de Física<sup>2</sup>; <sup>1</sup>Universidade Estadual do Centro Oeste, <sup>2</sup>Universidade Estadual de Maringá
- 18:00 YVO<sub>4</sub>:Nd<sup>3+</sup> obtained via non-hydrolytic sol-gel route: potential application in medical imaging field** C.P6.3  
 Julio Tanaka<sup>1</sup>, Paula Moreira<sup>1</sup>, Eduardo José Nassar<sup>1</sup>, Lucas Alonso Rocha<sup>1</sup>; <sup>1</sup>Universidade de Franca
- 18:00 Synthesis, structural and thermal characterization of iron(III) complex with 1,10-phenanthroline and malonic acid for antitumor application.** C.P6.4  
Ian Felipe Sousa Reis<sup>1</sup>, João Gomes de Oliveira Neto<sup>1</sup>, Kamila Rodrigues Abreu<sup>1</sup>, MARINA COSTA RAMOS<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1,2</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Federal University of Maranhão
- 18:00 Development of polyurethane-gelatin membranes for tissue engineering applications** C.P6.5  
 Luiza Freire Woigt<sup>1</sup>, Isabella Caroline Pereira Rodrigues<sup>1</sup>, Karina Danielle Pereira<sup>2,1</sup>, Augusto Ducati Luchessi<sup>2,1</sup>, Eder Socrates Najar Lopes<sup>3</sup>, Laís Pellizzer Gabriel<sup>1</sup>; <sup>1</sup>Faculdade de Ciências Aplicadas, Unicamp, <sup>2</sup>Universidade Estadual Paulista - Campus Rio Claro, <sup>3</sup>Faculdade de Engenharia Mecânica, Unicamp
- 18:00 Assessment and characterization of an AgAlTiZn multi-principal-element alloy by using powder metallurgy route** C.P6.6  
João Felipe Queiroz Rodrigues<sup>1</sup>, Giovana da Silva Padilha<sup>1</sup>, Wislei R R Osorio<sup>1</sup>, Ausdiniz Danilo Bortolozo<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 18:00 Complex of L-Glutamic Acid and 1,10-Phenanthroline with Copper (II) for antitumor application** C.P6.7  
 Gabriel Cirqueira dos Santos<sup>1</sup>, João Gomes de Oliveira Neto<sup>1</sup>, Ian Felipe Sousa Reis<sup>1</sup>, MARINA COSTA RAMOS<sup>1</sup>, Kamila Rodrigues Abreu<sup>1</sup>, Carliana Rodrigues da Silva<sup>1</sup>, Jailton Romão Viana<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 18:00 Surface characterization of the Ti10Mo8Nb alloy used in biomedical applications** C.P6.8  
JOAO PEDRO CAROBOLANTE CAROBOLANTE<sup>1</sup>, Ana Paula Rosifini Alves Claro<sup>2</sup>; <sup>1</sup>Universidade Estadual de São Paulo - Campus Guaratinguetá, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá
- 18:00 Study of Embryotoxicity of Poly (N-vinylcaprolactone) / Hydroxyapatite Nanocomposites in *Danio rerio*** C.P6.9  
Jordanna Fernandes Assis<sup>1,2</sup>, Leidiane F Gonçalves<sup>1,2</sup>, Monica R. F. Machado<sup>1,2</sup>, Fernando Henrique Cristovan<sup>2</sup>, Tatiane Moraes Arantes<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Universidade Federal de Jataí
- 18:00 Surface chemical modulation of Biocatalysts based on nanozeolite-enzyme complexes aiming the production of biofuel production using non-edible lipids feedstocks** C.P6.10  
Jose Geraldo Nery<sup>1</sup>, Adriano de Vasconcellos<sup>2</sup>, Alex Henrique Miller<sup>2</sup>, Donato Alexandre Aranda<sup>3</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Estadual Paulista - Campus São José do Rio Preto, <sup>3</sup>Universidade Federal do Rio de Janeiro

- 18:00 Bioprospection of Nile Tilapia (*Oreochromis Sp.*) residual biomass to obtain of biomimetic biomaterials** **C.P6.11**  
Jose Jovanny Bermudez Sierra<sup>1</sup>, Napoleão Bonaparte Caldas Cunha<sup>2</sup>, Nayanne Lima dos Santos<sup>3</sup>, Angelo Roncalli-Alves e Silva<sup>4</sup>, Ana Cristina Monteiro Moreira<sup>4</sup>, Eveline Turatti<sup>4</sup>, Renato Azevedo Moreira<sup>4</sup>, Maria Izabel Gallão<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>São Leopoldo Mandic, <sup>3</sup>Universidade Estadual do Ceará, <sup>4</sup>Universidade de Fortaleza
- 18:00 Composite nanofilaments containing bioactive material** **C.P6.12**  
JOSY ANTEVELI OSAJIMA<sup>1</sup>, Francisca Pereira de Araújo<sup>1</sup>, IGOR TADEU BATISTA<sup>2</sup>, FRANCILIO OLIVEIRA<sup>3</sup>, Hernane da Silva Barud<sup>2</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>, Anderson Oliveira Lobo<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Centro Universitário de Araraquara, <sup>3</sup>Centro universitário NovaFapi
- 18:00 Nanostructured system as an alternative to mycoses treatment: coated oily nanocapsules dispersed in biocompatible hydrogel** **C.P6.13**  
Juliana Hoch<sup>1</sup>, Ana Luiza Silva<sup>2</sup>, Silvia Guterres<sup>1</sup>, Kelly Cristine Zatta<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade do Vale do Rio dos Sinos
- 18:00 Microfluidics for Point-of-Care Diagnostic Devices** **C.P6.14**  
Kamilla Rodrigues Cruz<sup>1</sup>, Osvaldo Novais de Oliveira Jr.<sup>2,3,4</sup>, JORGE RICARDO MEJIA SALAZAR<sup>1</sup>; <sup>1</sup>Instituto Nacional de Telecomunicações, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Instituto de Física de São Carlos - USP, <sup>4</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 18:00 Synthesis and deposition of hydroxyapatite from eggshell on titanium alloy surfaces** **C.P6.15**  
Karina Feliciano Santos<sup>1,2</sup>, Juliana Kelmy Macario Barbosa Daguano<sup>1</sup>, Davinson Mariano da Silva<sup>2</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Faculdade de Tecnologia de São Paulo
- 18:00 Lipase immobilization in a thin film of silica by the sol-gel method on the modified surface of the FTO glass by dipcoating** **C.P6.16**  
Karine dos Santos Caetano<sup>1</sup>, Felix Fachinnetto Beck<sup>1</sup>, Leliz Ticono Arenas<sup>1</sup>, Tania Maria Haas Costa<sup>1</sup>; <sup>1</sup>Instituto de Química - UFRGS
- 18:00 Electrochemical corrosion evaluation of Si doped amorphous carbon films in Ringer's solution** **C.P6.17**  
Tarcísio Silva Cunha<sup>1</sup>, Kenny de Almeida Gomes Monteiro<sup>1</sup>, Emanuel Santos Jr.<sup>1</sup>, Sérgio de Souza Camargo Jr.<sup>2</sup>; <sup>1</sup>Centro Universitário de Volta Redonda, <sup>2</sup>Universidade Federal do Rio de Janeiro
- 18:00 Corrosion behavior of Ti30Ta alloy in artificial physiological fluids after surface modification** **C.P6.18**  
Kerolene Barboza Barboza da Silva<sup>1</sup>, JOAO PEDRO CAROBOLANTE CAROBOLANTE<sup>1</sup>, Ana Paula Rosifini Alves Claro<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá
- 18:00 Adherence Response of *Staphylococcus epidermidis* on Ti-30Ta Alloys Surface Coated with P(VDF-TrFE)/BaTiO<sub>3</sub> Films** **C.P6.19**  
Larissa Mayra Silva Ribeiro<sup>1</sup>, Patricia Capellato<sup>1</sup>, Daniela Sachs<sup>1</sup>, Ana Paula Rosifini Alves Claro<sup>2</sup>, Rossano Gimenes<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá
- 18:00 Investigations of the anodizing time at a constant current density on the corrosion properties of the AZ31B magnesium alloy** **C.P6.20**  
Leandro De Oliveira<sup>1</sup>, Renato Altobelli Antunes<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

- 18:00 Metformin release with pseudoboehmite** **C.P6.21**  
 Eloi Lazarin Jr.<sup>1</sup>, Antônio Hortêncio Munhoz Jr.<sup>1</sup>, Leila Figueiredo de Miranda<sup>1</sup>, Bruno Filipe Carmelino Cardoso Sarmiento<sup>2</sup>, Ayrton Bernussi<sup>3</sup>, Nelson Batista de Lima<sup>4</sup>, Maura Vincenza Rossi<sup>1</sup>, Renato Meneghetti Peres<sup>1</sup>, Odila Florencio<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie, <sup>2</sup>i3S - Institute for Investigation and Innovation in Health, <sup>3</sup>Texas Tech University, <sup>4</sup>Instituto de Pesquisas Energeticas e Nucleares
- 18:00 The fatigue performance of the metastable Ti-15Mo and Ti-12Mo-6Zr-2Fe alloys heat treated in the beta-phase field** **C.P6.22**  
Leonardo Contri Campanelli<sup>1</sup>, Cesar Adolfo Escobar Claros<sup>1</sup>, Brenda Juliet Martins Freitas<sup>1</sup>, Paulo Sergio Carvalho Pereira da Silva<sup>1</sup>, Claudemiro Bolfarini<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 18:00 pH responsive Ag@PAH nanoparticles applied in SERS** **C.P6.23**  
Leonardo Negri Furini<sup>1</sup>, Gabriel Costa<sup>1</sup>, Marcelo José Santos Oliveira<sup>1</sup>, Priscila Alessio<sup>1</sup>, Carlos José Leopoldo Constantino<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista
- 18:00 Superparamagnetic gels based on polyacrylamide and magnetit** **C.P6.24**  
Leticia Streck<sup>1</sup>, Ernani Dias da Silva Filho<sup>1</sup>, Elvis Lopes Brito<sup>1</sup>, Felipe Bohn<sup>1</sup>, José Luís Cardozo Fonseca<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 18:00 TiO<sub>2</sub>-NT synthesized from pure titanium (99.9%) and Ti6Al4V alloy and effects of several experimental parameters** **C.P6.25**  
Lígia Cristina Camargo Dias<sup>1</sup>, Paula Prenholatto Lopes<sup>1</sup>, Mariana Souza Sikora<sup>2</sup>, Marystela Ferreira<sup>1</sup>, Francisco Trivinho Strixino<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Optimization and evaluation of polymeric coating on non-covalently pegylated carbon nanotubes** **C.P6.26**  
Lívia Santos Gomides<sup>1</sup>, Júlia Barros Gomes<sup>1</sup>, Keiliane Silva dos Santos<sup>1</sup>, Thaís Rachid Netto<sup>1</sup>, Carla Onara Gonçalves<sup>1</sup>, Clascídia A. Furtado<sup>1</sup>, Rosemeire Brondi Alves<sup>2</sup>, Adelina Pinheiro Santos<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 18:00 Antimicrobial activity effects of surface treatment with isles of silver particles on Staphylococcus aureus and Escherichia coli** **C.P6.27**  
 Patricia Capellato<sup>1</sup>, Cláudia Eliana Bruno Marino<sup>2</sup>, Gilbert Silva<sup>1</sup>, Lucas Victor Benjamim Vasconcelos<sup>1</sup>, Rodrigo Perito Cardoso<sup>2</sup>, Kayam H Hamdar<sup>2</sup>, Daniela Sachs<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Universidade Federal do Paraná
- 18:00 Depth profile of the chemical composition of enamel irradiated with CO<sub>2</sub> laser** **C.P6.28**  
 Carla Regina Albino<sup>1</sup>, Luciano Bachmann<sup>1</sup>; <sup>1</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto
- 18:00 Analysis of sinterization times of the NiTi alloy processed by powder metallurgy related to the microstructural characteristics** **C.P6.29**  
Luiz Gastão Filho<sup>1</sup>, Marcelo José Gomes da Silva<sup>1</sup>, Candido Jorge de Sousa Lobo<sup>1</sup>, Hellen Cristine Prata de Oliveira<sup>2</sup>, Jorge Luiz Cardoso<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Universidade Federal de Ouro Preto
- 18:00 Mechanical and Microstructural Characterization in Commercial and Synthesized by Sol-Gel Method Using Chicken Eggs Shell as Precursor Hydroxyapatite.** **C.P6.30**  
Marcelo Ferreira Machado<sup>1</sup>, José Brant Campos<sup>2</sup>, Marilza Sampaio Aguiar<sup>3</sup>, Vitor Santos Ramos<sup>2</sup>; <sup>1</sup>Instituto Federal Fluminense, <sup>2</sup>Universidade do Estado do Rio de Janeiro, <sup>3</sup>Universidade Estácio de Sá

- 18:00 Electrochemical aptasensor platform with polymer films for Galectin -1 detection** **C.P6.31**  
 Marina Ribeiro Batistuti<sup>1</sup>, Leandro Bortot<sup>2</sup>, Marcelo Baruffi<sup>2</sup>, Marcelo Mulato<sup>1</sup>; <sup>1</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto, <sup>2</sup>Faculdade de Ciências Farmacêuticas de Ribeirão Preto
- 18:00 Kinect study of zirconia and zirconia contraction with alumina** **C.P6.32**  
 Carlos Alberto Stochi Junior<sup>1</sup>, Marcio Florian<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Microcharacterization and Young Modulus Study of Ti-10Mo-XZr alloys for Biomedical Applications** **C.P6.33**  
Marcos Ribeiro da Silva<sup>1</sup>, Pedro Akira Bazaglia Kuroda<sup>2</sup>, Carlos Roberto Grandini<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru
- 18:00 Preparation of porous ternary alloy Ti-34-Nb-6Sn / Mg for the implant** **C.P6.34**  
 Mariana Correa Rossi<sup>1</sup>, Daniel Leal Bayerlein<sup>2</sup>, Jaqueline de Souza Brandão<sup>1</sup>, João Pedro Hubbe Pfeifer<sup>1</sup>, Gustavo dos Santos Rosa<sup>1</sup>, André Massahiro Teramoto Kriek<sup>1</sup>, L. G. Martinez<sup>3</sup>, Margarida Juri Saeki<sup>4</sup>, Ana Liz Garcia Alves<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Instituto de Pesquisas Tecnológicas, <sup>3</sup>Instituto de Pesquisas Energeticas e Nucleares, <sup>4</sup>UNIVERSIDADE ESTADUAL PAULISTA JÚLIO DE MESQUITA FILHO - CAMPUS BOTUCATU
- 18:00 Influence of solute partitioning on mechanical properties of Ti-13Mo-2Fe** **C.P6.35**  
Mariana Gerardi Mello<sup>1</sup>, Alessandra Cremasco<sup>1</sup>, Rubens Caram<sup>2</sup>; <sup>1</sup>Faculdade de Ciências Aplicadas, Unicamp, <sup>2</sup>Faculdade de Engenharia Mecânica, Unicamp
- 18:00 Preparation characterization of Ti-5Mn-xMo (x=10,15) system alloys for biomedical applications** **C.P6.36**  
Mariana Luna Lourenço<sup>1</sup>, Giovana Collombaro Cardoso<sup>1</sup>, Karolyne dos Santos Jorge Sousa<sup>1</sup>, Tatiani Ayako Goto Donato<sup>1</sup>, Carlos Roberto Grandini<sup>2,3</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>São Paulo State University
- 18:00 Titanium and titanium alloy nanotexturization in SBF-based electrolyte: Study of the synthesis parameters effects on morphological, wettability and mechanical properties** **C.P6.37**  
 Anna Paulla Simon<sup>1</sup>, Carlise Hannel Ferreira<sup>1</sup>, Vidiany Aparecida Queiroz Santos<sup>2,1</sup>, Andressa Rodrigues<sup>3</sup>, Janaina Soares Santos<sup>3</sup>, Francisco Trivinho Strixino<sup>3</sup>, Henrique Emilio Zorel Junior<sup>1</sup>, Mariana S Sikora<sup>1</sup>; <sup>1</sup>Federal University of Technology - Paraná, <sup>2</sup>Faculdade de Pato Branco, <sup>3</sup>Universidade Federal de São Carlos - Campus Sorocaba
- 18:00 Synthesis and characterization of 1,10-phenanthroline and serine complexed with copper (II).** **C.P6.38**  
MARINA COSTA RAMOS<sup>1</sup>, João Gomes de Oliveira Neto<sup>1</sup>, Gabriel Cirqueira dos Santos<sup>1</sup>, Ian Felipe Sousa Reis<sup>1</sup>, Jayson Cabral dos Santos<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1,2</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Federal University of Maranhão
- 18:00 Obtention of hydroxyapatite by conventional hydrothermal method using waste of eggshells varying ph and time of synthesis** **C.P6.39**  
Mário Andean Macedo Castro<sup>1</sup>, Marcelo Moizinho Oliveira<sup>1</sup>, José Manuel Rivas Mercury<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão

- 18:00 Nanorods hydroxyapatite obtained by precipitation method from biowaste eggshell** **C.P6.40**  
Marla Karolyne dos Santos Horta<sup>1</sup>, Marilza Sampaio Aguilar<sup>2</sup>, Francisco José Moura<sup>1</sup>, José Brant Campos<sup>3</sup>, Suzana Bottega Peripolli<sup>3</sup>, Vitor Santos Ramos<sup>3</sup>, Daniel Navarro da Rocha<sup>4</sup>, Adilson Cláudio Quizunda<sup>3</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Universidade Estácio de Sá, <sup>3</sup>Universidade do Estado do Rio de Janeiro, <sup>4</sup>R-crio Células-tronco
- 18:00 Hybrid crosslinking to improve hydrogel toughness for tissue engineering: *in situ* SAXS study under tensile loading** **C.P6.41**  
MURILO CAMARGO CONSTANTINO<sup>1</sup>, Guilherme Fadel Picheth<sup>2</sup>, Rogério Ramos Sousa Jr<sup>1</sup>, Danilo Justino Carastan<sup>1</sup>, Florian Meneau<sup>3</sup>, Mathilde Julienne Gisèle Champeau Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidade Federal do Paraná, <sup>3</sup>Laboratorio Nacional de Luz Sincrotron
- 18:00 Corrosion resistance of new titanium alloy Ti-25Ta-25Nb-3Sn for biomedical applications** **C.P6.42**  
Mauricio Rangel Seixas<sup>1</sup>, Adelvam Pereira Júnior<sup>2</sup>, Roberto Zenhei Nakazato<sup>2</sup>, Ana Paula Rosifini Alves Claro<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá, <sup>2</sup>Universidade Estadual de São Paulo - Campus Guaratinguetá
- 18:00 Chlorhexidine incorporation in latex intraoral orthodontic elastics for dental applications** **C.P6.43**  
Mayté Paredes Zaldivar<sup>1</sup>, Marco Antonio da Costa Borges<sup>1</sup>, Thallita Pereira Queiroz<sup>1</sup>, Rogerio Margonar<sup>1</sup>, Nadia Lunardi<sup>1</sup>, Giovani Teixeira de Carvalho<sup>2</sup>, Hernane da Silva Barud<sup>1</sup>; <sup>1</sup>Universidade de Araraquara, <sup>2</sup>COP Clínica Odontológica
- 18:00 Development of porous supports of poly (lactic acid) produced by Fused deposition modeling as potential biomaterial** **C.P6.44**  
Leticia Machado<sup>1</sup>, Micaela Ferrari Ferrari<sup>1</sup>, Rosmary Nichele Brandalise<sup>1</sup>, Venina dos Santos<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul
- 18:00 Surface and profile roughness before and after etching: a comparison in dental ceramics** **C.P6.45**  
Bárbara Margarido Brondino<sup>1</sup>, Nair Cristina Margarido Brondino<sup>2</sup>, José Henrique Rubo<sup>1</sup>, Allan Victor Ribeiro<sup>3</sup>, Odney Carlos Brondino<sup>4</sup>; <sup>1</sup>FACULDADE DE ODONTOLOGIA DE BAURU, <sup>2</sup>São Paulo State University, <sup>3</sup>Instituto Técnico Federal, <sup>4</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Functionalization of Ti-30Ta alloy surface used as dental materials with bisphosphonate immobilization** **C.P6.46**  
Nara Miranda Guimarães<sup>1</sup>, Maria Cristina Rosifini Alves Rezende<sup>2,3</sup>, Ana Paula Rosifini Alves Claro<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universidade Estadual de São Paulo
- 18:00 Growth of titania nanotubes in potentiostatic and galvanostatic regimes for application in drug release systems** **C.P6.47**  
Paula Prenholatto Lopes<sup>1</sup>, Mariana S Sikora<sup>2</sup>, Marystela Ferreira<sup>1</sup>, Francisco Trivinho Strixino<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Injectable hydrogels based on Pluronic® F-127 for *in situ* therapeutic agent delivery** **C.P6.48**  
PRISCILLA MOL QUEIROZ<sup>1</sup>, Breno Rocha Barrioni<sup>1</sup>, Marivalda Magalhães Pereira<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais

- 18:00 Effect of processing on microtexture and corrosion resistance in austenitic stainless steel for biomedical application** **C.P6.49**  
Rafaella M Ribeiro<sup>1</sup>, Larissa Chiesa Mendonça de Souza<sup>1</sup>, Matheus Campolina Mendes<sup>2</sup>, Leonardo Sales Araujo<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Federal Center for Technological Education Celso Suckow da Fonseca
- 18:00 Flash sintering of zirconia/alumina ceramic composites** **C.P6.50**  
Raphael Euclides Prestes Salem<sup>1</sup>, Christianeq Lago Ojaimi<sup>2</sup>, Fábulo Ribeiro Monteiro<sup>2</sup>, Adilson Luiz Chinelatto<sup>3</sup>, Adriana Scoton Chinelatto<sup>3</sup>, Elíria Maria de Jesus Agnolon Pallone<sup>2</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Londrina, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Universidade Estadual de Ponta Grossa
- 18:00 Structural And Thermal Characterization Of A New Co-Amorphous Dapsone With Oxalic Acid** **C.P6.51**  
Raychimam Douglas Santana Bezerra<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1</sup>, Paulo Roberto da Silva Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 18:00 Preparation and Characterization of a New Dapsone Solid Dispersion Using Metformin Hydrochloride** **C.P6.52**  
Anderson Pedrosa da Silva<sup>1</sup>, Raychimam Douglas Santana Bezerra<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1</sup>, Paulo Roberto da Silva Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 18:00  $\beta$ -type titanium alloy for biomedical application developed by powder metallurgy** **C.P6.53**  
Raíssa Monteiro Pereira<sup>1</sup>, Vinicius Rodrigues Henriques<sup>2</sup>, Sabrina Moura Rovetta<sup>3</sup>, Cristiane Koga Ito<sup>3</sup>, Rebeca Falcão Correia<sup>4</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Aeronáutica e Espaço, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>Universidade Federal de São Paulo
- 18:00 Microtomography Technique to evaluate the Influence of Temperature and Chrome Dopants in Transient Diffusion of Iron Oxide in High Alumina Refractory Media** **C.P6.54**  
Carlos Eduardo Guedes Catunda<sup>1</sup>, Roberto R de Avillez<sup>2</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, <sup>2</sup>Pontifícia Universidade Católica do Rio de Janeiro
- 18:00 Nano Texturization of Titanium by Femtosecond Laser to Hydrophilize Cardiovascular Medical Devices** **C.P6.55**  
Rosa Corrêa Leoncio de Sá<sup>1,2</sup>, Eduardo Guy Perpétuo Bock<sup>3</sup>, Juliana Solheid<sup>1</sup>, Aron Pazzin Andrade<sup>4</sup>, Vladimir Jesus Trava-Airoldi<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Instituto Dante Pazzanese de Cardiologia, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>4</sup>Centro de Engenharia de Assistência Circulatória - Instituto Dante Pazzanese de Cardiologia
- 18:00 Polymeric films preventing intra-abdominal adhesion in rabbits** **C.P6.56**  
Luisa Gouvea Teixeira<sup>1</sup>, Helena Cristina Delgado Brito<sup>1</sup>, Julielton de Souza Barata<sup>1</sup>, Rozana Wendler Rocha<sup>1</sup>, Fernanda Martinato<sup>1</sup>, Bruna Nunes Teixeira<sup>2</sup>, Rossana Mara da Silva Moreira Thiré<sup>2</sup>, Áureo Evangelista Santana<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Jaboticabal/Faculdade de Ciências Agrárias e Veterinárias, <sup>2</sup>Universidade Federal do Rio de Janeiro/COPPE
- 18:00 PLA/PHBV scaffolds for tissue engineering produced by 3D printing** **C.P6.57**  
Nicolas Briere<sup>1,2</sup>, Flavia Rocha Drummond<sup>3</sup>, Marianna de Oliveira da Costa Maia-Pinto<sup>3</sup>, Rossana Mara da Silva Moreira Thiré<sup>3</sup>; <sup>1</sup>Université d'Orléans, <sup>2</sup>Universidade Federal do Rio de Janeiro/Escola Politécnica, <sup>3</sup>Universidade Federal do Rio de Janeiro/COPPE

- 18:00 Thin films of fibroin from SILKWORM COCOON** **C.P6.58**  
Sergio Akinobu Yoshioka<sup>1</sup>, Sendy Marques Soares<sup>2</sup>, Sheyla MC Máximo Bicalho<sup>3</sup>,  
Francisco Vieira dos Santos<sup>4</sup>, Márcia Cristina Branciforti<sup>4</sup>, Wilian  
Aita<sup>5</sup>; <sup>1</sup>Programa de Pós-graduação Interunidades em Bioengenharia - Campus São  
Carlos, <sup>2</sup>Instituto de Química de São Carlos - Universidade de São Paulo, <sup>3</sup>JHS  
Biomateriais, <sup>4</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo  
(USP), <sup>5</sup>Fiação de Seda Bratac
- 18:00 Influence of alloying elements on microstructure, microhardness and  
corrosion behaviour of Zn-1wt.% Mg-(Mn;Ca) ALLOYS** **C.P6.59**  
Talita Almeida Vida<sup>1</sup>, Clarissa Cruz<sup>1</sup>, Cássio Augusto Pinto Silva<sup>1</sup>, Noé Cheung<sup>1</sup>,  
Christopher Cardoso Brito<sup>2</sup>, Amauri Garcia<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Mecânica,  
Unicamp, <sup>2</sup>São Paulo State University
- 18:00 Microwave-Assisted Solvothermal Synthesis of V2O5-Graphene Acid  
Composites for 2-butanone Detection** **C.P6.60**  
Vinicius Ferreira Lopes<sup>1</sup>, Tarcísio Micheli Perfecto<sup>1</sup>, Diogo Paschoalini  
Volanti<sup>1</sup>; <sup>1</sup>São Paulo State University
- 18:00 Hollow ZnO microspheres with enhancing low-concentration 2-butanone  
sensing performance** **C.P6.61**  
Tarcísio Micheli Perfecto<sup>1</sup>, Cecilia de Almeida Zito<sup>1</sup>, Diogo Paschoalini  
Volanti<sup>1</sup>; <sup>1</sup>São Paulo State University
- 18:00 Preliminary study of the antimicrobial action of titanium alloys against  
bacterial biofilms related healthcare associated infections** **C.P6.62**  
Silas Matheus Brosco de Toledo Piza<sup>1</sup>, James Venturini<sup>2</sup>, Carlos Roberto  
Grandini<sup>3</sup>, Tatiani Ayako Goto Donato<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de  
Mesquita Filho" - Campus Bauru, <sup>2</sup>Universidade Federal de Mato Grosso do  
Sul, <sup>3</sup>Universidade Estadual Paulista
- 18:00 Influence of ultrasonic bath time on the carbon nanotubes cutting during  
functionalization with polyethylene glycol modified with pyrene** **C.P6.63**  
Thaís Rachid Netto<sup>1</sup>, Lívia Santos Gomides<sup>1</sup>, Keiliane Silva dos Santos<sup>1</sup>, Clascídia  
A. Furtado<sup>1</sup>, Adelina Pinheiro Santos<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia  
Nuclear
- 18:00 Influence of Ti substrate microstructural refinement on the growth of anodic  
TiO<sub>2</sub> NTs.** **C.P6.64**  
Thiago Luiz de Almeida Cortiz<sup>1</sup>, Anibal Mendes<sup>1</sup>, Katia Franklin Albertin  
Torres<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Prospective study of the manufacture of cranial prostheses in titanium plates** **C.P6.65**  
Moisés das Virgens Santana<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>, Hitalo de  
Jesus Bezerra da Silva<sup>1</sup>, Humberto Denys De Almeida Silva<sup>2</sup>; <sup>1</sup>Universidade  
Federal do Piauí, <sup>2</sup>Faculdade do Vale do Itapecurú
- 18:00 Prospective study of porous bioceramics of alumina and alumina-zirconia for  
use in bone implants** **C.P6.66**  
Valdivânia Albuquerque do Nascimento<sup>1</sup>, Rejane Teixeira do Nascimento<sup>1</sup>, Lucas  
Wendell Gonzaga Magalhães<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 Development of wires metal-organic frameworks on a gold surface** **C.P6.67**  
Valesca Ariane dos Santos Pizone<sup>1</sup>, Leila Aparecida Chiavacci<sup>1</sup>, Regina Célia  
Galvão Frem<sup>2</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Estadual Paulista  
Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil
- 18:00 Synthesis of BaO-Al<sub>2</sub>O<sub>3</sub>-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> glasses for use as fillers in dental  
composites via sol-gel method** **C.P6.68**  
Virgílio Antônio Greco Baptistella<sup>1</sup>, Rossano Gimenes<sup>1</sup>; <sup>1</sup>Universidade Federal de  
Itajubá

- 18:00 Tissue regeneration through the application of tilapia skin: a prospection** **C.P6.69**  
Vitoria Regina Sousa Bispo<sup>1</sup>, Sabrina Anicácia de Brito Correia<sup>1</sup>, Lucas Rafael Carneiro da Silva<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>, Daniella Stepheny Carvalho Andrade<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 Production, processing and characterization of biodegradable Mg-Gd-Y-Zr alloy for biomedical applications** **C.P6.70**  
Viviane Lima Freitas da Silva<sup>1</sup>, Bruno Xavier de Freitas<sup>1</sup>, Paula Leticia Correa de Toledo Cury<sup>1</sup>, Franz Miller Branco Ferraz<sup>1</sup>, Célia Regina Tomachuk<sup>1</sup>, Carlos Angelo Nunes<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena - Universidade de São Paulo



# **SYMPOSIUM D - Environmental remediation - science applied in the search for solutions to air, water and soil pollution**

## **Symposium organizers:**

Ieda Maria Garcia dos Santos (Universidade Federal da Paraíba - UFPB)  
Ary da Silva Maia (Universidade Federal da Paraíba - UFPB)  
Donald Macphee (University of Aberdeen, Scotland - UK)  
Ingrid Tavora Weber (Universidade de Brasília - Unb)  
François Chéviré (University of Rennes 1, Rennes, France)  
Carlos Alberto Paskocimas (Universidade Federal do Rio Grande do Norte - UFRN)



# MONDAY , SEPTEMBER 23

\* Invited Lecture

## *SESSION D.01.D1 (09:30 - 10:30) - Room Mármara*

- 09:30 Perspectives of photocatalytic processes for environmental applications** **D.O1.D1.1\***  
Raquel Fernandes Pupo Nogueira<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil
- 10:00 SrSnO<sub>3</sub>:Eu perovskites with an enhanced photocatalytic efficiency: A relationship with octahedral distortions and electronic defects** **D.O1.D1.2**  
André Luiz Menezes de Oliveira<sup>1,2</sup>, Laís Chantelle de Lima<sup>1</sup>, Brendan James Kennedy<sup>2</sup>, Iêda Maria Garcia dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>The University of Sydney
- 10:15 Water and air decontamination by a photocatalytic-nano-TiO<sub>2</sub>-functionalized cotton fabric** **D.O1.D1.3**  
Mirele Horsth de Paiva Teixeira<sup>1</sup>, Sergio Yesid Gómez González<sup>1</sup>, Dachamir Hotza<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

## *SESSION D.02.D1 (11:00 - 12:00) - Room Mármara*

- 11:00 Environmental remediation using photoactive material supported on clay** **D.O2.D1.1\***  
JOSY ANTEVELI OSAJIMA<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 11:30 Methylene Blue Degradation In Dry Phases Using SrSnO<sub>3</sub>/g-C<sub>3</sub>N<sub>4</sub> Irradiated By Sunlight** **D.O2.D1.2**  
IDIO ALVES DE SOUSA FILHO<sup>1</sup>, Ingrid Tavora Weber<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 11:45 Evaluation of structure, morphology and dye degradation performance of zinc oxide doped with ionic liquid** **D.O2.D1.3**  
Letícia Guerreiro da Trindade<sup>1</sup>, Letícia Zanchet<sup>2</sup>, Aline Barrios Trench<sup>3</sup>, Josiane Carneiro Souza<sup>3</sup>, Maria Helena Carvalho<sup>3</sup>, Ernesto Chaves Pereira<sup>3</sup>, Tatiana Martelli Mazzo<sup>4</sup>, Elson Longo<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>2</sup>Instituto de Química - UFRGS, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>4</sup>Universidade Federal de São Paulo

## *SESSION D.03.D1 (14:00 - 16:15) - Room Mármara*

- 14:00 Semiconductor as potent antitumor and antifungal agents** **D.O3.D1.1\***  
Elson Longo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 14:30 Hybrid aerogel photocatalysts/adsorbents for environmental applications** **D.O3.D1.2**  
Elias Paiva Ferreira Neto<sup>1</sup>, Ariane Tiemi Mitsuahara<sup>1</sup>, Thais Caroline Almeida da Silva<sup>1</sup>, Thales Mascarelli<sup>1</sup>, Sajjad Ullah<sup>2</sup>, Ubirajara Pereira Rodrigues Filho<sup>3</sup>, Sidney J.L. Ribeiro<sup>1</sup>; <sup>1</sup>Instituto de Química - Universidade Estadual Paulista, <sup>2</sup>University of Peshawar, <sup>3</sup>Instituto de Química de São Carlos-USP

- 14:45 Facile preparation of Ag<sub>2</sub>WO<sub>4</sub>/Ag<sub>3</sub>PO<sub>4</sub> composites with enhanced visible light photocatalytic activity** **D.O3.D1.3**  
 Aline Barrios Trench<sup>1</sup>, Román Alvarez Roca<sup>1</sup>, Thales Rafael Machado<sup>1</sup>, Elson Longo<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos
- 15:00 Study of the catalytic efficiency of layered niobates in photogeneration of hydroxyl radicals** **D.O3.D1.4**  
Nayara de Araújo Pinheiro<sup>1</sup>, Juliana Kelly Dionízio de Souza<sup>1</sup>, Iêda Maria Garcia dos Santos<sup>1</sup>, Ary da Silva Maia<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba
- 15:15 TiO<sub>2</sub>/Na<sub>2</sub>Ti<sub>6</sub>O<sub>13</sub> compounds obtained by microwave assisted hydrothermal method and evaluation of their photocatalytic activities** **D.O3.D1.5**  
Ana Rita Ferreira Alves Teixeira<sup>1</sup>, Liliana Lira Pontes<sup>1</sup>, Iêda Maria Garcia dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba
- 15:30 Effect of sulfur precursor and citric acid on the photocatalytic properties of SnS<sub>2</sub> nanoplates** **D.O3.D1.6**  
Daniela Oreggioni<sup>1</sup>, Laura Fornaro<sup>1</sup>, Andres Pérez<sup>1</sup>, María Eugenia Pérez<sup>1</sup>; <sup>1</sup>Universidad de la República
- 15:45 Low-power, highly selective NO<sub>2</sub> sensor using hierarchical Co<sub>2</sub>SnO<sub>4</sub> microspheres** **D.O3.D1.7**  
Niravkumar Jitendrabhai Joshi<sup>1</sup>, Huiliang Liu<sup>2</sup>, Takeshi Hayasaka<sup>2</sup>, Jing Nie<sup>2</sup>, Liwei Lin<sup>2</sup>, Osvaldo Novais de Oliveira Jr<sup>3</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>University of California Berkeley, <sup>3</sup>Instituto de Física de São Carlos - USP
- 16:00 Effect of applied voltage and reduced graphene oxide on properties and photocatalytic activity of Zinc oxide/reduced graphene oxide nanorods obtained by electrospinning-hydrothermal method.** **D.O3.D1.8**  
Pierre Giovanni Ramos<sup>1</sup>, JUAN RODRIGUEZ<sup>1</sup>; <sup>1</sup>Universidad Nacional de Ingeniería

## TUESDAY, SEPTEMBER 24

\* Invited Lecture

### *SESSION D.O1.D2 (09:30 - 10:30) - Room Mármará*

- 09:30 Synthesis and applications of biodegradable polymers from glycerol** **D.O1.D2.1\***  
Lucas Ricardo Fernandes Figueiredo<sup>1</sup>, André H. Azevedo<sup>1</sup>, IGOR FERNANDES PIMENTA<sup>1</sup>, Maria R. A. Félix<sup>1</sup>, Juliano Elvis Oliveira<sup>2</sup>, José Daniel Diniz Melo<sup>3</sup>, Eliton S. Medeiros<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Universidade Federal de Lavras, <sup>3</sup>Universidade Federal do Rio Grande do Norte
- 10:00 Lead remediation using alginate/cellulose nanocrystal films** **D.O1.D2.2**  
Alessandro Lamarca Urzedo<sup>1</sup>, Naomi Akiba<sup>1</sup>, Tatiana Pedron<sup>1</sup>, Ivanise Gaubeur<sup>1</sup>, Bruno Lemos Batista<sup>1</sup>, Juliana da Silva Bernardes<sup>2</sup>, Amedea Barozzi Seabra<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)

- 10:15 Hybrid adsorbent material based on grape bagasse synthesized by the sol-gel method for cationic dye removal from wastewater** **D.O1.D2.3**  
Jaqueline Benvenuti<sup>1</sup>, Mariliz Gutterres<sup>1</sup>, João Henrique Zimnoch Dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

**SESSION D.O2.D2 (11:00 - 12:00) - Room Mármara**

- 11:00 The use of iron ore tailings in the Iron Quadrangle of Minas Gerais** **D.O2.D2.1\***  
Fernando Soares Lameiras<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 11:30 First principles study of ions incorporation in calcium carbonate minerals** **D.O2.D2.2**  
Alvaro Torrez<sup>1,2</sup>, James Moraes de Almeida<sup>3</sup>, Caetano Rodrigues Miranda<sup>2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto de Física - Universidade de São Paulo, <sup>3</sup>Centro de Ciências Naturais e Humanas - UFABC
- 11:45 Characterization of montmorillonite-organoclays aiming the removal of pollutants from wastewater** **D.O2.D2.3**  
Deborah Liguori<sup>1</sup>, Guilherme Siqueira Gomide<sup>1</sup>, Alex Fabiano Cortez Campos<sup>1</sup>, Elisabeth Andreoli de Oliveira<sup>1</sup>, Geraldo José da Silva<sup>1</sup>; <sup>1</sup>Universidade de Brasília

**SESSION D.O3.D2 (14:00 - 16:15) - Room Mármara**

- 14:00 Enhancement of the Photocatalytic Activity of SrSnO<sub>3</sub> by supporting the material on a commercial oxide** **D.O3.D2.1\***  
Luzia Maria Castro Honório<sup>1</sup>, André Luiz Menezes de Oliveira<sup>2</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>, Josy Antevelli Osajima<sup>1</sup>, Donald E. Macphee<sup>3</sup>, Iêda Maria Garcia dos Santos<sup>2</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Federal da Paraíba, <sup>3</sup>University of Aberdeen
- 14:30 Nanocones of zinc hydroxide salt as adsorbent of sunset yellow dye** **D.O3.D2.2**  
Silvia Jaerger<sup>1</sup>, Rafael Marangoni<sup>1</sup>, Frederico José Kolisnek<sup>1</sup>; <sup>1</sup>Universidade Estadual do Centro Oeste
- 14:45 Hybrid Composed material based on Activated Carbon/CNTs: Fluoxetine adsorption and environmental remediation probed by zebrafish embryos.** **D.O3.D2.3**  
Diego Sousa Moura<sup>1</sup>, Elaine Yoshiko Matsubara<sup>2</sup>, Jose Mauricio Rosolen<sup>2</sup>, Cesar Koppe Grisolia<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade de São Paulo
- 15:00 Synthesis and characterization of Fe<sub>2</sub>O<sub>3</sub>/CuO thin films for arsenic removal from water** **D.O3.D2.4**  
Elizabeth Carmen Pastrana Alta<sup>1</sup>, Dunwei Wang<sup>2</sup>, Victor Zamora Castañeda<sup>1</sup>, Hugo Arturo Alarcón Caveró<sup>1</sup>; <sup>1</sup>Universidad Nacional de Ingeniería, <sup>2</sup>Boston College
- 15:15 Stable zero-valent FeNi nanoparticles supported on silica to use as a catalyst to reduce hexavalent chromium in water** **D.O3.D2.5**  
Leydi del Rocío Silva Calpa<sup>1</sup>, Thiago Oliveira Ferreira Correia<sup>2</sup>, José Carlos Netto Ferreira<sup>3</sup>, Sergio Noboru Kuriyama<sup>4</sup>, Sonia Letichevsky<sup>2</sup>, Roberto R de Avillez<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>3</sup>Universidade Federal Rural do Rio de Janeiro, <sup>4</sup>Instituto SENAI de Inovação
- 15:30 Molecularly imprinted polymers and high resolution-continuum source graphite furnace molecular absorption spectrometry: A powerful combination in environmental samples analysis** **D.O3.D2.6**  
Wiliam Boschetti<sup>1</sup>, Maria Goreti Rodrigues Vale<sup>1</sup>, João Henrique Zimnoch Dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

- 15:45 Development of passive samplers for gaseous elemental mercury based on nanogold deposited on glass or polymer supports** **D.O3.D2.7**  
Elias Barros Santos<sup>1</sup>, Anne Helene Fostier<sup>2</sup>, Jie-Yi Yao<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>INSTITUTE OF CHEMISTRY/UNICAMP
- 16:00 New Insights in Microplastic Characterization by Fourier-transform Infrared Spectroscopy Using Data Analysis Tools** **D.O3.D2.8**  
Henrique de Medeiros Back<sup>1</sup>, Daphiny Pottmaier<sup>1</sup>, Daniela Gadens Zanetti<sup>1</sup>, Orestes Estevam Alarcon<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

## Poster presentations

### *SESSION D.P4 (18:00 - 19:30)*

- 18:00 Evaluation of soil biodegradation and toxicity of the natural rubber composite with the incorporation of the Grits residue and eucalyptus hardwood pulp.** **D.P4.1**  
Giovani Boaventura Bacarin<sup>1</sup>, Aldo Eloizo Job<sup>1</sup>, Renivaldo José dos Santos<sup>1</sup>, Flavio Camargo Cabrera<sup>1</sup>, Vanusca Dalosto Jahno<sup>2</sup>, Marco Antônio Siqueira Rodrigues<sup>2</sup>, Cláudia Regina Klauck<sup>2</sup>, Maria Genesi Meirelles<sup>2</sup>, Thaís Fátima Rodrigues<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Universidade Feevale
- 18:00 Reuse of the red ceramic residue in natural rubber composites.** **D.P4.2**  
Aldo Eloizo Job<sup>1</sup>, Lucas Neves Botosso<sup>1</sup>, Fábio Friol Paiva<sup>1</sup>, Giovani Boaventura Bacarin<sup>1</sup>, Flavio Camargo Cabrera<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista
- 18:00 Tetragonal and monoclinic undoped ZrO<sub>2</sub> applied in the methylene blue adsorption** **D.P4.3**  
Alex de Meireles Neris<sup>1</sup>, Laís Chantelle de Lima<sup>1</sup>, Jailson Ferreira Machado<sup>2</sup>, Maria Gardennia Fonseca<sup>1</sup>, Iêda Maria Garcia dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia da Paraíba
- 18:00 Influence of the temperature and insertion of cerium on morphology of magnetite nanoparticles** **D.P4.4**  
Amanda Santos de Lima<sup>1</sup>, Raquel Fernandes Pupo Nogueira<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil
- 18:00 Phosphorus removal from aqueous solution by core-shell bimagnetic nanoparticles** **D.P4.5**  
Ana Alice Andrade Meireles Guerra<sup>1</sup>, Felipe Lopes Damasceno<sup>1</sup>, Cynara Caroline Kern Barreto<sup>1</sup>, Alex Fabiano Cortez Campos<sup>1</sup>, Ariuska Karla Barbosa Amorim<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 18:00 Pickering emulsion synthesis of Co-MOF/GO composites for energy storage purposes** **D.P4.6**  
Ana Carolina Alves da Rocha Vale<sup>1</sup>, Milena Kowalczyk Manosso Amorim<sup>1</sup>, Bráulio Silva Barros<sup>1</sup>, JOANNA ELZBIETA KULESZA<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 18:00 Influence of phosphogypsum content on the composition of eco-efficient cement** **D.P4.7**  
Ana Rita Damasceno Costa<sup>1</sup>, Samile Raiza Carvalho Matos<sup>1</sup>, Jefferson Santos da Silva<sup>1</sup>, Jardel Pereira Gonçalves<sup>1</sup>; <sup>1</sup>Universidade Federal da Bahia

- 18:00 Study of treatment of soils contaminated by agricultural defensives by activate coal adsorption** **D.P4.8**  
André Augusto Gutierrez Fernandes Beati<sup>1</sup>, Rafael Augusto Valentim da Cruz Magdalena<sup>1</sup>, Robson da Silva Rocha<sup>2</sup>, Raphael Kuhnlein Kuhnlein<sup>1</sup>; <sup>1</sup>Universidade São Francisco, <sup>2</sup>Escola de Engenharia de Lorena - USP
- 18:00 Thermo-acoustic lining made from the kraft cement packaging waste** **D.P4.9**  
 BEATRIZ SILVA OLIVEIRA<sup>1</sup>, FABIANA COSTA MUNHOZ FERRAZ<sup>1</sup>, André Luiz de Oliveira Chaves<sup>2</sup>, RICARDO RAMOS ROCHA<sup>1</sup>; <sup>1</sup>Universidade do Sagrado Coração, <sup>2</sup>Universidade Paulista
- 18:00 Fabrication and characterization of porous membrane modified with metal oxide for effluent treatment.** **D.P4.10**  
André Luiz Gilioli<sup>1</sup>, Otávio Vilaça Mesquita<sup>1</sup>, Lauro Silva<sup>1</sup>, Delia do Carmo Vieira<sup>1</sup>, Cleberson Cipriano de Paula<sup>1</sup>, Alessandra Stevanato<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Londrina
- 18:00 Photodegradation of Methylene Blue in presence of TiO<sub>2</sub> supported in Laponite RD** **D.P4.11**  
Andressa Cristina de Almeida Nascimento<sup>1</sup>, Douglas Silva Machado<sup>1</sup>, Tatiana Batista<sup>1</sup>, Alexia da Costa Feliciano<sup>1</sup>, Péricles Joaquim Hilário da Cunha Lemos<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 18:00 Antimicrobial activity in gypsum by the incorporation of zinc oxide nanoparticles** **D.P4.12**  
 Guilherme Donizeti Silva<sup>1</sup>, Jacqueline Roberta Tamashiro<sup>2</sup>, Bruna Martins<sup>1</sup>, Geisiany Maria Queiroz-Fernandes<sup>1</sup>, Marcia Rodrigues de Moraes Chaves<sup>3</sup>, Angela Kinoshita<sup>1</sup>; <sup>1</sup>Universidade do Sagrado Coração, <sup>2</sup>Universidade do Oeste Paulista, <sup>3</sup>Faculdade do Centro Oeste Paulista
- 18:00 Biosorbents and activated carbon from leaves of *Manihot esculenta*, and applicability in the adsorption of synthetic dyes** **D.P4.13**  
 Jean Colombari Neto<sup>1</sup>, Anna Flávia Almeida<sup>1</sup>, Douglas Cardoso Dragunski<sup>1</sup>, Josiane Caetano<sup>1</sup>, Reinaldo Aparecido Bariccatti<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 18:00 Treatment of laboratory effluents through caulinitical matrices** **D.P4.14**  
Antonio Cícero de Sousa<sup>1</sup>, PAULO HENRIQUE ALMEIDA DA HORA<sup>2</sup>, PAULO HENRIQUE ALMEIDA DA HORA<sup>1</sup>, ROSA Karolina Barros ARAGÃO<sup>1</sup>, Gesivaldo Jesus Alves de Figueiredo<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia da Paraíba, <sup>2</sup>Universidade Estadual de Alagoas
- 18:00 Study of the use of palm oil almond in substitution to gravel as aggregate in the manufacture of lightweight concrete** **D.P4.15**  
Antonio Joaquim Bastos da Silva Filho<sup>1</sup>, André De Carvalho Machado<sup>1</sup>, Jonathas Sousa Reis<sup>1</sup>, Franco Dani Rico Amado<sup>1</sup>, Rafael Nascimento Moreira<sup>1</sup>; <sup>1</sup>Universidade Estadual de Santa Cruz
- 18:00 Synthesis and characterization of layered oxynitrides of formula  $K_{1-x}Ca_2Nb_3-yTa_yO_{10-x}N_x$  (y = 0, 1, 2 e 3) obtained by ammonolysis** **D.P4.16**  
Arnayra Sonayra Brito Silva Carreiro<sup>1</sup>, LAIS CHANTELLE DE LIMA<sup>1</sup>, Juliana Kelly Dionízio de Souza<sup>1</sup>, Iêda Maria Garcia dos Santos<sup>1</sup>, Valerie Bouquet<sup>2</sup>, François Chevire<sup>2</sup>, Ary da Silva Maia<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Universidade de Rennes 1

- 18:00 Characterization and application of oil shale waste as ceramic pigment** **D.P4.17**  
 Maria de Fátima Dantas Silva<sup>1</sup>, Asenete Frutuoso Costa<sup>1</sup>, PATRICIA M PIMENTEL<sup>2</sup>, Marcus Antonio Freitas Melo<sup>1</sup>, Dulce Maria de Araújo Melo<sup>1</sup>, Auristela Carla De Miranda<sup>3</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Federal Rural do Semi-árido, <sup>3</sup>Programa de Pós-graduação em Ciência e Engenharia de Materiais, Universidade Federal da Paraíba
- 18:00 CTAB-coated magnetic nanoparticles for ASA removal from aqueous solutions** **D.P4.18**  
Ayessa Pires Maciel<sup>1</sup>, Cynara Caroline Kern Barreto<sup>1</sup>, Alex Fabiano Cortez Campos<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 18:00 Study of photocatalytic degradation of yellow eosin using TiO<sub>2</sub>** **D.P4.19**  
Benjamim Sipaúba Gonçalves Rubim<sup>1</sup>, Alan Ícaro Sousa Morais<sup>1</sup>, Marcelo Barbosa Furtini<sup>1</sup>, Luzia Maria Castro Honório<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>, Josy Antevéli Osajima<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 Comparative studies between bulk and suspension synthesis of a Hybrid Molecularly Imprinted Polymers (HMIPs) for extraction of saccharin from surface water** **D.P4.20**  
Camila Santos Dourado<sup>1</sup>, Fabiana Casarin<sup>1</sup>, Izabella Fernanda Ferreira Domingues<sup>1</sup>, Maria Vitória dos Santos Villa Bande<sup>1</sup>, Jez Willian Batista Braga<sup>1</sup>, ANA CRISTI BASILE DIAS<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 18:00 SERS: detection of prometryn herbicide and its adsorption mechanism on Ag nanoparticles** **D.P4.21**  
 rafael Jesus gonçalves Rubira<sup>1</sup>, Leonardo Negri Furini<sup>1</sup>, Santiago Sanchez-Cortes<sup>2</sup>, Carlos José Leopoldo Constantino<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Consejo Superior de Investigaciones Científicas, <sup>3</sup>Faculdade de Ciências e Tecnologia da UNESP, Campus de Presidente Prudente
- 18:00 *Simarouba amara* Aubl. As Adsorbent For Oil Removal From Wastewater** **D.P4.22**  
Caroline Yuri Aoki<sup>1</sup>, Francisco Antônio Rocco Lahr<sup>1</sup>, Débora Gonçalves<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 18:00 Graphene oxide as a promising adsorbent for pharmaceutical active compounds remediation from surface water** **D.P4.23**  
 Yuri Abner Rocha Lebron<sup>1</sup>, Victor Rezende Moreira<sup>1</sup>, Marielle Mara da Silva<sup>1</sup>, Lucilaine Valéria de Souza Santos<sup>2,1</sup>, Raquel Sampaio Jacob<sup>1</sup>, Cláudia Karina Barbosa de Vasconcelos<sup>1</sup>, Marcelo Machado Viana<sup>2</sup>; <sup>1</sup>Pontifícia Universidade Católica de Minas Gerais, <sup>2</sup>Universidade Federal de Minas Gerais
- 18:00 Potential application of activated carbon fibers produced from textile-grade polyacrylonitrile (PAN) fibers in water treatment** **D.P4.24**  
 Isabela Maria Martins<sup>1</sup>, Gabriela de Moraes Gouvêa Lima Lima<sup>1</sup>, jossano saldanha marcuzzo<sup>2</sup>, Maurício Ribeiro Baldan<sup>2</sup>, Cristiane Koga Ito<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais
- 18:00 Analyze of rubber-concrete elastic modulus and your use in rigid pavement** **D.P4.25**  
Danilo Da Silva Vendramini<sup>1</sup>, Paulo Henrique Rodrigues<sup>2</sup>, Paula Cristina De Souza<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Faculdade Integrado de Campo Mourão
- 18:00 A spectrophotometric method for carbon monoxide determination using aminopentacyano (II) complex of potassium** **D.P4.26**  
Dheniffer oliveira Buffon<sup>1</sup>, cleber antonio lindino<sup>1</sup>, caroline pauletti<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná



- 18:00 Study of controlled-release fertilizers with the aid of the finite element method (FEM) D.P4.27**  
 Vitoria Stuani Favini<sup>1</sup>, Douglas Fabris<sup>1</sup>, Bruno Henriques<sup>1</sup>, Henrique Simas<sup>1</sup>, Marcio Celso Fredel<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Development of a new Chitosan/PVA/Bentonite/FeOOH hydrogel composite for adsorption of sulfur and nitrogen compounds in aqueous media D.P4.28**  
Edilaine Ferreira da Silva<sup>1,2</sup>, Camila Alves Escanio<sup>3,2</sup>, Mariany Vieira Furtado<sup>2</sup>, Felipe Rocha Silvestre<sup>2</sup>, Rafaela Cristina Cota<sup>2</sup>, Isabela Paula Moreira Costa<sup>2</sup>, Caio Rezende Moreira<sup>2</sup>, Ionara Fernanda Rezende Vieira<sup>2</sup>, Alan Rodrigues Teixeira Machado<sup>4,2</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Centro Universitário de Belo Horizonte, <sup>3</sup>Instituto Nacional de Pesquisas Espaciais, <sup>4</sup>Universidade do Estado de Minas Gerais
- 18:00 Synthesis of peptidyl-resins with chelating amino acid sequences for heavy metal retention from contaminated waters D.P4.29**  
Eduardo Festozo Vicente<sup>1</sup>, Rafael Yokoo Shoiti de Souza<sup>1</sup>, Jessica Aparecida Serafim<sup>1</sup>; <sup>1</sup>Faculdade de Ciência e Engenharia da UNESP-campus de Tupã
- 18:00 Triclosan degradation by heterogeneous photocatalysis: bentonite clay as host matrix for Niobium oxide D.P4.30**  
Elenice Hass Caetano Lacerda<sup>1</sup>, Vitor Sena Koserá<sup>1</sup>, Elaine Regina Lopes Tiburtius<sup>1</sup>, Juliana Regina Kloss<sup>2</sup>, Sérgio Toshio Fujiwara<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Federal University of Technology - Curitiba - PR
- 18:00 Nanogold thin film and its potential application as dosimeter to monitor personal exposure to gaseous elemental mercury D.P4.31**  
Elias Barros Santos<sup>1</sup>, Jie-Yi Yao<sup>1</sup>, Denise Oliveira Lino<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 18:00 Solid phase extraction using molecular imprinting polymers (MISPE) for the determination of parabens in samples of environmental interest D.P4.32**  
 Anselmo Alves do Nascimento<sup>1</sup>, Viviane do Nascimento Bianchi<sup>1</sup>, Clóvis Lúcio da Silva<sup>1</sup>, Elizabete Campos de Lima<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Organophilic montmorillonite containing sulfhydryl groups for the removal of cationic dyes D.P4.33**  
Emiliane Gerbasi Ricci<sup>1</sup>, Liziane Marçal<sup>1</sup>, Eduardo José Nassar<sup>1</sup>, Emerson Henrique de Faria<sup>1</sup>, Katia Jorge Ciuffi<sup>1</sup>; <sup>1</sup>Universidade de Franca
- 18:00 Activated carbon from rice husk biochar with high surface area D.P4.34**  
Enelise Scapin<sup>1</sup>, Gabriela Pereira Maciel<sup>2</sup>, Allan Polidoro<sup>1</sup>, Eliane Lazzari<sup>1</sup>, Edilson V Benvenuti<sup>1</sup>, Tiago Falcade<sup>1</sup>, Rosângela Assis Jacques<sup>1</sup>; <sup>1</sup>Instituto de Química - UFRGS, <sup>2</sup>Universidade Federal do Rio Grande do Sul
- 18:00 Ammoniacal nitrogen adsorbent from asbestos chrysotile and phosphoric acid D.P4.35**  
 Camila Pereira Giroto<sup>1</sup>, Érica Fernanda Poruczinski<sup>1</sup>, Silvia Denofre De Campos<sup>1</sup>, Elvio Antonio de Campos<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 18:00 Synthesis, characterization and application of polyaniline/graphene oxide and polyaniline/reduced graphene oxide nanocomposites D.P4.36**  
 Hugo Gajardoni de Lemos<sup>1</sup>, Luis Marcelo G da Silva<sup>1</sup>, Stefany Rodrigues Saraiva<sup>1</sup>, Yasmin Montero Quispe<sup>1</sup>, Eduardo Lucas Subtil<sup>1</sup>, Everaldo Carlos Venancio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Hybrid molecular imprinted synthesis for amoxicillin extraction in surface waters D.P4.37**  
Fabiana Casarin<sup>1</sup>, Camila Santos Dourado<sup>1</sup>, Patrícia Cristina Silva Menêzes<sup>2</sup>, ANA CRISTI BASILE DIAS<sup>1</sup>, Lilian Rodrigues Braga<sup>2</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Paulista

- 18:00 Synthesis of polymers molecularly printed by bulk, precipitation and suspension methods for the recognition of caffeine** **D.P4.38**  
FABIANA CASARIN<sup>1</sup>, Camila Santos Dourado<sup>1</sup>, MARIA VITÓRIA DOS SANTOS VILLA BANDE<sup>1</sup>, ERISENE SILVA ALMEIDA<sup>1</sup>, ANA CRISTI BASILE DIAS<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 18:00 Natural rubber composite foam: A new approach for recycling sugarcane bagasse fiber** **D.P4.39**  
Fábio Friol Paiva<sup>1</sup>, Laura Neves Alencar<sup>1</sup>, Giovani Boaventura Bacarin<sup>1</sup>, Leandra Oliveira Salmazo<sup>2</sup>, Miguel Angel Rodríguez-Pérez<sup>2</sup>, Flávio Camargo Cabrera<sup>1</sup>, Aldo Eloizo Job<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente, <sup>2</sup>Universidad de Valladolid, <sup>3</sup>Universidade Estadual Paulista
- 18:00 Adsorption of heavy metal ions in waters over mesoporous geopolymer containing different metazeolites** **D.P4.40**  
Ana Isa Perez Cordoves<sup>1</sup>, FABÍOLA DA SILVEIRA MARANHÃO<sup>2</sup>, Sheila Gonçalves de Castro<sup>1</sup>, Camila da Silva Barros<sup>2,1</sup>, Fernando Gomes de Sousa Jr<sup>1</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ, <sup>2</sup>Instituto de Macromoleculas "Eloisa Mano"
- 18:00 Use of geopolymers to remove oil from produced water** **D.P4.41**  
FABÍOLA DA SILVEIRA MARANHÃO<sup>1</sup>, Felipe Ferreira de Carvalho<sup>1</sup>, Daniela Marques do Nascimento<sup>1</sup>, Bryan Henrique Oliveira Athayde<sup>1</sup>, Daniela Batista de Oliveira Gaspar<sup>1</sup>, Rodrigo Afonso Esteves<sup>1</sup>, Fernando Gomes de Souza Junior<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 18:00 Mechanical characterization of a polyurethane hybrid composite with natural fibers** **D.P4.42**  
FELIPE Delapria Dos Santos<sup>1</sup>, Daniele Cristina Tita Granzotto<sup>1</sup>, Vagner Roberto Batistela<sup>1</sup>, Andressa dos Santos<sup>1</sup>, Silvia Luciana Favaro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 18:00 Mechanochemical treatment of asbestos cement using high-energy ball mill and vibration disk mill** **D.P4.43**  
Roger Borges<sup>1</sup>, Fernando Wypych<sup>2</sup>, Rodrigo Klaic<sup>1</sup>, Cristiane Sanchez Farinas<sup>1</sup>, Cauê Ribeiro Oliveira<sup>1</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Universidade Federal do Paraná
- 18:00 Production of gypsum plaster with partial replacement of the Grits residue from the pulp industry.** **D.P4.44**  
Saulo Vinicius Martins Souza<sup>1</sup>, Giovani Boaventura Bacarin<sup>1</sup>, Gabrieli Roefero Tolosa<sup>1</sup>, Flavio Camargo Cabrera<sup>1</sup>, Aldo Eloizo Job<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista
- 18:00 Aplicação de membranas íon seletivas para a remoção de compostos nitrogenados de águas subterrâneas** **D.P4.45**  
Gabriel Figueredo de Souza<sup>1</sup>, Bianca de Souza Rocha<sup>1</sup>, Manuella Silva Soares Barreto<sup>1</sup>, Tatiane Benvenuti<sup>1</sup>, Franco Dani Rico Amado<sup>1</sup>; <sup>1</sup>Universidade Estadual de Santa Cruz
- 18:00 Reuse of lime mud residue from the eucalyptus kraft pulp industry applied as a partial substitute in the manufacture of gypsum emplaste.** **D.P4.46**  
Gabrieli Roefero Tolosa<sup>1</sup>, Saulo Vinicius Martins Souza<sup>1</sup>, Flavio Camargo Cabrera<sup>1</sup>, Giovani Boaventura Bacarin<sup>1</sup>, Aldo Eloizo Job<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

- 18:00 Technical feasibility of the use of rice husk ash modified by iron (III) and chromium (III) as ceramic pigment** **D.P4.47**  
GERBESON CARLOS BATISTA DANTAS<sup>1</sup>, SÉRGIO RAIR MEDEIROS SILVA<sup>1</sup>, PATRICIA M PIMENTEL<sup>1</sup>, TARCÍSIO ELÓI DE ANDRADE JÚNIOR<sup>1</sup>, SÂMEA VALENSCA ALVES BARROS<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido
- 18:00 Reactivity and mechanical properties of mortars incorporated with scheelite mining residues** **D.P4.48**  
 MARIA DE LOURDES XAVIER DE FRANÇA NETA<sup>1</sup>, GERBESON CARLOS BATISTA DANTAS<sup>1</sup>, SÂMEA VALENSCA ALVES BARROS<sup>1</sup>, GELMIRE DE ARAÚJO NEVES<sup>2</sup>, ROMUALDO R. MENEZES<sup>2</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido, <sup>2</sup>Universidade Federal de Campina Grande
- 18:00 Development of geopolymetric mortar incorporating the Candonga sediment** **D.P4.49**  
Glaucia Marcossi Cardoso Duarte<sup>1</sup>, Fabiana Grasielle Penido Andrade Silva<sup>2</sup>, Yara Sena Pereira<sup>1</sup>, Ana Maria Matildes dos Santos<sup>1</sup>, Fernando Soares Lameiras<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Centro Universitário Una
- 18:00 Heterogeneous photocatalysis with TiO<sub>2</sub> thin films in water bed reactor on commercial ceramic substrates** **D.P4.50**  
Graziele Dajana Sena de Sousa<sup>1</sup>, Adriano Cesar Rabelo<sup>1</sup>; <sup>1</sup>Universidade Federal do Oeste do Pará
- 18:00 Construction of mango kernel (*Mangifera indica*) plant-based enzymatic biosensor applied to paracetamol detection** **D.P4.51**  
 Ramon Silva Vilela<sup>1</sup>, Guilhermina Ferreira Teixeira<sup>1</sup>, Kátia Flávia Fernandes<sup>1</sup>, Flavio Colmati<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 18:00 Synthesis of orthorhombic Sb<sub>2</sub>O<sub>4</sub> micro- and nanostructures by a vapor-solid process** **D.P4.52**  
 Rosana Alves Gonçalves<sup>1</sup>, Herick Ematne da Silva Barros<sup>2</sup>, Olivia Maria Berengue<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Estadual Paulista
- 18:00 Synthesis and characterization of composite cathodes (LaNiO<sub>3</sub>-CGO and LaCoO<sub>3</sub>-CGO) obtained by the gelatin method** **D.P4.53**  
Iago Bezerril da Silva<sup>1</sup>, Flávia de Medeiros Aquino<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba
- 18:00 Development of materials of La<sub>0.7</sub>Sr<sub>0.3</sub>CoO<sub>3</sub>, LaCoO<sub>3</sub> and SrCoO<sub>3</sub> perovskite type** **D.P4.54**  
Iasmin Alves Ribeiro<sup>1</sup>, Anne Michele Garrido Pedrosa de Souza<sup>1</sup>, Marcelo José de Barros Souza<sup>1</sup>; <sup>1</sup>Universidade Federal de Sergipe
- 18:00 Thermoluminescence Properties of Structure Ceramic Materials for Development of Dosimeters Device** **D.P4.55**  
 Leandro Cardoso Xavier<sup>1</sup>, Icoana Lais Leitão Mascarenhas Martins<sup>1</sup>, Gerardo A. Idrobo Pizo<sup>1</sup>, Pilar Hidalgo Falla<sup>1</sup>, Marcelo B Bento<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 18:00 Rodamine-B Degradation Using SrSnO<sub>3</sub>/g-C<sub>3</sub>N<sub>4</sub> Irradiated With Sunlight** **D.P4.56**  
IDIO ALVES DE SOUSA FILHO<sup>1</sup>, Cesar Koppe Grisolia<sup>1</sup>, Ingrid Tavora Weber<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 18:00 Synthesis and characterization of functionalized nanoparticles for adsorption of organic dye** **D.P4.57**  
Isabela Maria Balão da Silva<sup>1</sup>, Bárbara de Oliveira Tessarolli<sup>1</sup>, Rafael Turra Alarcon<sup>1</sup>, Gilbert Banach<sup>1</sup>, Aroldo Geraldo Magdalena<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru

**18:00 Development of Al<sub>2</sub>O<sub>3</sub> and kaolin supports for carbon membrane applications D.P4.58**  
Thaís Martins Neves<sup>1</sup>, Nilson Romeu Marcilio<sup>1</sup>, Liliâne Damaris Pollo<sup>1</sup>, Isabel Cristina Tessaro<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

## WEDNESDAY, SEPTEMBER 25

### Poster presentations

#### *SESSION D.P5 (11:00 - 12:30)*

- 11:00 An alternative for coal-mining waste dams D.P5.1**  
Marcelo Gryczak<sup>1</sup>, Cesar L. Petzhold<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 11:00 Synthesis, characterization, and application of MoO<sub>3</sub> by hydrothermal route assisted by microwaves as an adsorbent of organic dyes. D.P5.2**  
Larissa Oliveira Garcia<sup>1</sup>, Fenelon Martinho Pontes<sup>1</sup>, Rafaela Ferneda Ferneda<sup>1</sup>, Regina Aparecida Capeli<sup>1</sup>, Elson Longo<sup>2,3</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>3</sup>Universidade Federal de São Carlos
- 11:00 Study and development of processes for the recycling of cartoned packaging D.P5.3**  
Mayara Elizabeth Pereira<sup>1</sup>, Jose Fernando Marin Junior<sup>1</sup>, Roberta Martins da Bianchi Bianchi<sup>1</sup>; <sup>1</sup>Universidade São Francisco
- 11:00 The influence of the disposition of bamboo bars of the specimen dendrocalamus giganteus in bending tests D.P5.4**  
André De Carvalho Machado<sup>1</sup>, Antonio Joaquim Bastos da Silva Filho<sup>1</sup>, Jonathas Sousa Reis<sup>1</sup>, Franco Dani Rico Amado<sup>1</sup>, Rafael Nascimento Moreira<sup>1</sup>; <sup>1</sup>Universidade Estadual de Santa Cruz
- 11:00 Photocatalytic Activity of TiO<sub>2</sub> Nanotubes Obtained by a New Chemical Route D.P5.5**  
Fernando Rogério de Paula<sup>1</sup>, Maykon André Montanhera<sup>2</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Estadual Paulista
- 11:00 Synthesis and investigation of WO<sub>3</sub> thin films applied as gas sensor D.P5.6**  
Janaina Lima Borges<sup>1</sup>, Anderson Borges da Silva<sup>1</sup>, Luís Fernando da Silva<sup>2</sup>, Maria Ines Basso Bernardi<sup>3</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Instituto de Física de São Carlos - USP
- 11:00 Determination of Experimental Density of Nanomagnetic Ni-Zn Ceramics Using Helium Picnometry, Stability by Thermogravimetry and its Band Gap Energy D.P5.7**  
Joelda Dantas<sup>1</sup>, Elvia Leal<sup>2</sup>, Julyanne Rodrigues de Medeiros Pontes<sup>2</sup>, Vitória Marçal<sup>2</sup>, Pollyana Caetano Ribeiro<sup>1</sup>, Marta Célia Dantas da Silva<sup>1</sup>, José Geraldo A.P. Filho<sup>3</sup>, Ana Cristina F.M. Costa<sup>2</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Universidade Federal de Campina Grande, <sup>3</sup>Universidade Federal de Pernambuco

- 11:00 Adsorption of amoxicillin by rare earth doped nickel ferrite nanoparticles** **D.P5.8**  
Joice Yoko D Alessandro Idehara<sup>1</sup>, Patrícia Mariana Alves Caetano<sup>1</sup>, Daniele Alves Fagundes<sup>1</sup>, Liliam Viana Leonel<sup>1</sup>, Luis Eugenio Fernandez-Outon<sup>2</sup>, João Batista Santos Barbosa<sup>1</sup>, José Domingos Ardisson<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 11:00 Identification of ferruginous compounds in atmospheric particulate matter by <sup>57</sup>Fe mössbauer and chemical mass balance measurements** **D.P5.9**  
José Domingos Ardisson<sup>1</sup>, José Costa<sup>2</sup>, João Silva<sup>2</sup>, Rogério Queiroz<sup>2</sup>, Tsutomu Morimoto<sup>3</sup>, Adriana Silva de Albuquerque<sup>1</sup>, Luis Eugenio Fernandez-Outon<sup>4</sup>, Waldemar Augusto de Almeida Macedo<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>ArcelorMittal, <sup>3</sup>Morimoto, <sup>4</sup>Universidade Federal de Minas Gerais
- 11:00 A study on solid state recycling of copper alloy chips** **D.P5.10**  
José Fernando Batista Junior<sup>1</sup>, Marcio Andreato Mendes<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Londrina
- 11:00 Synthesis and characterization of g-C<sub>3</sub>N<sub>4</sub> / carbon xerogel / TiO<sub>2</sub>: Photocatalytic activity evaluation** **D.P5.11**  
Karla Faquine Rodrigues<sup>1</sup>, Gilmar Patrocínio Thim<sup>1</sup>, Liana Alvares Rodrigues<sup>2</sup>, Deborah Dibbern Brunelli<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Escola de Engenharia de Lorena - Universidade de São Paulo
- 11:00 Physical and morphological characterization of anodic self-organization Titanium Dioxide Nanotubes** **D.P5.12**  
Laís Gimenes Vernasqui<sup>1</sup>, Raissa Samira Rocha da Silva<sup>1</sup>, Neidenei Gomes Ferreira<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 11:00 Application of composites formed by TiO<sub>2</sub> nanotubes and MOFs in the photodegradation of the methylene blue dye** **D.P5.13**  
Emanuely José Souza<sup>1</sup>, Larissa A. Santa Cruz<sup>2,1</sup>, Bráulio Silva Barros<sup>2</sup>, Giovanna Machado<sup>1</sup>; <sup>1</sup>Centro de Tecnologias Estratégicas do Nordeste, <sup>2</sup>Universidade Federal de Pernambuco
- 11:00 Influence of the use of eucalyptus sawdust as a loading on the properties of expanded natural rubber composite** **D.P5.14**  
Laura Neves Alencar<sup>1</sup>, Fábio Friol Paiva<sup>1</sup>, Fernando Sergio Okimoto<sup>1</sup>, Giovani Boaventura Bacarin<sup>2</sup>, Leandra Oliveira Salmazo<sup>3</sup>, Miguel Angel Rodríguez-Pérez<sup>3</sup>, Flavio Camargo Cabrera<sup>2</sup>, Aldo Eloizo Job<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universidad de Valladolid
- 11:00 Praseodymium doped cerium oxide nanoparticles: structural analyses** **D.P5.15**  
Liliane Lelis Oliveira<sup>1</sup>, Johan Alexander Cortes Suarez<sup>1</sup>, Rafael Aparecido Ciola Amoresi<sup>2</sup>, Elson Longo<sup>3,4</sup>, Alexandre Z. Simões<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>São Paulo State University, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>4</sup>Universidade Federal de São Carlos
- 11:00 Measurement and technological control of self-compacting concrete with partial replacement of Portland cement by ash from sugarcane bagasse** **D.P5.16**  
Lucas Dionísio Barros<sup>1</sup>, Lorena Araújo Silva<sup>2</sup>, Karen Lopes Lima<sup>2</sup>, Bacus de Oliveira Nahime<sup>2</sup>, Igor Soares dos Santos<sup>2</sup>; <sup>1</sup>Universidade de Rio Verde, <sup>2</sup>Instituto Federal Goiano Campus Rio Verde

- 11:00 Use of porous ceramics as catalysts in the treatment of effluents contaminated by dyes** **D.P5.17**  
 Luis Fernando Baldo Estorari<sup>1</sup>, Lucca Monteiro Silva Semensato<sup>1</sup>, Maisa Helena Mancini<sup>1</sup>, Tania Regina Giraldi<sup>1</sup>, Elíria Maria de Jesus Agnolon Pallone<sup>2</sup>, Sylma Carvalho Maestrelli<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Universidade de São Paulo
- 11:00 Characterization of an interlocking block manufactured from Electrical and Electronic Equipment Waste** **D.P5.18**  
Luiz Tadeu Gabriel<sup>1</sup>, Rodrigo Fernando Bianchi<sup>1</sup>, Américo Tristão Bernardes<sup>1</sup>, Leonardo Barbosa Godefroid<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto
- 11:00 Determination of the equilibrium time and cation exchange in adsorption of toxic metals by 4A magnetic zeolite composite** **D.P5.19**  
Luiz Thiago Vasconcelos da Silva<sup>1</sup>, Breno Aragão Dos Santos<sup>1</sup>, Mayza Morais Franca<sup>1</sup>, Carla Bastos Vidal<sup>1</sup>, Adonay Rodrigues Loiola<sup>1</sup>, Ronaldo Ferreira Do Nascimento<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará
- 11:00 Synthesis and characterization of Zn-MOF and Zn-MOF@Fe<sub>3</sub>O<sub>4</sub> for efficient removal of toluene from water** **D.P5.20**  
Lyara Ferreira Pereira<sup>1</sup>, ALLANA CHRISTINA FROS<sup>1</sup>, Milena Kowalczyk Manosso Amorim<sup>1</sup>, ANA KARINA PEREIRA LEITE<sup>2</sup>, JOANNA ELZBIETA KULESZA<sup>1</sup>, Bráulio Silva Barros<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Universidade Federal do Rio Grande do Norte
- 11:00 Detection of the fungicide Tiabendazole via surface-amplified Raman spectroscopy (SERS)** **D.P5.21**  
Marcelo José Santos Oliveira<sup>1</sup>, Leonardo Negri Furini<sup>2</sup>, rafael Jesus gonçalves Rubira<sup>2</sup>, Carlos José Leopoldo Constantino<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Faculdade de Ciências e Tecnologia da UNESP, Campus de Presidente Prudente
- 11:00 Removal of sodium dodecyl sulfate by adsorption on modified silica** **D.P5.22**  
 LARISSA DE SOUZA TOLEDO<sup>1</sup>, Angela Kinoshita<sup>1</sup>, Beatriz Antoniassi<sup>1</sup>, GUSTAVO CASTRO ROCHA<sup>2</sup>, Marcia Rodrigues de Moraes Chaves<sup>3</sup>; <sup>1</sup>Universidade do Sagrado Coração, <sup>2</sup>UNIVERSIDADE ESTADUAL PAULISTA JÚLIO DE MESQUITA FILHO - CAMPUS BOTUCATU, <sup>3</sup>Faculdade do Centro Oeste Paulista
- 11:00 Use of *Typha angustifolia* L. as biosorbent to remove chloramphenicol in aqueous samples** **D.P5.23**  
 Paula Chiachia Pasta<sup>1</sup>, Toncler Silva<sup>1</sup>, Adrielli Cristina Silva<sup>1</sup>, Alexandre de Oliveira Jorgetto<sup>2</sup>, Margarida Juri Saeki<sup>1</sup>, GUSTAVO CASTRO ROCHA<sup>1</sup>; <sup>1</sup>UNIVERSIDADE ESTADUAL PAULISTA JÚLIO DE MESQUITA FILHO - CAMPUS BOTUCATU, <sup>2</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil
- 11:00 Adsorption of benzene on two calix[4]arene-based coordination polymers quantified by <sup>13</sup>C qNMR** **D.P5.24**  
MARIA ALAIDE OLIVEIRA<sup>1</sup>, ALLANA CHRISTINA FROS<sup>1</sup>, JOANNA ELZBIETA KULESZA<sup>1</sup>, Bráulio Silva Barros<sup>1</sup>, José Daniel Da Silva Fonseca<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

- 11:00 Hydrothermal carbonization of the leaf litter of cashew: evaluation of the reactional parameters** **D.P5.25**  
Maria Darly Teles Fernandes<sup>1</sup>, José Cleber Vasconcelos Júnior<sup>2</sup>, Wesley Rodrigues de Sousa<sup>2</sup>, Odair Pastor Ferreira<sup>1</sup>, Antonio Gomes Souza Filho<sup>1</sup>, Rosana Maria Alves Saboya<sup>1</sup>, José Valdenir Silveira<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Universidade Estadual do Vale do Acaraú
- 11:00 Influence of dopand addition in the gas sensing properties of ZnO thin films** **D.P5.26**  
Maria Ines Basso Bernardi<sup>1</sup>, Weverton Alison dos Santos Silva<sup>2</sup>, Anderson Borges da Silva<sup>2</sup>, Bruno Sanches de Lima<sup>3</sup>, Valmor Roberto Mastelaro<sup>3</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP, <sup>2</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>3</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 11:00 Preparation and characterization of starch - latex blends for agricultural applications** **D.P5.27**  
Mariana Moraes Góes<sup>1</sup>, Gizilene Maria Carvalho<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 11:00 Development of electrochemical sensors based on novel hybrid silica/titania materials** **D.P5.28**  
Marília Reginato de Barros<sup>1</sup>, João Paulo Winiarski<sup>1</sup>, Franciele de Matos Morawski<sup>1</sup>, Cristiane Luisa Jost<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Removal of caffeine in water using sugarcane bagasse biomass as biochar** **D.P5.29**  
Mateus Cottorello Fonsêca<sup>1</sup>, César Augusto Marasco Júnior<sup>1</sup>, Diógenes dos Santos Dias<sup>1</sup>, Bianca Ferreira da Silva<sup>1</sup>, Paulo Clairmont Feitosa de Lima Gomes<sup>1</sup>; <sup>1</sup>Instituto de Química, Unesp
- 11:00 Synthesis, characterization and investigation of CaMoO<sub>4</sub> adsorption capacity** **D.P5.30**  
Sandra de Cássia Pereira<sup>1,2</sup>, Alberthmeiry Teixeira de Figueiredo<sup>2</sup>, MAYLURA MORAIS CALDAS<sup>2</sup>, Cristiano Morita Barrado<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Universidade Federal de Goiás - Regional Catalão
- 11:00 Synthesis and characterization of MOF-derived nanoporous metal oxides for energy storage devices.** **D.P5.31**  
Milena Kowalczyk Manosso Amorim<sup>1</sup>, Lyara Ferreira Pereira<sup>1</sup>, Ana Carolina Alves da Rocha Vale<sup>1</sup>, Thiago Tallysson Freire Costa<sup>1</sup>, Bráulio Silva Barros<sup>1</sup>, JOANNA ELZBIETA KULESZA<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 11:00 Formaldehyde analysis on wood panels by headspace** **D.P5.32**  
Mirela Angelita Artner<sup>1</sup>, Fabricio Hansel<sup>2</sup>, Washington Luiz Esteves Magalhães<sup>1,2</sup>, André Christian Keinert<sup>3</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Embrapa Florestas, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 11:00 Alkali-Treated *Luffa Cylindrica* As Adsorbent For Dye Removal From Wastewater** **D.P5.33**  
Murilo Camargo Constantino<sup>1</sup>, Débora Gonçalves<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 11:00 New composite gypsum plaster with dregs waste from paper industry** **D.P5.34**  
Nelissa Garcia Balarim<sup>1</sup>, Flávio Camargo Cabrera<sup>2</sup>, Aldo Eloizo Job<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>São Paulo State University
- 11:00 Synthesis and characterization of manganese dioxide for the removal of lead and cadmium of aqueous effluents** **D.P5.35**  
Orfelinda Avalo<sup>1</sup>, David Martinez<sup>1</sup>, Edwilde Yoplac<sup>1</sup>, Johan Cobeñas<sup>1</sup>, Richard Paredes<sup>1</sup>; <sup>1</sup>Universidad Nacional de Ingeniería

- 11:00 Application of Ni/Co ferrite nanoparticles in the adsorption and degradation of amoxicillin** **D.P5.36**  
Patrícia Mariana Alves Caetano<sup>1,2</sup>, Daniele Alves Fagundes<sup>2</sup>, Joice Yoko D Alessandro Idehara<sup>2</sup>, Adriana Silva de Albuquerque<sup>2</sup>, Luis Eugenio Fernandez-Outon<sup>3</sup>, Waldemar Augusto de Almeida Macedo<sup>2</sup>, José Domingos Ardisson<sup>2</sup>; <sup>1</sup>Centro Universitário Una, <sup>2</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>3</sup>Universidade Federal de Minas Gerais
- 11:00 Incorporation and reactivity of quartzite mining residues in cement matrix composites when attacked by sulfate ions** **D.P5.37**  
 SÂMEA VALENSCA ALVES BARROS<sup>1</sup>, GELMIRE DE ARAÚJO NEVES<sup>2</sup>, ROMUALDO R. MENEZES<sup>2</sup>, GERBESON CARLOS BATISTA DANTAS<sup>1</sup>, PATRICIA M PIMENTEL<sup>1</sup>, MARIA DE LOURDES XAVIER DE FRANÇA NETA<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido, <sup>2</sup>Universidade Federal de Campina Grande
- 11:00 Stabilization of heavy metals present in quartzite residues using cement matrix** **D.P5.38**  
 SÂMEA VALENSCA ALVES BARROS<sup>1</sup>, GELMIRE DE ARAÚJO NEVES<sup>2</sup>, ROMUALDO R. MENEZES<sup>2</sup>, GERBESON CARLOS BATISTA DANTAS<sup>1</sup>, TARCÍSIO ELÓI DE ANDRADE JÚNIOR<sup>1</sup>, PATRICIA M PIMENTEL<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido, <sup>2</sup>Universidade Federal de Campina Grande
- 11:00 Study of the crystalline structure of  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> nanoparticle obtained by the hydrothermal method assisted by microwave.** **D.P5.39**  
Paulo Afonso Freitas Diniz<sup>1</sup>, Kiany Sirley Brandão Cavalcante<sup>1</sup>, Ulisses Magalhães Nascimento<sup>2</sup>, Fernanda Hellen de Souza Santos<sup>2</sup>; <sup>1</sup>Federal Institute of Maranhão, <sup>2</sup>Federal University of Maranhão
- 11:00 Hydrothermal treatment of Bi<sub>2</sub>O<sub>3</sub> thin films deposited via spin coating and evaluation of their potential for dye removal under UV radiation** **D.P5.40**  
Paulo Henrique Eleuterio Falsetti<sup>1</sup>, Douglas Mendes da Silva Del Duque<sup>1</sup>, Vagner Romito de Mendonça<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 11:00 Gas sensor response of Eu doped CeO<sub>2</sub> from a morphological perspective** **D.P5.41**  
Pedro Paulo Ortega<sup>1</sup>, Miguel Adolfo PONCE<sup>2</sup>, Elson Longo<sup>3</sup>, Alexandre Z. Simões<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidad Nacional de Mar del Plata, <sup>3</sup>Universidade Federal de São Carlos
- 11:00 Photocatalytic oxidation of hazardous dye on Ag/ZnO-saponite nanocomposite** **D.P5.42**  
 Dihego Lima Damacena<sup>1</sup>, Andre Amaral Oliveira<sup>1</sup>, Pollyana Trigueiro<sup>1</sup>, Luzia Maria Castro Honório<sup>1</sup>, Maria Gardennia Fonseca<sup>2</sup>, Iêda Maria Garcia dos Santos<sup>2</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>, JOSY ANTEVELI OSAJIMA<sup>1</sup>, Maguy Jaber<sup>3</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Federal da Paraíba, <sup>3</sup>Pierre and Marie Curie University - Paris 6
- 11:00 Removal of lead from aqueous solutions by CoFe<sub>2</sub>O<sub>4</sub>@ $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> magnetic nanoparticles** **D.P5.43**  
Priscila Ferreira Reis<sup>1</sup>, João C. M. Neiva<sup>1</sup>, Cynara Caroline Kern Barreto<sup>1</sup>, Alex Fabiano Cortez Campos<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 11:00 Synthesis and characterization of molybdenum oxide by hydrothermal route** **D.P5.44**  
Rafaela Ferneda Ferneda<sup>1</sup>, Fenelon Martinho Pontes<sup>1</sup>, Larissa Oliveira Garcia<sup>1</sup>, Regina Aparecida Capeli<sup>1</sup>, Elson Longo<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Universidade Federal de São Carlos



- 11:00 Synthesis and characterization of lamellar oxynitrides with formula  $K_{1+x}M_2Nb_3O_{10-x}N_x$  (M = Ca and Sr) obtained by ammonolysis.** **D.P5.45**  
Rayssa Barbosa Medeiros<sup>1</sup>, Ary da Silva Maia<sup>1</sup>, Iêda Maria Garcia dos Santos<sup>1</sup>, Arnayra Sonayra Brito Silva Carreiro<sup>1</sup>, Valérie Bouquet<sup>2</sup>, François Cheviré<sup>2</sup>, Maryline Guilloux-Viry<sup>2</sup>, Valerie Demange<sup>2</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Université de Rennes 1
- 11:00 Microstructure of concretes with addition of sucrose from sugarcane vinasse** **D.P5.46**  
 Jacqueline Roberta Tamashiro<sup>1</sup>, Patricia Alexandra Antunes<sup>1</sup>, Vitória Domingues Galante<sup>1</sup>, Lucas Henrique Pereira Silva<sup>2</sup>, Aldo Eloizo Job<sup>3</sup>, Angela Kinoshita<sup>1</sup>, Rebeca Delatore Simões<sup>4</sup>; <sup>1</sup>Universidade do Oeste Paulista, <sup>2</sup>Instituto Federal de São Paulo, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>Faculdade de Ciência e Engenharia da UNESP-campus de Tupã
- 11:00 Synthesis and characterization of  $WO_3/Me$  (Me= Ag and Cu) nanostructures synthesized by the hydrothermal method.** **D.P5.47**  
Regina Aparecida Capeli da Silva<sup>1</sup>, Larissa Oliveira Garcia<sup>2</sup>, Rafaela Ferneda Ferneda<sup>1</sup>, Elson Longo<sup>3</sup>, Fenelon Martinho Pontes<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil
- 11:00 The iron(III)-terephthalic acid metal-organic framework as an adsorbent for paracetamol removal from water** **D.P5.48**  
 Jocácia Murieli de Oliveira Miranda Kister<sup>1</sup>, Renata Mello Giona<sup>2</sup>, Alesandro Bail<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Campus Apucarana, <sup>2</sup>Universidade Tecnológica Federal do Paraná - Câmpus Medianeira
- 11:00 Use of ornamental stones waste in the production of ecological soil-cement bricks** **D.P5.49**  
 José Eduardo Horta Celso<sup>1</sup>, FABIANA COSTA MUNHOZ FERRAZ<sup>1</sup>, RICARDO RAMOS ROCHA<sup>1</sup>; <sup>1</sup>Universidade do Sagrado Coração
- 11:00  $Ag_2WO_4$  polymorphs with enhanced photocatalytic performance** **D.P5.50**  
Román Alvarez Roca<sup>1</sup>, Pablo Santana Lemos<sup>1</sup>, Amanda Fernandes Gouveia<sup>2</sup>, Juan Andrés<sup>3</sup>, Elson Longo<sup>4</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Estadual do Piauí, <sup>3</sup>Universitat Jaume I, <sup>4</sup>Universidade Federal de São Carlos - Campus São Carlos
- 11:00 Structural and morphological modifications of VACNTs for application as water harvesting surfaces** **D.P5.51**  
Romário Araújo Pinheiro<sup>1</sup>, AMANDA ARAUJO SILVA<sup>1</sup>, Filipe Menezes Rosa<sup>1</sup>, Rene Martins Volu<sup>2</sup>, Djoille Denner Damm<sup>3</sup>, Vladimir Jesus Trava-Airoldi<sup>1</sup>, Evaldo José Corat<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Instituto de Estudos Avançados, <sup>3</sup>Universidade Federal de São Paulo
- 11:00 Characterization of Galvanic Waste generated in the Industrial Pole of Manaus for application in ceramic composites** **D.P5.52**  
Sabrina Silva Santana<sup>1</sup>, Jean Carlos Silva Andrade<sup>1</sup>, Mateus Ferreira Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 11:00 Cerium modified hematites: synthesis, characterization and formation of  $Fe_2O_3/CeO_2$  heterostructure** **D.P5.53**  
Saidy Cristina Ayala<sup>1</sup>, Raquel Fernandes Pupo Nogueira<sup>2</sup>; <sup>1</sup>Instituto de Química, Unesp, <sup>2</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil

- 11:00 Photocatalytic activity investigation of immobilized TiO<sub>2</sub>-PPy and ZnO-PPy for NO<sub>x</sub> degradation** **D.P5.54**  
 Yasmin Vieira<sup>1</sup>, Jandira Leichweis<sup>1</sup>, SIARA SILVESTRI SILVESTRI<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Maria
- 11:00 Preparation and characterization of biochar-ZnAl<sub>2</sub>O<sub>4</sub> composite and its adsorption behavior followed by photodegradation for diclofenac removal** **D.P5.55**  
 Jandira Leichweis<sup>1</sup>, Yasmin Vieira<sup>1</sup>, Maria Amélia Zazychi<sup>1</sup>, Edson Luiz Foletto<sup>1</sup>, SIARA SILVESTRI SILVESTRI<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Maria
- 11:00 Evaluation of the mechanical properties of ceramic products incorporated with eggshell residue** **D.P5.56**  
 Francine Machado Nunes<sup>1</sup>, Eduarda Medran Rangel<sup>1</sup>, Tanyse Parada Sampaio<sup>1</sup>, Fabio Calcagno Riemke<sup>1</sup>, Rubens Camaratta<sup>1</sup>, Fernando Machado<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 11:00 Thermal and morphological analyses of polymeric materials hybridized by 2,1,3-benzothiadiazole** **D.P5.57**  
Thatiane Dorneles de Almeida Teixeira<sup>1</sup>, Artemis Marti Ceschin<sup>2</sup>, Luciano Paulino Silva<sup>3</sup>, Michele Ávila dos Santos<sup>2</sup>, Maria José Sales<sup>2</sup>, NIZAMARA PEREIRA PEREIRA<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência E Tecnologia de Brasília, <sup>2</sup>Universidade de Brasília, <sup>3</sup>EMBRAPA, Centro Nacional de Pesquisa de Recursos Genéticos e Biotecnologia
- 11:00 Investigation of the electrochemical properties of an hybrid ormosil film with phosphomolybdic acid toward Prometon** **D.P5.58**  
Victória Oliveira Margarido<sup>1</sup>, Julia Helena De Paula<sup>1</sup>, Adriano L Souza<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Araras
- 11:00 Metasilicates-chitosan composites for environmental remediation** **D.P5.59**  
Vinicius Litrenta Medeiros<sup>1</sup>, Jose Geraldo Nery<sup>1</sup>; <sup>1</sup>São Paulo State University
- 11:00 Surface texturing effect on the gas sensing properties of ZnO thin films** **D.P5.60**  
Weverton Alison dos Santos Silva<sup>1</sup>, Bruno Sanches de Lima<sup>2</sup>, Maria Ines Basso Bernardi<sup>2</sup>, Valmor Roberto Mastelaro<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 11:00 Industrial residue valoration: investigation on the effect of waste incorporation from effluent of drilling and lapidating processes of glass in mortar** **D.P5.61**  
William Rafael Stegall dos Santos<sup>1</sup>, Adrielli Aparecida Westerlon<sup>1</sup>, Vinicius Matheus de Souza<sup>1</sup>, Paola Egert Ortiz<sup>1</sup>, Jasper José Zanco<sup>1</sup>, Heloisa Regina Turatti Silva<sup>1</sup>; <sup>1</sup>Universidade do Sul de Santa Catarina
- 11:00 Geopolymer synthesis with iron ore tailings addition** **D.P5.62**  
Yara Sena Pereira<sup>1</sup>, Sabrina Mirele de Oliveira Nascimento<sup>1</sup>, Glaucia Marcossi Cardoso Duarte<sup>1</sup>, Ana Maria Matildes dos Santos<sup>1</sup>, Fernando Soares Lameiras<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear

# **SYMPOSIUM E - Green Materials: Processes and Devices**

## **Symposium organizers:**

Marcelo Ornaghi Orlandi (Sao Paulo State University)

Clara Santato (Polytechnique Montreal)

Francesca Soavi (Alma Mater Studiourm Universita' di Bologna)

Neftali Lenin Carreno (Federal University of Pelotas)



## WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

### *SESSION E.01.D3 (09:30 - 10:30) - Room Mármara*

- 09:30 Synthesis of carbon-based porous material from simple raw materials** **E.O1.D3.1**  
Geovanny Broetto Besinella<sup>1</sup>, Fabiano Bisinella Scheufele<sup>2</sup>, Carlos Eduardo Borba<sup>1</sup>, José Eduardo Padilha de Sousa<sup>3</sup>, Helton José Alves<sup>3,1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná, <sup>2</sup>Universidade Tecnológica Federal do Paraná, <sup>3</sup>Universidade Federal do Paraná
- 09:45 Manufacture of SBA-15 and SBA-16 with expanded pores using sugarcane bagasse ash** **E.O1.D3.2**  
Leandro Moreira Stefano<sup>1</sup>, Mychelle Vianna Pereira Companhon<sup>1</sup>, Flavio C Colman<sup>1</sup>, Wagner André Santos Conceição<sup>1</sup>, Murilo Pereira Moisés<sup>2</sup>, EDUARDO RADOVANOVIC<sup>1</sup>, Silvia Luciana Favaro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Tecnológica Federal do Paraná - Campus Apucarana
- 10:00 Fabricating 3D PLGA-Ag scaffold using supercritical deposition-foaming technique** **E.O1.D3.3**  
Tahmasb Hatami<sup>1</sup>, Juliane Viganó<sup>1</sup>, Julian Martínez<sup>1</sup>, Lucia Helena Innocentini Mei<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

### *SESSION E.02.D3 (11:00 - 12:00) - Room Mármara*

- 11:00 Assessment of compressive strength and water absorption of hollow concrete blocks manufactured with recycled paper in the mixture** **E.O2.D3.1**  
Mariana de Sousa Prazeres<sup>1</sup>, Eduardo Aurélio Barros Aguiar<sup>2</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Universidade Estadual do Maranhão
- 11:15 Study of the addition of recycled paper in the concrete for the manufacture of blocks in concrete of interlocking pavement.** **E.O2.D3.2**  
Paulo Rafael Nunes e Silva Albuquerque<sup>1</sup>, Luciano Carneiro Reis<sup>2</sup>, Eduardo Aurélio Barros Aguiar<sup>3</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>3</sup>Universidade Estadual do Maranhão
- 11:30 Feasibility analysis of the use of waste from the footwear industry in the manufacture of interlocking blocks** **E.O2.D3.3**  
Fabiana Andresa da Silva<sup>1</sup>, Victor José dos Santos Baldan<sup>2</sup>, Thales Martins Ponciano<sup>3</sup>, Javier Mazariegos Pablos<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>University of São Paulo, <sup>3</sup>Escola de Engenharia de São Carlos
- 11:45 A comparative study of model-free isoconversional kinetic analysis approaches to non-isothermal pyrolysis of semi-interpenetrating polymer network** **E.O2.D3.4**  
Julia da Silva Menezes<sup>1</sup>, Alexandre Sucro Moraes Galvão Carvalho<sup>2</sup>, Veronica Maria de Araújo Calado<sup>2</sup>, Ana Maria Rocco<sup>2</sup>; <sup>1</sup>Escola de Química/Universidade Federal do Rio de Janeiro, <sup>2</sup>Universidade Federal do Rio de Janeiro

**SESSION E.03.D3 (14:00 - 16:15) - Room Mármara**

- 14:00 Sensor response of  $\text{CaCu}_{3-x}\text{SrTi}_4\text{O}_{12}$  with  $x = 0,0$  and  $x = 0,15$  for CO detection** **E.O3.D3.1**  
Johan Alexander Cortes Suarez<sup>1</sup>, Miguel Angel Ramírez Gil<sup>1</sup>; <sup>1</sup>São Paulo State University
- 14:15 Controlled synthesis and photoluminescence of  $\beta\text{-Ga}_2\text{O}_3$  nanostructures** **E.O3.D3.2**  
Aline Varella Rodrigues<sup>1</sup>, Naira Linhares Sabino<sup>1</sup>, Marcelo Ornaghi Orlandi<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil
- 14:30 Recent Advances in oxide thermoelectric materials** **E.O3.D3.3**  
Leilane Roberta Macario<sup>1,2</sup>, Holger Kleinke<sup>1</sup>, Edson Roberto Leite<sup>3,2</sup>; <sup>1</sup>University of Waterloo, <sup>2</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>3</sup>Universidade Federal de São Carlos
- 14:45 Synthesis Of Corundum Pink And Uvarovite Using Ashes From Leather Waste.** **E.O3.D3.4**  
Aylla Joani Mendonça Oliveira<sup>1</sup>, Rossano Gimenes<sup>1</sup>, Melina Espanhol Soares<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 15:00 New sodium orthoferrite synthesis route for green sodium ion batteries** **E.O3.D3.5**  
Maria Gabriella Detone Guaita<sup>1</sup>, Paulo Rogério Catarini da Silva<sup>1</sup>, Luiz Henrique Dall Antonia<sup>1</sup>, Alexandre Urbano<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 15:30 Response surface methodology as a innovative tool for scaling up green synthesis of silver nanoparticles** **E.O3.D3.6**  
Julia Moreira Pupe<sup>1,2</sup>, Cíntia Caetano Bonatto<sup>3</sup>, Luciano Paulino Silva<sup>1,2</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>EMBRAPA, Centro Nacional de Pesquisa de Recursos Genéticos e Biotecnologia, <sup>3</sup>Tecsinapse
- 15:45 Silica / Chitosan capsules loaded with tannic acid as corrosion inhibitor for carbon steel protection** **E.O3.D3.7**  
Luzia Rejane Lisboa Santos<sup>1</sup>, Izabel Cristina Riegel-Vidotti<sup>1</sup>, Cláudia Eliana Bruno Marino<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 16:00 Recovery of  $\text{Nd}_2\text{Fe}_{14}\text{B}$  phase from machining sludge of sintered Nd-Fe-B magnets via reduction-diffusion** **E.O3.D3.8**  
Karen Bolis<sup>1</sup>, Giulia Danielle Giovanni D'Avila<sup>1</sup>, Rafael Yosikatsu Odo<sup>1</sup>, Leonardo Ulian Lopes<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

**THURSDAY, SEPTEMBER 26**

\* Invited Lecture

**SESSION E.01.D4 (09:30 - 11:00) - Room Mármara**

- 09:30 Nanoscale Electrochemistry and Molecular Electronics** **E.O1.D4.1\***  
Paulo Roberto Bueno<sup>1</sup>; <sup>1</sup>São Paulo State University

- 10:00 Investigation of nano-sized Pt-Nb-NbO<sub>x</sub> supported on TiN as cost-effective electrocatalyst for Polymer Electrolyte Membranes Fuel Cell** **E.O1.D4.2**  
Natália F Daudt<sup>1</sup>, Abhinav Poozhikunnath<sup>2</sup>, Leonard Bonville<sup>2</sup>, Haoran Yu<sup>2</sup>, Radenka Maric<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Maria, <sup>2</sup>University of Connecticut
- 10:15 BaZr<sub>0,9</sub>Y<sub>0,1</sub>O<sub>3-δ</sub> + BaCe<sub>0,9</sub>Y<sub>0,1</sub>O<sub>3-δ</sub> Ceramics Composites: Microstructure Development and Electrical Properties for SOFC/SOEC Solid Electrolytes** **E.O1.D4.3**  
Huyra Estevao Araujo<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 10:30 Charge Transfer Dynamics and Device Performance of Environmentally Friendly Processed Nonfullerene Organic Solar Cells** **E.O1.D4.4**  
LUANA CRISTINA DE MENEZES DE MENEZES<sup>1</sup>, Yingzhi Jin<sup>2</sup>, Leandro Benatto<sup>1</sup>, Chuanfei Wang<sup>2</sup>, Marlus Koehler<sup>1</sup>, Fengling Zhang<sup>2</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Linköping University
- 10:45 Potential new biocatalysts for biofuel production: The fungal lipases of *Thermomyces lanuginosus* and *Rhizomucor miehei* immobilized on nanozeolitic supports ion exchanged with lanthanide cations.** **E.O1.D4.5**  
Guilherme de Paula Guarnieri<sup>1</sup>, Vinicius Litrenta Medeiros<sup>2</sup>, Suhelen Tannus de Almeida<sup>2</sup>, Adriano de Vasconcellos<sup>3</sup>, Alex Silva Paula<sup>2</sup>, Donato Alexandre Aranda<sup>4</sup>, Jose Geraldo Nery<sup>2,3</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>São Paulo State University, <sup>3</sup>Universidade Estadual Paulista - Campus São José do Rio Preto, <sup>4</sup>Universidade Federal do Rio de Janeiro

## TUESDAY, SEPTEMBER 24

### Poster presentations

#### SESSION E.P3 (11:00 - 12:30)

- 11:00 Utilization of babassu coconut fibers in the production of concrete** **E.P3.1**  
Wilson Alves de Oliveira júnior<sup>1</sup>, Maria Elayne Rodrigues Alves<sup>1</sup>, João Batista de Oliveira Libório Dourado<sup>1</sup>, Valdeci Bosco dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 11:00 Structural and thermal characterization of Sm<sub>3</sub>NbO<sub>7</sub> obtained by Mechanical Alloying** **E.P3.2**  
Camila da Costa Pinto<sup>1</sup>, Sérgio Michielon De Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 11:00 X Ray Diffraction study of High-Energy milled sample of Sm<sub>2</sub>O<sub>3</sub> and Tantalum** **E.P3.3**  
Camila da Costa Pinto<sup>1</sup>, Sérgio Michielon De Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 11:00 Sol-gel microencapsulation of clove essential oil** **E.P3.4**  
Victória Vieira Kopp<sup>1</sup>, Mariliz Soares Gutterres<sup>1</sup>, João Henrique Zimnoch dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

- 11:00 Study of antimicrobial activity of nanocomposite for building application** **E.P3.5**  
Lucas Italo Freitas Pinto<sup>1</sup>, Joziel Alves de Oliveira<sup>1</sup>, Frederico Ribeiro Gonçalves Vasconcelos Rosendo<sup>1</sup>, Marcelo Barbosa Furtini<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>, Josy Antevelli Osajima<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 11:00 Mechanical Characterization of Polymeric Composites with Natural Fibers** **E.P3.6**  
Adonay Bruno Oliveira da Silva<sup>1</sup>, Marcelo Augusto Gonçalves Bardi<sup>1</sup>; <sup>1</sup>Universidade São Francisco
- 11:00 Intense photoluminescence of  $\beta$ -Ga<sub>2</sub>O<sub>3</sub> ellipsoids synthesized by reflux condensation** **E.P3.7**  
 Naira Linhares Sabino<sup>1</sup>, Aline Varella Rodrigues<sup>1</sup>, Marcelo Ornaghi Orlandi<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil
- 11:00 Influence of nanoparticula CELLULOSE/ZINC in crystalization of PBAT** **E.P3.8**  
Amanda Ramos Aragão Melo<sup>1</sup>, José Carlos Dutra Filho<sup>2</sup>, José António Covas<sup>3</sup>, Maria Inês Bruno Tavares<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto SENAI de Inovação, <sup>3</sup>Universidade do Minho
- 11:00 Pull off test in geopolymer substrates bonded with epoxy and polyurethane adhesives** **E.P3.9**  
Ana Carolina Passos<sup>1</sup>, Silvio de Barros<sup>1,2</sup>, Eduardo Sampaio<sup>3</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, <sup>2</sup>Université de Nantes, <sup>3</sup>Universidade do Estado do Rio de Janeiro
- 11:00 A new route shyntesis of Bi<sub>4</sub>Ti<sub>3</sub>O<sub>12</sub> ceramics** **E.P3.10**  
Ana Caroline Silva<sup>1</sup>, Layne Taynara Santos Zanon<sup>1</sup>, Ederson Carlos Aguiar<sup>1</sup>; <sup>1</sup>Universidade Estadual de Mato Grosso do Sul
- 11:00 Pet as coarse aggregate for green concrete** **E.P3.11**  
Ana Luiza André<sup>1</sup>, Isabella Carolina Conceição<sup>1</sup>, Ricardo Luiz Perez Teixeira<sup>1</sup>, Carlos Augusto de Souza Oliveira<sup>1</sup>, Júnia Soares Nogueira Chagas<sup>2</sup>, Leonardo Lúcio de Araújo Gouveia<sup>3</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Centro Federal de Educação Tecnológica de Minas Gerais, <sup>3</sup>Universidade do Estado de Minas Gerais
- 11:00 Investigation of the melting behavior of doped and undoped (K Na)NbO<sub>3</sub> powders for single crystal growth from melt** **E.P3.12**  
 Frederico Neme Ribeiro<sup>1</sup>, Marcus Vinicius Silva<sup>2</sup>, Manuel Henrique Lente<sup>2</sup>, ANA MARIA DO ESPIRITO SANTO<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal de São Paulo
- 11:00 Characterization of green polymeric composite reinforced with wood** **E.P3.13**  
 Julia Aguiar<sup>1</sup>, Miguel Felipe Galera da Silva<sup>2</sup>, Wires Costa Machado<sup>2</sup>, Caroline Rodrigues Pereira de Paula<sup>3</sup>, Ênio Henrique Pires da Silva<sup>2</sup>, Ana Paula de Moura<sup>1</sup>, Romeu Rony Cavalcante da Costa<sup>2</sup>; <sup>1</sup>Federal University of Technology - Cornélio Procópio, <sup>2</sup>Universidade Tecnológica Federal do Paraná - câmpus Cornélio Procópio, <sup>3</sup>Federal University of Technology - Curitiba - PR
- 11:00 Urchin-like hierarchical Co<sub>3</sub>O<sub>4</sub> nanostructures for gas sensor application** **E.P3.14**  
Anderson André Felix<sup>1</sup>, Marcelo Ornaghi Orlandi<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil
- 11:00 Manganese carboxylate as a semiochemical adsorbent.** **E.P3.15**  
Anderson Nogueira de Carvalho<sup>1</sup>, Fábio Da Silva Lisboa<sup>1</sup>, Diogo M Vidal<sup>2</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Universidade Federal de Minas Gerais



- 11:00 Study of the Characterization of Alternative Carbon via Industrial Waste Pyrolysis, using a Continuous Flow Industrial Reactor** **E.P3.16**  
André Augusto Gutierrez Fernandes Beati<sup>1</sup>, Robson da Silva Rocha<sup>2</sup>, José Pedro Thompson Junior<sup>1</sup>, Raphael Kuhnlein Kuhnlein<sup>1</sup>, Graziela Pereira Esteves<sup>1,3</sup>, Cristiane Barbieri Rodella<sup>3,4</sup>, Nicole Schwarz Silva<sup>3</sup>; <sup>1</sup>Universidade São Francisco, <sup>2</sup>Escola de Engenharia de Lorena - USP, <sup>3</sup>Laboratorio Nacional de Luz Sincrotron, <sup>4</sup>Brazilian Synchrotron Light Laboratory
- 11:00 Electrodeposition of Prussian Blue electrodes for energy storage devices** **E.P3.17**  
 Bruna Fernanda Baggio<sup>1</sup>, Cristiano Vicente<sup>1</sup>, Silvia Pelegrini<sup>1</sup>, Iuri Stefani Brandt<sup>1</sup>, Cristiani Campos Plá Cid<sup>1</sup>, Milton Tumelero<sup>2</sup>, André Avelino Pasa<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal do Rio Grande do Sul
- 11:00 Reduction of the thickness of porcelain tiles submitted to chemical tempering** **E.P3.18**  
Bruna Nascimento de Souza<sup>1</sup>, Marcelo Dal Bó<sup>2</sup>, Wenceslau Fernandes das Neves<sup>1</sup>, Dachamir Hotza<sup>1</sup>, Marcio Celso Fredel<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Instituto Federal de Santa Catarina
- 11:00 Cellulose based supercapacitor using [Bmim][NTf<sub>2</sub>] as electrolyte** **E.P3.19**  
Bruno da Silveira Noremberg<sup>1</sup>, José Henrique Alano<sup>2</sup>, Guilherme Kurz Maron<sup>1</sup>, Ricardo Marques Silva<sup>1</sup>, Oscar Giordani Paniz<sup>1</sup>, Lucas da Silva Rodrigues<sup>1</sup>, Neftalí Lenin Villarreal Carreño<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Federal University of Rio Grande
- 11:00 A new sol-gel synthesis for PANI-incorporated RuO<sub>2</sub> ambigels for supercapacitor electrodes** **E.P3.20**  
 Joseane Caroline Bernardes<sup>1</sup>, Bruno Neckel Wesling<sup>1</sup>, Bruno Toselli<sup>1</sup>, Daliana Muller<sup>1</sup>, Carlos Renato Rambo<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Synthesis and characterization of nanostructured zinc oxide obtained by means of high energy mechanochemistry** **E.P3.21**  
Carla de Albuquerque Dias<sup>1</sup>, Sérgio Michielon de Souza<sup>1</sup>, Querem Hapuque Rebelo<sup>2</sup>, Beatriz Palhano de Oliveira<sup>3</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Universidade Federal do Oeste do Pará, <sup>3</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 11:00 Polypyrrole foams incorporated with MnO<sub>2</sub> as electrodes in supercapacitors** **E.P3.22**  
Daliana Muller<sup>1</sup>, Joseane Caroline Bernardes<sup>1</sup>, Geneviève Kreibich Pinheiro<sup>1</sup>, Bruno Neckel Wesling<sup>1</sup>, Carlos Renato Rambo<sup>1</sup>, Dachamir Hotza<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Starch films as anti-corrosion material** **E.P3.23**  
 Emanuel Gomes Bertizzolo<sup>1</sup>, Lázaro Aleixo dos Santos<sup>2</sup>, Silvia Rodrigues Rodrigues<sup>2</sup>, Silvia Mesquita Tamborim<sup>2</sup>, Daniela Bianchini<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal do Rio Grande do Sul
- 11:00 Characterization of LDPE/cassava bagasse composite** **E.P3.24**  
Danilo Cebrian Scarpelini Kaminski<sup>1</sup>, Augusto Dias Siqueira<sup>1</sup>, Nathalia Wisniewski Siqueira<sup>1</sup>, Samuel Slipack<sup>1</sup>, Thiago Marcel Dei Tós Vieira Nascimento<sup>1</sup>, Alessandro Saia Moreno<sup>1</sup>, Fabrício Fasolo<sup>1</sup>, Marcos Toda<sup>1</sup>, Luiz Eduardo Justiniano da Silva<sup>1</sup>, Silvia Luciana Fávaro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 11:00 Experimental investigation of temperature-induced phase transitions in lead free (Ba,Ca)(Zr,Ti)O<sub>3</sub> ceramics** **E.P3.25**  
 Rangel Graudiston Aredes<sup>1</sup>, André Luis Boaventura<sup>1</sup>, Renato Boschilia Junior<sup>1</sup>, Eduardo Antonelli<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo

- 11:00 Development and application of a novel palladium-containing polymeric composite for greener C-C coupling reactions** **E.P3.26**  
Elvis Naoto Nishida<sup>1</sup>, Laíze Zaramello<sup>1</sup>, Higor Andrade Centurion<sup>2</sup>, Renato Vitalino Gonçalves<sup>2</sup>, Carlos Eduardo M. Campos<sup>1</sup>, Ricardo Ferreira Affeldt<sup>1</sup>, Prof. Bruno Silveira de Souza<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Instituto de Física de São Carlos - USP
- 11:00 Preparation and Characterization of AA6061 Aluminum Alloy Composite Reinforced With Different Contents of Blast-Furnace Slag by Powder Metallurgy** **E.P3.27**  
Emmanuel Pacheco Rocha Lima<sup>1</sup>, Pedro Cunha de Lima<sup>2</sup>, Paulo Ximenes Aragão Filho<sup>1</sup>, Nélio Scrivener Furtado<sup>3</sup>, Marlon Correia da Silva<sup>2</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia da Bahia, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão
- 11:00 Effect of functional groups on the capacitive performance of multiwalled carbon nanotubes** **E.P3.28**  
Erica da Costa Campos<sup>1</sup>, José Henrique Alano<sup>2</sup>, Guilherme Kurz Maron<sup>1</sup>, Bruno da Silveira Noremberg<sup>1</sup>, Lucas da Silva Rodrigues<sup>1</sup>, Veridiana Gehrke<sup>1</sup>, Neftali Lenin Villarreal Carreño<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Federal University of Rio Grande
- 11:00 The influence of additives on synthesis of supermalloy nanoparticles by chemical reduction** **E.P3.29**  
Fabio Muchenski<sup>1</sup>, Ney Pereira Mattoso Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 11:00 Photoelectrochemical performance of rGO-tin oxide nanocomposites** **E.P3.30**  
Fernanda Costa Romeiro<sup>1</sup>, Gabriel Facheti<sup>1</sup>, Alysson Stefan Martins<sup>1</sup>, Maria Valnice Zanoni<sup>1</sup>, Marcelo Ornaghi Orlandi<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil
- 11:00 Recycling of Ground Granulated Blast Furnace Slag Through the Synthesis of Geopolymers** **E.P3.31**  
Fernando Henrique Oliveira Maia<sup>1</sup>, Mariana Arruda Pereira<sup>1,2</sup>, Wander Luiz Vasconcelos<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Universidade Federal de São João Del Rei
- 11:00 Sealing Plates in Cement-Wood Composites** **E.P3.32**  
Bruna de Oliveira Criado<sup>1</sup>, Fernando Sergio Okimoto<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente
- 11:00 Bricks with incorporation of waste of civil construction and of processing of ornamental stones** **E.P3.33**  
Sheila Souza Barreto<sup>1</sup>, Beatriz França Pasoti<sup>1</sup>, Larissa Bevenuto Gomes<sup>1</sup>, Eloah Martins<sup>1</sup>, Luis Fernando dos Santos<sup>1</sup>, Fernando Sergio Okimoto<sup>1</sup>, Aldo Eloizo Job<sup>2,3</sup>; <sup>1</sup>Faculdade de Ciências e Tecnologia da UNESP, Campus de Presidente Prudente, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universidade Estadual Paulista, Campus de Presidente Prudente
- 11:00 Cement plates incorporating waste from ornamental stone processing** **E.P3.34**  
Beatriz França Pasoti<sup>1</sup>, Sheila Souza Barreto<sup>1</sup>, Elton Aparecido Prado Reis<sup>2</sup>, Fernando Sergio Okimoto<sup>1</sup>, Aldo Eloizo Job<sup>3,4</sup>; <sup>1</sup>Faculdade de Ciências e Tecnologia da UNESP, Campus de Presidente Prudente, <sup>2</sup>Faculdades Integradas Antônio Eufrásio de Toledo de Presidente Prudente, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>Universidade Estadual Paulista, Campus de Presidente Prudente

- 11:00 Ethylene diamine copper II complex used for determination copper in insulation oil** **E.P3.35**  
Melina Espanhol Soares<sup>1</sup>, Nathalia Vieira Barbosa<sup>2</sup>, Milady Renata Apolinário Silva<sup>1</sup>, Rossano Gimenes<sup>1</sup>, Flávio Soares Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Sul de Minas Gerais
- 11:00 Study of hydrothermal carbonization of bagasse fibers of malt** **E.P3.36**  
Gabriel Fornazaro<sup>1</sup>, Raphael Leonardo Bulla<sup>1</sup>, Andressa dos Santos<sup>1</sup>, EDUARDO RADOVANOVIC<sup>1</sup>, Jean Rodrigo Bocca<sup>1</sup>, Gabriel Vinicius Alves Silva<sup>1</sup>, Silvia Luciana Favaro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 11:00 A new template sol-gel synthesis of RuO<sub>2</sub> aerogels for supercapacitor electrodes** **E.P3.37**  
Gabriella Melo Viana Dias<sup>1</sup>, Joseane Caroline Bernardes<sup>1</sup>, Bruno Neckel Wesling<sup>1</sup>, Daliana Muller<sup>1</sup>, Carlos Renato Rambo<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Evaluation of the mechanical properties of polyurethane compounds with lignocellulosic fibers** **E.P3.38**  
Gabriel Vinicius Alves Silva<sup>1</sup>, Natasha Dias Martins<sup>1</sup>, Ricardo Augusto Moreira Valdir<sup>1</sup>, FELIPE Delapria Dos Santos<sup>1</sup>, Gabriel Fornazaro<sup>1</sup>, Mychelle Vianna Pereira Companhoni<sup>1</sup>, Andressa dos Santos<sup>1</sup>, Silvia Luciana Favaro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 11:00 Development of Activated Carbon – SnO<sub>2</sub> nanocomposites for sensing applications** **E.P3.39**  
Guilherme Kurz Maron<sup>1</sup>, Veridiana Gehrke<sup>1</sup>, Lucas da Silva Rodrigues<sup>1</sup>, Bruno da Silveira Noremberg<sup>1</sup>, Ricardo Marques Silva<sup>1</sup>, Rubens Maribondo do Nascimento<sup>2</sup>, Neftali Lenin Villarreal Carreño<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal do Rio Grande do Norte
- 11:00 Proteic sol-gel synthesis and structural characterization of pure and Cu-doped cobaltites powders** **E.P3.40**  
Jakeline Raiane Dora dos Santos<sup>1</sup>, Glageane da Silva Souza<sup>2</sup>, Rennáh Francisco Figueiredo Gonçalves<sup>1</sup>, Daniel Araújo Macedo<sup>3</sup>, Uílame Umbelino Gomes<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Federal de Campina Grande, <sup>3</sup>Universidade Federal da Paraíba
- 11:00 Evaluation of the association of sugarcane bagasse ash and mollusc shell powder in the manufacture of ceramic materials** **E.P3.41**  
Janaina Accordi Junkes<sup>1</sup>, JEFFERSON AFONSO FARIAS<sup>1</sup>, ATILA MICAEL DOS SANTOS SILVA<sup>1</sup>, Amanda Tenório Costa<sup>1</sup>, Viviana Possamai Della Sagrillo<sup>2</sup>; <sup>1</sup>Centro Universitário Tiradentes, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo
- 11:00 Use of Flat Glass Lapping Waste as a Partial Replacement of Soil in the Manufacture of Soil-Cement Bricks.** **E.P3.42**  
Suzana Souza da Silva Scardua<sup>1</sup>, Janaina Accordi Junkes<sup>2</sup>, Viviana Possamai Della Sagrillo<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>2</sup>Centro Universitário Tiradentes
- 11:00 Influence of TiO<sub>2</sub> particle size in thermal and structural properties of starch-based bionanocomposites** **E.P3.43**  
Jenny Luis Nhaliguangue Boane<sup>1</sup>, Ana Carolina Cortez Lemos<sup>2</sup>, Kelen Cristina Dos Reis<sup>2</sup>, Júlio César Ugucioni<sup>2</sup>, Leonilson Kiyoshi Sato de Herval<sup>2</sup>, Flávio Augusto de Melo Marques<sup>2</sup>, Juliano E. Oliveira<sup>2</sup>, Joaquim Paulo da Silva<sup>2</sup>; <sup>1</sup>Universidade Nova de Lisboa, <sup>2</sup>Universidade Federal de Lavras

- 11:00 Preparation and characterization of mofs of [Cu<sub>3</sub>(BTC)<sub>2</sub>] by the electrochemistry method** **E.P3.44**  
José Ewerton Silva<sup>1</sup>, Brenand Anjos dos Santos Souza<sup>1</sup>, Daniela Maria do Amaral Ferraz Navarro<sup>1</sup>, Marcelo Navarro<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 11:00 Sulfonation of semi-interpenetrating network membranes for Fuel Cell Applications** **E.P3.45**  
Julia da Silva Menezes<sup>1</sup>, Thais Gouveia<sup>2</sup>, Veronica Maria de Araújo Calado<sup>2</sup>, Ana Maria Rocco<sup>2</sup>; <sup>1</sup>Escola de Química/Universidade Federal do Rio de Janeiro, <sup>2</sup>Universidade Federal do Rio de Janeiro
- 11:00 Green synthesis of cobalt and iron oxides assisted biomolecules of Tomato (Solanum lycopersicum L.) at room temperature.** **E.P3.46**  
Julia Delatorre Bronzato<sup>1</sup>, Aryane Tofanello<sup>1</sup>, Adrianne M. M. Brito<sup>1</sup>, Iseli L Nantes-Cardoso<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 The influence of photodegradation on the biodegradation test in aqueous medium of PLA/PBAT films** **E.P3.47**  
Rita de Cássia Barbosa Camargo Lamparelli<sup>1</sup>, Thaís Larissa do Amaral Montanheiro<sup>1</sup>, Ana Paula da Silva<sup>1</sup>, Larissa Stieven Montagna<sup>1</sup>, Ana Paula Lemes<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 11:00 Development and characterization of reinforced PLA composites of coconut fiber and coffee grounds** **E.P3.48**  
Érika Bomfim dos Santos<sup>1</sup>, Fabio Roberto Passador<sup>1</sup>, Larissa Stieven Montagna<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 11:00 Synthesis of activated carbon using different activators from biomass and its application in supercapacitors** **E.P3.49**  
Lucas da Silva Rodrigues<sup>1</sup>, Veridiana Gehrke<sup>1</sup>, Guilherme Kurz Maron<sup>1</sup>, Erica da Costa Campos<sup>1</sup>, Bruno da Silveira Noremberg<sup>1</sup>, José Henrique Alano<sup>2</sup>, Neftalí Lenin Villarreal Carreño<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Federal University of Rio Grande
- 11:00 Electrochemical characterization of pseudocapacitive materials using a source measure unit** **E.P3.50**  
Lucas da Silva Rodrigues<sup>1</sup>, José Henrique Alano<sup>2</sup>, Veridiana Gehrke<sup>1</sup>, Guilherme Kurz Maron<sup>1</sup>, Bruno da Silveira Noremberg<sup>1</sup>, Erica da Costa Campos<sup>1</sup>, Neftalí Lenin Villarreal Carreño<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Federal University of Rio Grande
- 11:00 Cerium oxide redox cycle for methane reforming to syngas** **E.P3.51**  
Lucas Zocchio<sup>1</sup>, Daniel Zanetti de Florio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Optical and structural characterization of organic natural dyes extracted from plants for application in organic devices** **E.P3.52**  
Luiz Carlos Carlos Pocas<sup>1</sup>, Marco Aurélio Toledo da Silva<sup>1,2</sup>, Sidney Alves Lourenço<sup>1</sup>, Ivan Dias<sup>3</sup>, Ricardo Vignoto Fernandes<sup>3</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade Tecnológica Federal do Paraná - Londrina, <sup>3</sup>Universidade Estadual de Londrina
- 11:00 Valorization of jacitara fibers: synthesis and characterization of cellulose and nanocellulose preparation.** **E.P3.53**  
Marcella Cortes da Silva<sup>1</sup>, Wanison André Gil Pessoa Júnior<sup>2</sup>, Lizandro Manzato<sup>2,1</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Amazonas
- 11:00 High Sensitive and Low Power Single Element Device using SnO Micro Discs** **E.P3.54**  
Mateus Gallucci Masteghin<sup>1</sup>, Marcelo Ornaghi Orlandi<sup>1</sup>; <sup>1</sup>Instituto de Química, Unesp

- 11:00 Biodegradation studies of polymeric compounds of polyolefins modified by cocoa residues flour** **E.P3.55**  
Marcio Kobayashi<sup>1</sup>, Henrique Finocchio<sup>1</sup>, Mirella Cristina Fares<sup>1</sup>, Gabriel Rodrigues Alvarenga<sup>2</sup>, Taicia Pacheco Fill<sup>2</sup>, Carlos Alberto Flavio Correa<sup>3</sup>; <sup>1</sup>AFINKO Soluções em Polímeros Ltda, <sup>2</sup>Instituto de Química, Unicamp, <sup>3</sup>Universidade Federal do ABC
- 11:00 Energy impact evaluation of sugar bagasse cane fiber as reinforcement in composites** **E.P3.56**  
 Alice Pistori Sales<sup>1</sup>, Marcos Yutaka Shiino<sup>1</sup>, Kelly Cristina Coelho de Carvalho Benini<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista - Instituto de Ciência e Tecnologia - Campus de São José dos Campos, <sup>2</sup>Universidade Estadual de São Paulo - Campus Guaratinguetá
- 11:00 Ceramic composite obtained by the waste reuse from the wastewater treatment plant** **E.P3.57**  
Marcus Alexandre Diniz<sup>1</sup>, Sheyla Karolina Justino Marques<sup>2</sup>, Magnus Roberto Diniz Junior<sup>3</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Norte, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de Alagoas, <sup>3</sup>Universidade Federal do Rio Grande do Norte
- 11:00 Manufacture of sustainable concrete blocks incorporating scrap tire rubber** **E.P3.58**  
Maria Gabriela Araújo Ranieri<sup>1</sup>, Maria Auxiliadora de Barros Martins<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>, Adilson da Silva Mello<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 11:00 Influence of the electrodes mass on the capacitors performance** **E.P3.59**  
Mayara Martins Spielmann da Silva<sup>1</sup>, José Henrique Alano<sup>2</sup>, Lucas da Silva Rodrigues<sup>1</sup>, Veridiana Gehrke<sup>1</sup>, Erica da Costa Campos<sup>1</sup>, Guilherme Kurz Maron<sup>1</sup>, Neftali Lenin Villarreal Carreño<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Federal University of Rio Grande
- 11:00 Development of metakaolin geopolymers with the addition of sugarcane bagasse ash** **E.P3.60**  
Mérlin Cristina dos Santos Fernandes<sup>1</sup>; <sup>1</sup>São Paulo State University
- 11:00 Niobium oxides targets for Pulse Laser Deposition (PLD)** **E.P3.61**  
Nataly Messina Pecelin<sup>1</sup>, André Santarosa Ferlauto<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Dynamic mechanical analysis (DMA) and morphological characterization by AFM and SEM of PVA and PVA/PANI blends with humic substances** **E.P3.62**  
 Thatiane Dorneles de Almeida Teixeira<sup>1</sup>, Rafael Souza da Costa<sup>2</sup>, Artemis Marti Ceschin<sup>2</sup>, Luciano Paulino Silva<sup>3</sup>, Michele Àvila dos Santos<sup>2</sup>, Maria José Sales<sup>2</sup>, NIZAMARA PEREIRA PEREIRA<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência E Tecnologia de Brasília, <sup>2</sup>Universidade de Brasília, <sup>3</sup>EMBRAPA, Centro Nacional de Pesquisa de Recursos Genéticos e Biotecnologia
- 11:00 Recycling of ternary electrodes from commercial lithium-ion batteries** **E.P3.63**  
Otávio José de Oliveira<sup>1</sup>, Maria Gabriella Detone Guaita<sup>1</sup>, Paulo Rogério Catarini da Silva<sup>1</sup>, Alexandre Urbano<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 11:00 Sol-gel Synthesis of High Capacitance MnO<sub>2</sub> from Spent Zn-MnO<sub>2</sub> batteries using a green route.** **E.P3.64**  
Pedro Vitor Dixini<sup>1</sup>, Beatriz Belotti Carvalho<sup>2</sup>, VITOR CEZAR BROETTO PEGORETTI<sup>3</sup>, Gustavo dos Reis Gonçalves<sup>2</sup>, Marcos Benedito Jose de Freitas<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>2</sup>Universidade Federal do Espírito Santo, <sup>3</sup>Instituto Federal Fluminense

- 11:00 Hybrid Pigments based on exchanged-montmorillonite and bixin dye** **E.P3.65**  
 Andre Amaral Oliveira<sup>1</sup>, Dihego Lima Damacena<sup>1</sup>, Pollyana Trigueiro<sup>1</sup>, Luzia Maria Castro Honório<sup>1</sup>, Francisco das Chagas de Melo Brito<sup>2</sup>, Maria Gardennia Fonseca<sup>3</sup>, Maguy Jaber<sup>4</sup>, JOSY ANTEVELI OSAJIMA<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Piauí, <sup>3</sup>Universidade Federal da Paraíba, <sup>4</sup>Pierre and Marie Curie University - Paris 6
- 11:00 Preparation and Characterization of BaZr<sub>0.5-x</sub>Ce<sub>0.5-y</sub>Y<sub>x</sub>Gd<sub>y</sub>O<sub>3-δ</sub> (BZCYG) Proton Conducting Perovskite** **E.P3.66**  
Rafael de Freitas Cuer<sup>1</sup>, Daniel Zanetti de Florio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Sintering of anode/electrolyte bilayers for solid oxide fuel cells** **E.P3.67**  
Rennáh Francisco Figueiredo Gonçalves<sup>1</sup>, Jakeline Raiane Dora dos Santos<sup>1</sup>, Thayse Ricardo da Silva<sup>2</sup>, Daniel Araújo Macedo<sup>2</sup>, Uílame Umbelino Gomes<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Federal da Paraíba
- 11:00 Coconut fiber mineralization process: obtaining aintí-flame material** **E.P3.68**  
Roberto Rodrigues Cunha Lima<sup>1</sup>, Valter José Fernandes Junior<sup>2</sup>, Paulla Beatriz Franca Sousa<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Norte, <sup>2</sup>Universidade Federal do Rio Grande do Norte
- 11:00 Extraction and characterization of cellulose from the pineapple leaf (*Ananás Comosus* (L) Merrill) CV. VICTORY** **E.P3.69**  
Silma de Sá Barros<sup>1</sup>, Wanison André Gil Pessoa Júnior<sup>2</sup>, Flávio Augusto de Freitas<sup>2</sup>, Lizandro Manzato<sup>2,1</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Amazonas
- 11:00 Factorial experimental design to synthesis of LaFeO<sub>3</sub> perovisktes for use as catalysts in plastic production** **E.P3.70**  
Soraia Cristina Gonzaga Neves Braga<sup>1</sup>, Filipe Leoncio Braga<sup>2</sup>, Emmanuela Sternberg<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>2</sup>Instituto Federal do Espírito Santo
- 11:00 Adaptation of the mercerization method for extracting the cellulose from the silver banana peel (*M.spp*) and evaluation of the influence of water on the molecular structure of the cellulose** **E.P3.71**  
SUZAN XAVIER LIMA<sup>1</sup>, Adriano de Souza Carolino<sup>1</sup>, Edgar Aparecido Sanches<sup>1</sup>, Sérgio Michielon de Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 11:00 Solar-Driven Membraneless Hydrogen Peroxide-Photofuel Cell Employing Bismuth Vanadate and Cuprous Oxide Photoelectrodes** **E.P3.72**  
Tatiana Santos Andrade<sup>1</sup>, Bárbara Sá<sup>1</sup>, Mariandry Rodriguez<sup>1</sup>, Márcio César Pereira<sup>1</sup>, Izabela Campos Sena<sup>1</sup>; <sup>1</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri
- 11:00 Deep eutectic solvent assisted sustainable synthesis of ZnSe nanoparticles by hot injection** **E.P3.73**  
Tatiane Pretto<sup>1</sup>, Fábio Baum<sup>1</sup>, Marcos Jose Leite Santos<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto de Química - UFRGS
- 11:00 Use of wood waste in industrial ecology for the production of sustainable materials** **E.P3.74**  
 Daniella Stepheny Carvalho Andrade<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 11:00 Obtention and characterization of activated carbon from renewable sources** **E.P3.75**  
Veridiana Gehrke<sup>1</sup>, Guilherme Kurz Maron<sup>1</sup>, Lucas da Silva Rodrigues<sup>1</sup>, Erica da Costa Campos<sup>1</sup>, Mayara Martins Spielmann da Silva<sup>1</sup>, Neftali Lenin Villarreal Carreño<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas

- 11:00 Synthesis of Bi<sub>4</sub>Ti<sub>3</sub>O<sub>12</sub> compounds via citrate method** **E.P3.76**  
Victor Buratto Tinti<sup>1</sup>, Vincenzo Esposito<sup>2</sup>, Daniel Zanetti de Florio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Technical University of Denmark / Danmarks Tekniske Universitet
- 11:00 Manufacturing of PEDOT:PSS-BASED conductive paper for humidity sensing** **E.P3.77**  
Vilany Santana Pereira<sup>1</sup>, Sofia Catharina Desegna<sup>1</sup>, Stefan Blawid<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 11:00 Verification of the sensitivity of electrical circuits with IDE geometry adapted in relation to temperature variation** **E.P3.78**  
Wallas Alves Pires dos Santos<sup>1</sup>, Roberto Pereira dos Santos Júnior<sup>1</sup>, Elen Poliani Arlindo Fuzari<sup>1</sup>, Gilberto Campos Fuzari Junior<sup>1</sup>, Marco Donisete de Campos<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso
- 11:00 Residual Balsa wood OSB Panels with castor oil based resins and urea-formoldehyde** **E.P3.79**  
Wanley Eduardo Lopes Junior<sup>1</sup>, Guilherme Henrique Ament Barbirato<sup>1</sup>, Juliano Fiorelli<sup>1</sup>, Mariana Pavesi<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 11:00 Analysis of Si-Te system processed by Mechanical Alloying** **E.P3.80**  
Zeane Vieira Borges<sup>1</sup>, Claudio Michel Poffo<sup>1</sup>, João Cardoso de Lima<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina





# **SYMPOSIUM F - Organic Electronics and Bioelectronics: Fundamentals, Applications and Emerging Technologies**

**Symposium organizers:**

Juliana Eccher (Universidade Federal de Santa Catarina)

Marystela Ferreira (Universidade Federal de São Carlos)

Douglas José Coutinho (Universidade Tecnológica Federal do Paraná)

Eduard Westphal (Universidade Tecnológica Federal do Paraná)



# MONDAY , SEPTEMBER 23

\* Invited Lecture

## *SESSION F.01.D1 (09:30 - 10:30) - Room Báltico*

- 09:30 Less is more, Thermally activated delayed fluorescence from exciplexes, how dilution increases performance** **F.O1.D1.1\***  
Andrew Paul Monkman<sup>1</sup>, Marco Colella<sup>1</sup>, Andrew Danos<sup>1</sup>; <sup>1</sup>Durham University
- 10:00 Electrochemically driven synthesis of conjugated polymers for use as electrochromic materials and organic light-emitting diode emitters** **F.O1.D1.2**  
Przemyslaw Data<sup>1</sup>, Dawid Nastula<sup>1</sup>; <sup>1</sup>Silesian University of Technology
- 10:15 State of matter dependent charge transfer interactions between planar molecules for doping applications** **F.O1.D1.3**  
Andreas Opitz<sup>1</sup>, Paul Beyer<sup>1</sup>, Duc Pham<sup>1</sup>, Clea Peter<sup>1</sup>, Lutz Grubert<sup>1</sup>, Stefan Hecht<sup>1</sup>, Norbert Koch<sup>1,2</sup>; <sup>1</sup>Humboldt Universität zu Berlin, <sup>2</sup>Helmholtz-Zentrum Berlin für Materialien und Energie GmbH

## *SESSION F.02.D1 (11:00 - 12:00) - Room Báltico*

- 11:00 Transparent, Low-Voltage and High Mobility Solution-Processed Metal Oxide Thin Film Transistors** **F.O2.D1.1**  
Lucas Fugikawa Santos<sup>1</sup>, João Paulo Braga<sup>1</sup>, Guilherme Rodrigues de Lima<sup>1</sup>, Ángel Alberto Hidalgo<sup>2</sup>, Maykol Damasceno Oliveira<sup>2</sup>, Neri Alves<sup>1</sup>, Giovanni Gozzi<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Federal do Piauí
- 11:15 Vertical Electrolyte Transistors** **F.O2.D1.2**  
Keli Fabiana Seidel<sup>1</sup>, Felix Hermerschmidt<sup>2</sup>, Simon Dalgleish<sup>2</sup>, Emil J.W. List-Kratochvil<sup>2</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Humboldt Universität zu Berlin
- 11:30 Vertical organic field-effect transistors with the rolled-up drain electrode** **F.O2.D1.3**  
Ali Nawaz<sup>1</sup>, Leandro Mercedes<sup>1</sup>, Davi Henrique Starnini de Camargo<sup>1</sup>, Carlos Cesar Bof Bufon<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 11:45 Growth mechanisms insights for Surface Mounted Metal-Organic Frameworks** **F.O2.D1.4**  
Tatiana Parra Vello<sup>1</sup>, Cátia Crispilho Corrêa<sup>1</sup>, Mathias Strauss<sup>2</sup>, Carlos Cesar Bof Bufon<sup>3,4,2,1</sup>; <sup>1</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>Universidade Estadual de Campinas

## *SESSION F.03.D1 (14:00 - 16:15) - Room Báltico*

- 14:00 Room temperature phosphorescence and nematic glass formation of twisted arenes and related materials** **F.O3.D1.1\***  
Harald Bock<sup>1</sup>, Giliandro Farias<sup>2</sup>, Cristian Momoli Salla<sup>2</sup>, David da S. Simeão<sup>2</sup>, Thamires Santos Moreira<sup>3</sup>, Juliana Eccher<sup>2</sup>, Bernardo de Souza<sup>2</sup>, Ivan H. Bechtold<sup>2</sup>, Pierre Dechambenoit<sup>1</sup>, Fabien Durola<sup>1</sup>; <sup>1</sup>Centre National de la Recherche Scientifique, <sup>2</sup>Universidade Federal de Santa Catarina, <sup>3</sup>Universidade Federal da Paraíba

- 14:30 Cinnamate-based cross-linked structures for organic semiconductor applications** **F.O3.D1.2**  
Joseph Cameron<sup>1</sup>, Peter Skabara<sup>1</sup>; <sup>1</sup>University of Glasgow
- 14:45 Photo triggered ligand loss in ruthenium complexes of meso-tetra(4-pyridyl) porphyrin/ RuCl<sub>2</sub>(CO)(PPh<sub>3</sub>)<sub>2</sub> supramolecules** **F.O3.D1.3**  
 Jefferson Marcio Sanches Lopes<sup>1</sup>, Sandro Nascimento Costa<sup>1</sup>, Alzir Azevedo Batista<sup>2</sup>, Luis Rogério Dinelli<sup>3</sup>, Paulo Antonio Trindade Araujo<sup>4</sup>, Newton Martins Barbosa Neto<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universidade Federal de Uberlândia, <sup>4</sup>University of Alabama
- 15:00 Energy transfer between thiophene/phenylene copolymer and azobenzene: an experimental and computational study** **F.O3.D1.4**  
Alessandra Stacchini Menandro<sup>1</sup>, Leonardo José Amaral Siqueira<sup>1</sup>, Laura Oliveira Péres<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 15:15 Study of energy transfer in Poly-(3-hexylthiophene) films using the emission ellipsometry technique** **F.O3.D1.5**  
Aleffe Bruno Schura<sup>1</sup>, Raigna Augusta da Silva Zadra Armond<sup>2</sup>, Henrique de Santana<sup>3</sup>, Alexandre Marletta<sup>2</sup>, Eralci Moreira Therézio<sup>1,4</sup>; <sup>1</sup>Universidade Federal de Mato Grosso, <sup>2</sup>Universidade Federal de Uberlândia, <sup>3</sup>Universidade Estadual de Londrina, <sup>4</sup>INSTITUTE OF CHEMISTRY/UNICAMP
- 15:30 Kinetic Monte-Carlo simulations for deposition of organic film mixtures** **F.O3.D1.7**  
Tung Ba Thanh To<sup>1,2</sup>, Fabio David Alves Aarão Reis<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense, <sup>2</sup>Instituto de Física
- 15:45 Nanoscale, Variable-Area, Organic Electronic Devices for Hypersensitive Pressure Recognition** **F.O3.D1.8**  
Leandro Mercês<sup>1,2</sup>, Rafael Furlan de Oliveira<sup>1,2</sup>, Carlos Cesar Bof Bufon<sup>1,2</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)

## TUESDAY, SEPTEMBER 24

\* Invited Lecture

### *SESSION F.O1.D2 (09:30 - 10:30) - Room Báltico*

- 09:30 Stability challenges in Organic Photovoltaics and Perovskite Solar cells using data analytical approaches** **F.O1.D2.1\***  
Jeff Kettle<sup>1</sup>; <sup>1</sup>Bangor University
- 10:00 Series and shunt resistances performance of PTB7-Th:PC<sub>71</sub>BM solar cells when in contact with the environment** **F.O1.D2.2**  
 Roberto Mendonça Faria<sup>1</sup>, Francineide Lopes de Araújo<sup>2</sup>, Daniel Roger Amorim<sup>1</sup>, Bruno Bassi Millan Torres<sup>1</sup>, Douglas José Coutinho<sup>3</sup>; <sup>1</sup>São Carlos Institute of Physics, University of São Paulo, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 10:15 Temperature and solvent effects on P3HT:PCBM bulk-heterojunctions: morphological analysis on atomistic molecular dynamics simulations** **F.O1.D2.3**  
Marlene Notelio Borges Luíza de Moraes<sup>1</sup>, Ranylson Marcello Leal Savedra<sup>1</sup>, Melissa F. Siqueira Savedra<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto

### **SESSION F.02.D2 (11:00 - 12:00) - Room Báltico**

- 11:00 Scale effects of the active area on the performance of organic photovoltaic when exposed to air** **F.O2.D2.1**  
Daniel Roger Bezerra Amorim<sup>1</sup>, Mariana Richelle Pereira da Cunha<sup>2</sup>, Roberto Mendonça Faria<sup>3</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>São Carlos Institute of Physics, University of São Paulo
- 11:15 Direct measurement of charge recombination losses in organic solar cells by transient spectroscopy** **F.O2.D2.2**  
Abhay Gusain<sup>1</sup>, Joaquim Brasil Lima-Filho<sup>1</sup>, Paulo Barbeitas Miranda<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 11:30 The impact of the synthetic route of poly(fullerene)s on their structural, morphological and opto-electronic properties** **F.O2.D2.3**  
Lucas Kaique Roncaselli<sup>1</sup>, André Antunes da Silva<sup>1</sup>, Deuber L. S. Agostini<sup>1</sup>, Clarissa Almeida Olivati<sup>1</sup>, Roger C Hiorns<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente, <sup>2</sup>Centre National de la Recherche Scientifique
- 11:45 X-Ray detector devices using organic photovoltaics** **F.O2.D2.4**  
Izabela Silva Bicalho<sup>1</sup>, Newton José Arruda Júnior<sup>1</sup>, Luiza de Queiroz Corrêa<sup>1</sup>, Diego Bagnis<sup>1</sup>; <sup>1</sup>Centro de Inovações CSEM Brasil

### **SESSION F.03.D2 (14:00 - 16:15) - Room Báltico**

- 14:00 Phthalocyanine-Fullerene Dyads - from Challenging Helices to Promising Layers** **F.O3.D2.1\***  
Matthias Lehmann<sup>1</sup>, Dominik Weh<sup>1</sup>, Moritz Dechant<sup>1</sup>, Markus Hügél<sup>1</sup>; <sup>1</sup>University of Würzburg
- 14:30 Molecular switches based on acylhydrazones polycatenar liquid crystals** **F.O3.D2.2**  
WILSON OLIVEIRA OLIVEIRA<sup>1</sup>, Eduard Westphal<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 14:45 Ionic non-symmetrical dimeric liquid crystal with luminescence and gelling properties.** **F.O3.D2.3**  
Monike Silva Kutz<sup>1</sup>, Eduard Westphal<sup>1</sup>, Fernando Molin<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 15:00 P3HT:LC-CoPc blend as donor layer for organic solar cells** **F.O3.D2.4**  
Diego Fernando Silva Sousa<sup>1</sup>, Petru Apostol<sup>2</sup>, Harald Bock<sup>2</sup>, Marta Elisa Rosso Dotto<sup>1</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Centre National de la Recherche Scientifique
- 15:15 Star-shaped Azocompounds: Liquid-crystalline and reversible photoisomerization properties** **F.O3.D2.5**  
Gustavo Sérgio dos Santos<sup>1</sup>, Eduard Westphal<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 15:30 How Organic Photovoltaic (OPV) modules can reach the market at an affordable price? Production and R&D efforts for commercial OPV cost reduction** **F.O3.D2.6**  
Jair Francisco Rodrigues<sup>1</sup>, Bárbara Hellen de Souza Miranda<sup>1</sup>, Paulo Luiz Lopes<sup>1</sup>, Gabriela Amorim Soares<sup>1</sup>, José Maria Anacleto<sup>2</sup>, Vinicius Ramos Zanchin<sup>2</sup>, Matheus Veloso<sup>2</sup>, Matheus Melo Machado<sup>2</sup>, Rodrigo Vilaça<sup>1</sup>, Diego Bagnis<sup>1</sup>; <sup>1</sup>Centro de Inovações CSEM Brasil, <sup>2</sup>SUNEW Filmes Fotovoltaicos Impressos SA

- 15:45 Conductive polymer film advanced characterisation by electrochemical impedance spectroscopy** **F.O3.D2.7**  
Pavel Chulkin<sup>1</sup>, Mieczyslaw Lapkowski<sup>1</sup>; <sup>1</sup>Silesian University of Technology in Gliwice
- 16:00 Electrical and mechanical characterization of (PEI/PAA) self-assembled, self-healing film.** **F.O3.D2.8**  
Gabriel Gaál<sup>1</sup>, Mawin Javier Martinez Jimenez<sup>1</sup>, Fernando Alvarez<sup>1</sup>, VARLEI RODRIGUES<sup>1</sup>, Antonio Riul Jr.<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

## WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

### *SESSION F.O1.D3 (09:30 - 10:30) - Room Báltico*

- 09:30 Ultra-low noise system to detect electroactive Glioma cells and beyond** **F.O1.D3.1\***  
Paulo Rocha<sup>1</sup>; <sup>1</sup>University of Bath
- 10:00 Biomimetic organic transistors for monitoring membrane-drug interactions** **F.O1.D3.2**  
Priscila Cavassin<sup>1,2</sup>, Renan Colucci<sup>2</sup>, Henrique Frulani de Paula Barbosa<sup>3</sup>, Roisin Owens<sup>1</sup>, Gregorio Couto Faria<sup>2</sup>; <sup>1</sup>University of Cambridge, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP)
- 10:15 Modular enzymatic biosensor based on organic semiconducting devices for glucose and urea** **F.O1.D3.3**  
Hugo José Nogueira Pedroza Dias Mello<sup>1,2</sup>, Simon Dalgleish<sup>2</sup>, Giovanni Ligorio<sup>2</sup>, Emil J.W. List-Kratochvil<sup>2</sup>, Marcelo Mulato<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Humboldt Universität zu Berlin

### *SESSION F.O2.D3 (11:00 - 12:00) - Room Báltico*

- 11:00 Development of nanomembrane-based electrochemical cells for sensor application** **F.O2.D3.1**  
Letícia Mariê Minatogau Ferro<sup>1</sup>, Anerise de Barros<sup>2</sup>, Cátia Crispilho Corrêa<sup>1</sup>, Luís Otávio Zapparoli Falsetti<sup>1</sup>, Leandro Mercês<sup>1</sup>, Carlos Cesar Bof Bufon<sup>2,1</sup>; <sup>1</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>2</sup>Universidade Estadual de Campinas
- 11:15 Saxitoxin detection with an electrochemical impedance biosensor** **F.O2.D3.2**  
PABLO CESAR SERRANO ARAMBULO<sup>1</sup>, Gisele Elias Nunes<sup>1</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:30 Insertion of Carbon nanotubes in Langmuir-Blodgett films of stearic acid and asparaginase for bioelectronics** **F.O2.D3.3**  
Luiz Henrique Rodrigues Rola Possarle<sup>1</sup>, José Siqueira Júnior<sup>2</sup>, Luciano Caseli<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal do Triângulo Mineiro
- 11:45 Peptide films in a platform for C-Reactive Protein (CRP) immunosensors** **F.O2.D3.4**  
Julia Pinto Piccoli<sup>1</sup>, Andrey Coatrini Soares<sup>2</sup>, Osvaldo Novais de Oliveira Jr<sup>1</sup>, Eduardo Maffud Cilli<sup>3</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Embrapa Instrumentação, <sup>3</sup>Universidade Estadual Paulista

### SESSION F.O3.D3 (14:00 - 16:15) - Room Báltico

- 14:00 Size matters: charge transport in reduced graphene oxide multilayers** F.O3.D3.1\*  
Mawin Javier Martinez Jimenez<sup>1</sup>, Rafael Furlan de Oliveira<sup>2</sup>, Carlos Cesar Bof Bufon<sup>3</sup>, VARLEI RODRIGUES<sup>1</sup>, Marcelo de Assunção Pereira-da-Silva<sup>4</sup>, Angelo Luiz Gobbi<sup>3</sup>, Antonio Riul Jr.<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Université de Strasbourg, <sup>3</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>4</sup>Instituto de Física de São Carlos - USP
- 14:30 Dehydration Reactions in Graphene Oxide for the preparation of Transparent Conducting Electrodes for Organic Electronic Applications** F.O3.D3.2  
Alessandro Henrique Lima<sup>1</sup>, Nayton Claudinei Vicentini<sup>1</sup>, Giovanni Romeu Carvalho<sup>1</sup>, Camila Thomacelli Tavares<sup>1</sup>, Clemilda Cunha<sup>1</sup>, Indhira Oliveira Maciel<sup>1</sup>, Benjamin Fragneaud<sup>1</sup>, Cristiano Legnani<sup>1</sup>, Welber Gianini Quirino<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 14:45 Electrocapacitive layer-by-layer films of metallic oxide nanoparticles with reduced graphene oxide for supercapacitor application** F.O3.D3.3  
Danilo Alves Oliveira<sup>1</sup>, Jodie L. Lutkenhaus<sup>2</sup>, José Roberto Siqueira Jr.<sup>1</sup>; <sup>1</sup>Universidade Federal do Triângulo Mineiro, <sup>2</sup>Texas A&M University
- 15:00 Electrolyte-gated Transistors based on Reduced Graphene Oxide: A versatile Platform for Bioelectronics** F.O3.D3.4  
Rafael Furlan de Oliveira<sup>1</sup>, Stefano Casalini<sup>1</sup>, Pietro Antonio Livio<sup>1</sup>, Verónica Montes-García<sup>1</sup>, Paolo Samori<sup>1</sup>; <sup>1</sup>Université de Strasbourg
- 15:15 Exciton diffusion in aluminum phthalocyanine chloride and graphene oxide mediated cancer phototherapies** F.O3.D3.5  
Fernando Teixeira Bueno<sup>1</sup>, Leonardo Evaristo de Sousa<sup>2</sup>, Israel Pinheiro de Siqueira<sup>1</sup>, Pedro Henrique de Oliveira Neto<sup>1</sup>, Mayara Simonelly dos Santos<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Estadual de Goiás
- 15:30 Study of the impedimetric response of PEDOT modified electrodes for the development of Triclosan and Butylparaben sensor** F.O3.D3.6  
Ana Leticia Letícia Soares<sup>1</sup>, Debora Paulus Soares<sup>1</sup>, Luis Marchesi<sup>2</sup>, Marcio Vidotti<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 15:45 Electroactive and biodegradable EDOT-based macromonomers for 'grafting through' copolymerization** F.O3.D3.7  
Aruã Clayton Da Silva<sup>1</sup>, Susana Ines Cordoba de Torresi<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 16:00 Enhancing PEDOT nanotubes energy storage properties during electrocatalysis of micropollutants** F.O3.D3.8  
Bruna M. Hryniewicz<sup>1</sup>, Larissa Bach-Toledo<sup>1</sup>, Marcio Vidotti<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná

## THURSDAY, SEPTEMBER 26

\* Invited Lecture

### **SESSION F.O1.D4 (09:30 - 11:00) - Room Báltico**

- 09:30 Deposition and characterization of PEDOT:PSS and AgNW electrodes and its application as Schottky contact for sprayed ZnO** F.O1.D4.1  
Gabriel Leonardo Nogueira<sup>1</sup>, Maykel Santos Klem<sup>1</sup>, Douglas Henrique Vieira<sup>1</sup>, Luis Henrique Tigre Bertoldo<sup>1</sup>, Neri Alves<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente
- 09:45 The effect of humidity in Al/ZnO/PEDOT:PSS Schottky diode parameters** F.O1.D4.2  
Douglas Henrique Vieira<sup>1</sup>, Gabriel Leonardo Nogueira<sup>1</sup>, Maíza da Silva Ozório<sup>1</sup>, Neri Alves<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente
- 10:00 Electroactive composites based on conducting polymers and reduced graphene oxide** F.O1.D4.3  
Gabriela Martins de Araújo<sup>1</sup>, Milton Alexandre Cardoso<sup>1</sup>, Fábio Ruiz Simões<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 10:15 Pectinase and Carbon Nanotubes blended in phospholipid Langmuir-Blodgett films for bioelectronics** F.O1.D4.4  
Raul Torres Rodrigues<sup>1</sup>, Luciano Caseli<sup>1</sup>, José Siqueira Júnior<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal do Triângulo Mineiro
- 10:30 Electrical characterization of physically prepared silver nanoparticles in layer-by-layer films** F.O1.D4.6  
Rafael Cintra Hensel Ferreira<sup>1</sup>, Maria Helena Gonçalves<sup>1</sup>, Matthias Hillenkamp<sup>2</sup>, Osvaldo Novais de Oliveira Jr<sup>3</sup>, Antonio Riul Jr.<sup>1</sup>, VARLEI RODRIGUES<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Université Claude Bernard Lyon 1, <sup>3</sup>Universidade de São Paulo

## **MONDAY , SEPTEMBER 23**

### **Poster presentations**

#### **SESSION F.P2 (18:00 - 19:30)**

- 18:00 Diketopyrrolopyrrole-fluorene-based copolymer: an investigation of photophysical and electrochemical properties** F.P2.1  
Lucas Scalon<sup>1</sup>, Alfredo Leithold Neto<sup>1</sup>, Myllena Souza Pereira<sup>1</sup>, Soraia Zaioncz<sup>1</sup>, João B. Floriano<sup>1</sup>, Andreia Gerniski Macedo<sup>1</sup>, Paula C. Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Nanocomposite formed by poly (o-ethoxyaniline) emeraldine-salt form and zinc: spectroscopic and structural characterization** F.P2.2  
Matheus Fonseca Ferreira<sup>1</sup>, Matheus Moraes Biondo<sup>1</sup>, Edgar Aparecido Sanches<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 18:00 Influence of different acidic dopants to structural, morphological and electrical properties of poly(o-methoxyaniline)** F.P2.3  
Matheus Moraes Biondo<sup>1</sup>, Edgar Aparecido Sanches<sup>1</sup>, Yurimiler Leyet Ruiz<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 18:00 Predicting Exciton transfer efficiency in N-heteroaromatic crystals** F.P2.4  
Ingrid Gomes Ribeiro<sup>1</sup>, Larissa dos Santos Born<sup>1</sup>, Leonardo Evaristo de Sousa<sup>2</sup>, Pedro Henrique de Oliveira Neto<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Estadual de Goiás



- 18:00 Development of electronic tongues for cancer diagnosis** **F.P2.5**  
Acelino Cardoso de Sá<sup>1</sup>, Flávio Makoto Shimizu<sup>2</sup>, Anderson Fiamingo<sup>1</sup>, Daniel Cesar Braz<sup>1</sup>, Andrey Coatrini Soares<sup>3</sup>, Lidia Maria Rebolho Batista Arantes<sup>4</sup>, Ana Carolina Carvalho<sup>4</sup>, Matias Eliseo Melendez<sup>4</sup>, André Lopes Carvalho<sup>4</sup>, Odemir Martinez Bruno<sup>1</sup>, Osvaldo Novais de Oliveira Jr<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>3</sup>Embrapa Instrumentação, <sup>4</sup>Centro de Pesquisa em Oncologia Molecular (CPOM) - Hospital de Câncer de Barretos
- 18:00 Polymeric composites devices fabricated via 3D laser micromachining: processing, characterization and potential applications** **F.P2.6**  
Adriano J.G. Otuka<sup>1</sup>, Josiani Cristina Stefanelo<sup>1</sup>, Antonio Ricardo Zanatta<sup>1</sup>, Debora Tereza Balogh<sup>1</sup>, Cleber R. Mendonça<sup>1</sup>; <sup>1</sup>São Carlos Institute of Physics, University of São Paulo
- 18:00 Analysis of aqueous solution of KCl as a function of temperature by electric characterization** **F.P2.7**  
Adriel Jardim de Santana<sup>1</sup>, Fernando Carlos Messias Freire<sup>1</sup>, Arthur Ernandes Torres da Silva<sup>1</sup>, Alexsander Ramos Duarte<sup>2</sup>, Thiago Marques de Andrade<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 18:00 P3ATs and graphene films characterization for the development of a photovoltaic cell** **F.P2.8**  
Sara Nascimento Oliveira<sup>1</sup>, Aleffe Bruno Schura<sup>1</sup>, Paulo Ernesto Marchezi<sup>2</sup>, Ana Flávia Nogueira<sup>2</sup>, Romildo Jeronimo Ramos<sup>1</sup>, Eralci Moreira Therézio<sup>1,2</sup>; <sup>1</sup>Universidade Federal de Mato Grosso, <sup>2</sup>Instituto de Química (IQ) - Universidade Estadual de Campinas (Unicamp)
- 18:00 Soft-lithography in graphene oxide and reduced graphene oxide thin films as transparent conductors for practical organic electronic applications** **F.P2.9**  
Alessandro Henrique Lima<sup>1</sup>, Alessandra Pereira<sup>2</sup>, Indhira Oliveira Maciel<sup>1</sup>, Benjamin Fragneaud<sup>1</sup>, Cristiano Legnani<sup>1</sup>, Marco Cremona<sup>3</sup>, Welber Gianini Quirino<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora, <sup>2</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>3</sup>Department of physics, Pontifical Catholic University of Rio de Janeiro - PUC-Rio
- 18:00 Organic Light-Emitting Diodes for Photodynamic Therapy application** **F.P2.10**  
Aline Magalhaes Santos<sup>1</sup>, Beatriz Vilela de Moura<sup>1</sup>, Rafael dos Santos Carvalho<sup>1</sup>, Sonia Renaux Wanderley Louro<sup>1</sup>, Marco Cremona<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro
- 18:00 Copper Electrodes Performance Evaluation on Glucose Biosensors Construction by Immobilization of the Glucose Oxidase Enzyme in PANI-RGO Composite** **F.P2.11**  
Alisson Lima Martins<sup>1</sup>, Fabio Seiti Hadano<sup>1</sup>, Fabio Kurt Schneider<sup>1</sup>, Wilson José Da Silva<sup>1</sup>, Jeferson Ferreira de Deus<sup>1</sup>, Anderson Emanuel Ximim Gavim<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Aza-Diels-Alder reactions: An approach for construction of pro-mesogenic quinoline cores** **F.P2.12**  
Aloir Antonio Merlo<sup>1</sup>, Luma Fritsch<sup>1</sup>, Richard J. Mandle<sup>2</sup>; <sup>1</sup>Instituto de Química - UFRGS, <sup>2</sup>University of York
- 18:00 Organic magnetoresistance on devices based in polybithiophene and with different electrodes** **F.P2.13**  
Ana Cristina de Paula<sup>1</sup>, José Pedro Mansueto Serbena<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná

- 18:00 Heterocycle quinoxaline applied to the preparation of luminescent materials: Synthesis, mesomorphism and photophysical properties** **F.P2.14**  
Leonardo Oliveira Aguiar<sup>1</sup>, Suélem P. Souza<sup>1</sup>, Ivan H. Bechtold<sup>2</sup>, Thiago Cazati<sup>3</sup>, André Alexandre Vieira<sup>1</sup>; <sup>1</sup>Universidade Federal da Bahia, <sup>2</sup>Universidade Federal de Santa Catarina, <sup>3</sup>Universidade Federal de Ouro Preto
- 18:00 Structural characterization of the  $\beta$  phase of polyfluorene obtained by XRD, FTIR, SEM and UV-vis absorption and photoluminescence** **F.P2.15**  
André Andrade Ferreira<sup>1</sup>, Denis Augusto Turchetti<sup>2</sup>, Alisson de Jesus Santana<sup>2</sup>, Leni Akcelrud<sup>2</sup>, Yvonne P. Mascarenhas<sup>3</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade Federal do Paraná, <sup>3</sup>Instituto de Física de São Carlos - USP
- 18:00 Photophysical Study of Poly(9,9-Dihexylfluorene-co-thiophene) doped with tetracyanoquinodimethane.** **F.P2.16**  
Arthur Santos Espíndola<sup>1</sup>, Fernando Henrique Cristovan<sup>2</sup>, Alexandre Marletta<sup>3,4</sup>, Erick Piovesan<sup>3</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Universidade Federal de Jataí, <sup>3</sup>Universidade Federal de Uberlândia, <sup>4</sup>Federal University of Uberlândia
- 18:00 Polymer-salt interaction in polymer light-emitting electrochemical cells: a theoretical study** **F.P2.17**  
Levy Alvarenga Galindo<sup>1</sup>, Francisco Carlos Lavarda<sup>1</sup>, Augusto Batagin-Neto<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>2</sup>Universidade Estadual Paulista - Campus Itapeva
- 18:00 Development of a bench to measure thermal conductivity of polymers** **F.P2.18**  
Matheus Vinicius Oliveira Herrero<sup>1</sup>, Guilherme Henrique Zotto Johansen<sup>1</sup>, Augusto Dias Siqueira<sup>1</sup>, Matheus Franzotti Rozza<sup>1</sup>, Nathalia Wisniewski Siqueira<sup>1</sup>, Laís Weber Aguiar<sup>1</sup>, Robson Leal Silva<sup>1,2</sup>, Wagner André Santos Conceição<sup>1</sup>, Silvia Luciana Favaro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Fundação Universidade Federal da Grande Dourados
- 18:00 Phthalocyanine columnar liquid crystal doped with MWCNTs** **F.P2.19**  
Beatriz Machado Silva<sup>1</sup>, Carlos Henrique Stadtlober<sup>1</sup>, José Eduardo Silva Olegário<sup>1</sup>, Daniela Zambelli Mezalira<sup>1</sup>, Harald Bock<sup>2</sup>, Juliana Eccher<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Centre de Recherche Paul-Pascal
- 18:00 Detection of cancer biomarkers using low-cost screen-printed electrodes and magnetic nanoparticles** **F.P2.20**  
Beatriz Montilha Tirich<sup>1,2</sup>, Glenda Gisela Ibañez Redin<sup>1</sup>, Niravkumar Jitendrabhai Joshi<sup>1</sup>, Deivy Wilson Wilson<sup>1</sup>, Osvaldo Novais de Oliveira Jr<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP)
- 18:00 Study of electrospinning parameters for the manufacture of Carbon Nanotube/ Thermoplastic Polyurethane membranes** **F.P2.21**  
Bruna Caldas de Sousa<sup>1</sup>, Vanessa Oliveira Castro<sup>1</sup>, Guilherme Mariz de Oliveira Barra<sup>1</sup>, Claudia Merlini<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Polymeric nanocomposite of gold nanoparticles and polyfluorene: synthesis and characterization** **F.P2.22**  
Carla Requena Klimpovuz<sup>1</sup>, Hellen de Almeida Vienna<sup>1</sup>, Denis Augusto Turchetti<sup>1</sup>, Marcela Mohallem Oliveira<sup>2</sup>, Leni Akcelrud<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Application of the generalized phase element method in the analysis of electrochemical impedance spectroscopy measurements on a polycrystalline gold electrode** **F.P2.23**  
Carleane Patricia da Silva Reis<sup>1</sup>, Muriel de Pauli<sup>1</sup>, Aldo Matthaeus Cutrim Gomes<sup>1</sup>, Robson Lourenço Cavalcante<sup>1</sup>, Rafael Bento Serpa<sup>1</sup>, Françoise Toledo Reis<sup>1</sup>, Maria Luisa Sartorelli<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

- 18:00 Capacitive processes extracted from a generalized phase element analysis of electrochemical impedance spectroscopy measurements** **F.P2.24**  
Muriel de Pauli<sup>1</sup>, Aldo Matthaeus Cutrim Gomes<sup>1</sup>, Robson Lourenço Cavalcante<sup>1</sup>, Rafael Bento Serpa<sup>1</sup>, Carleane Patricia da Silva Reis<sup>1</sup>, Françoise Toledo Reis<sup>1</sup>, Maria Luisa Sartorelli<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Photoisomerization of liquid crystalline azo dyes** **F.P2.25**  
Carolina Francener Junkes<sup>1</sup>, Paola Z Crocomo<sup>1</sup>, André Alexandre Vieira<sup>2</sup>, Eduard Westphal<sup>3</sup>, Hugo Gallardo<sup>1</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal da Bahia, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Chemical vapor sensors based on nitrogen-doped hollow carbon spheres** **F.P2.26**  
Bridget Mutuma<sup>1</sup>, Clara Ines Garcia<sup>2</sup>, Rodrigo Coura Dias<sup>3</sup>, Boitumelo Matsoso<sup>4</sup>, Neil John Coville<sup>1</sup>, Ivo Alexandre Hümmelgen<sup>2</sup>; <sup>1</sup>University of the Witwatersrand, <sup>2</sup>Universidade Federal do Paraná, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Paraná, <sup>4</sup>Université Claude Bernard Lyon 1
- 18:00 Fabrication and electrical characterization of active layers based on thin films of polythiophene in ITO/ACTIVE LAYER/AL devices by impedance spectroscopy technique** **F.P2.27**  
Lucas Vinicius de Lima Citolino<sup>1</sup>, Clarissa de Almeida Olivati<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente
- 18:00 Study and characterization of nanostructured films of amphiphilic Poly-Fulerenes derivatives** **F.P2.28**  
Lucas Kaique Roncaselli<sup>1</sup>, Andre Vitor Santos Simois<sup>2</sup>, Deuber Lincon da Silva Agostini<sup>3</sup>, Roger C Hiorns<sup>4</sup>, Clarissa de Almeida Olivati<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente, <sup>2</sup>Universidade Estadual Paulista, Campus de Presidente Prudente, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>Centre National de la Recherche Scientifique
- 18:00 Influence of the dielectric layer thickness on the electrical parameters of spray-pyrolysis ZnO thin-film transistors.** **F.P2.29**  
Cleber Alexandre de Amorim<sup>1</sup>, João Paulo Braga<sup>2</sup>, Guilherme Rodrigues de Lima<sup>2</sup>, Giovanni Gozzi<sup>3</sup>, Lucas Fugikawa Santos<sup>3</sup>; <sup>1</sup>Faculdade de Ciência e Engenharia da UNESP-campus de Tupã, <sup>2</sup>Universidade Estadual Paulista - Campus São José do Rio Preto, <sup>3</sup>Universidade Estadual Paulista - Campus Rio Claro
- 18:00 A forensic "electronic tongue" for detection of 7-aminoflunitrazepam in human urine** **F.P2.30**  
Cristiane Margarete Daikuzono<sup>1</sup>, André Lopes Ferreira<sup>1</sup>, Flávio Makoto Shimizu<sup>2</sup>, Maria Helena Piazzetta<sup>2</sup>, Angelo Luiz Gobbi<sup>3</sup>, Osvaldo Novais de Oliveira Jr<sup>4</sup>, Marystela Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>2</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>3</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>4</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 18:00 Neutral Cu(I) Complexes with TADF Emission Mechanism Applied in Solution-processed OLEDs** **F.P2.31**  
Cristian Momoli Salla<sup>1</sup>, Giliandro Farias<sup>1</sup>, Bernardo de Souza<sup>1</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Growth and characterization of copper films and tubes electrodeposited on n-type silicon substrates** **F.P2.32**  
Daiana Galvão da Silva<sup>1</sup>, Maria Luisa Sartorelli<sup>1</sup>, Muriel de Pauli<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

- 18:00 Machine learning applied to cancer diagnosis through the analysis of impedance spectra obtained with electronic tongue** **F.P2.33**  
Daniel Cesar Braz<sup>1</sup>, Acelino Cardoso de Sá<sup>1</sup>, Flávio Makoto Shimizu<sup>2</sup>, Lidia Maria Rebolho Batista Arantes<sup>3</sup>, Ana Carolina de Carvalho<sup>3</sup>, Matias Eliseo Melendez<sup>3</sup>, André Lopes Carvalho<sup>3</sup>, Odemir Martinez Bruno<sup>1</sup>, Osvaldo Novais de Oliveira Jr<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>3</sup>Centro de Pesquisa em Oncologia Molecular (CPOM) - Hospital de Câncer de Barretos
- 18:00 Tin based hybrid resist for Extreme UV Lithography** **F.P2.34**  
 Guilherme Kretzmann Belmonte<sup>1,2</sup>, Suelen Weimer Cendron<sup>2</sup>, Cleverson Alves Silva Moura<sup>1,2</sup>, Gabriela Albara Lando<sup>2</sup>, Pulikanti Guruprasad Reddy<sup>3</sup>, Kenneth E. Gonsalves<sup>3</sup>, Daniel Eduardo Weibel<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto de Química - UFRGS, <sup>3</sup>Indian Institute of Technology Mandi
- 18:00 Screen-printing mesh count influence on electro-optical properties of full-printed light-emitting devices** **F.P2.35**  
Danilo Santos<sup>1</sup>, Luiza Gualter Ramires<sup>1</sup>, Raissa Morais Alves dos Anjos<sup>1</sup>, Matheus Henrique Quadros<sup>2</sup>, Elson dos Santos<sup>3</sup>, Henry Fellegara<sup>3</sup>, Lucas Fugikawa Santos<sup>1</sup>, Giovanni Gozzi<sup>1</sup>; <sup>1</sup>Institute of Geosciences and Exact Sciences/UNESP, <sup>2</sup>Flextronics Instituto de Tecnologia - FIT, <sup>3</sup>Indústria de Tintas Condutivas - TICON
- 18:00 Micro/Nano-Fabrication of a device for the electrical characterization of thin surface metal-organic framework (SURMOF) films** **F.P2.36**  
Davi Henrique Starnini de Camargo<sup>1,2</sup>, Tatiana Parra Vello<sup>3,2</sup>, Luiz Gustavo Simão Albano<sup>2</sup>, Carlos Cesar Bof Bufon<sup>1,3,2</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>3</sup>Universidade Estadual de Campinas
- 18:00 Photophysical properties of P3HT:LC-CoPc donor blend for OSCs improvement** **F.P2.37**  
Diego Fernando Silva Sousa<sup>1</sup>, Petru Apostol<sup>2</sup>, Harald Bock<sup>2</sup>, Marta Elisa Rosso Dotto<sup>1</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Centre National de la Recherche Scientifique
- 18:00 Ab-initio study of the interaction between P3HT and oxygen molecules** **F.P2.38**  
 Ernesto Osvaldo Wrasse<sup>1</sup>, Marcelo Fernandes<sup>1</sup>, Douglas José Coutinho<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Solubilization and characterization of blend rGO:ITO: a case study for application in transparent conductive thin films** **F.P2.39**  
Edgar Henrique de Souza<sup>1</sup>, Anderson E. X. Gavim<sup>1</sup>, Fabio Seiti Hadano<sup>1</sup>, Leticia Patricio Christopholi<sup>1</sup>, Wilson José Da Silva<sup>1</sup>, Paula C. Rodrigues<sup>1</sup>, João B. Floriano<sup>1</sup>, Emilson Ribeiro Viana Junior<sup>1</sup>, Jeferson Ferreira de Deus<sup>1</sup>; <sup>1</sup>Federal University of Technology - Paraná
- 18:00 Synthesis and characterization of polythiophene and silver nanocomposites** **F.P2.40**  
Eduarda de Castro Flach<sup>1,2</sup>, Aline Ribeiro<sup>1,2</sup>, Leliz Ticona Arenas<sup>1,2</sup>, Jacqueline Ferreira<sup>1,2</sup>, Fabiano Mesquita Rosa<sup>3</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto de Química - UFRGS, <sup>3</sup>Instituto de Física Ufrgs
- 18:00 Excited State Intramolecular Proton Transfer reaction as a strategy for the white-light generation** **F.P2.41**  
Emmanuel Santos Moraes<sup>1</sup>, Luís Gustavo Teixeira Alves Duarte<sup>1</sup>, José Carlos Germino<sup>1</sup>, Marcelo Meira Faleiros<sup>1</sup>, Teresa Dib Zambon Atvars<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

- 18:00 Morphological study on perovskite films via Nano-IR spectroscopy and Ellipsometry** **F.P2.42**  
Eralci Moreira Therézio<sup>1,2</sup>, Rodrigo Szostak<sup>1</sup>, Paulo Ernesto Marchezi<sup>1</sup>, Raul O. Freitas<sup>3</sup>, Eduardo Giangrossi Machado<sup>1</sup>, Raphael Nagao<sup>1</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>State University of Campinas, <sup>2</sup>Federal University of Mato Grosso, <sup>3</sup>Brazilian Synchrotron Light Laboratory
- 18:00 Optical analysis of P3HT films with reduced graphene oxide** **F.P2.43**  
 Maria Ruth Neponucena dos Santos<sup>1</sup>, Paulo Ernesto Marchezi<sup>2</sup>, Ana Flávia Nogueira<sup>2</sup>, Alexandre Marletta<sup>3</sup>, Romildo Jerônimo Ramos<sup>1</sup>, Eralci Moreira Therézio<sup>2,1</sup>; <sup>1</sup>Federal University of Mato Grosso, <sup>2</sup>State University of Campinas, <sup>3</sup>Federal University of Uberlândia
- 18:00 Graphene oxide interaction in langmuir films of phospholipids with penicillinase enzyme for biosensing application** **F.P2.44**  
fabio antonio scholl<sup>1</sup>, José Siqueira Júnior<sup>2</sup>, Luciano Caseli<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal do Triângulo Mineiro
- 18:00 Non-symmetrical mesogens based on quinoxaline and benzimidazole heterocycles: self-assembly induced by amphoteric donating/accepting H-bonds** **F.P2.45**  
 André H de Oliveira<sup>1</sup>, Welisson de Pontes Silva<sup>2</sup>, Jordan K da Silva<sup>1</sup>, Júlio Cezar de Oliveira Freitas<sup>1</sup>, Miguel A de Souza<sup>1</sup>, Rodrigo Cristiano<sup>2</sup>, Fabício Gava Menezes<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Federal da Paraíba
- 18:00 Electrical properties investigation of nanocomposites with metallic nanoparticles in epoxy polymeric matrix** **F.P2.46**  
Fernando Aparecido Dias Radomski<sup>1</sup>, Celso Araújo Duarte<sup>1</sup>, Evaldo Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 Donor-acceptor polymers with PDMS-Ur based cross-linkers: a novel hybrid material for stretchable semiconductor applications** **F.P2.47**  
Florian Steffen Günther<sup>1</sup>, Ubirajara Pereira Rodrigues Filho<sup>2</sup>, Roberto Mendonça Faria<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Instituto de Química de São Carlos-USP
- 18:00 Use of label-free Al doped ZnO particles for optical detection of fluoroquinolones** **F.P2.48**  
Francisco García-Salinas<sup>1</sup>, José Martín Yáñez-Limón<sup>1</sup>, Rivelino Flores-Farías<sup>1</sup>, Carlos Alberto Ávila-Herrera<sup>1</sup>, Abraham Méndez-Albores<sup>2</sup>, Alma Guadalupe Vázquez-Durán<sup>2</sup>; <sup>1</sup>Centro de Investigación y de Estudios Avanzados, <sup>2</sup>Universidad Nacional Autónoma de México-Facultad de Estudios Superiores Cuautitlán
- 18:00 Reactivity of Melanin Subunits: Electronic Structure Calculations of Monomers and Dimers** **F.P2.49**  
Gabriel Gomes Baltazar Alves<sup>1</sup>, Augusto Batagin-Neto<sup>1</sup>, Carlos FO Graeff<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista
- 18:00 Local reactivity on the structure of carbon nanoflakes: the influence of geometries and doping/functionalizations** **F.P2.50**  
Gabriel Gomes Baltazar Alves<sup>1</sup>, Augusto Batagin-Neto<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista
- 18:00 Dielectric properties of PVA:BaTiO<sub>3</sub> flexible films** **F.P2.51**  
Geneviève Kreibich Pinheiro<sup>1</sup>, Bruno Neckel Wesling<sup>1</sup>, Carlo Requião Cunha<sup>2</sup>, Carlos Renato Rambo<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal do Rio Grande do Sul

- 18:00 Design of efficient and low-cost emitters based on Cu (I) complexes with thermally activated delayed fluorescence for OLEDs applications** **F.P2.52**  
Giliandro Farias<sup>1</sup>, Cristian Momoli Salla<sup>1</sup>, Bernardo de Souza<sup>1</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Surface energy of Graphene Oxide by Contact Angle Measurements** **F.P2.53**  
Giovana Conod<sup>1</sup>, Alessandro Henrique Lima<sup>2</sup>, Welber Gianini Quirino<sup>2</sup>, Marta Elisa Rosso Dotto<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal de Juiz de Fora
- 18:00 RFID antennas produced with transparent conductive ink** **F.P2.54**  
 Alisson Henrique Ferreira Marques<sup>1,2</sup>, Danilo Santos<sup>1</sup>, Kayo Oliveira Vieira<sup>1</sup>, Matheus Henrique Quadros<sup>3</sup>, Pedro Henrique Pereira Rebello<sup>3</sup>, Vinícius Lourenço Dias Ferro<sup>3</sup>, Elson dos Santos<sup>2</sup>, Henry Fellegara<sup>2</sup>, Paula Valério<sup>3</sup>, Lucas Fugikawa Santos<sup>1</sup>, Giovani Gozzi<sup>1</sup>; <sup>1</sup>Institute of Geosciences and Exact Sciences/UNESP, <sup>2</sup>Indústria de Tintas Condutivas - TICON, <sup>3</sup>Flextronics Instituto de Tecnologia - FIT
- 18:00 Study of ternary composite GO/MnO<sub>2</sub>/Pani in a columnar liquid crystal** **F.P2.55**  
Giovanna Tramontin Carneiro<sup>1</sup>, Eduardo Guilherme Cividini Neiva<sup>2</sup>, Gabriel Zeplin<sup>2</sup>, Michele Duarte Tonet<sup>1</sup>, Harald Bock<sup>3</sup>, Juliana Eccher<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Regional de Blumenau, <sup>3</sup>Centre de Recherche Paul-Pascal
- 18:00 Graphene oxide aerogel with polymers in the new system of production of thin film Al<sup>3+</sup> ion batteries** **F.P2.56**  
Giovanni Romeu Carvalho<sup>1</sup>, Pedro Henrique Fazza Stroppa<sup>1</sup>, Alessandro Henrique Lima<sup>1</sup>, Nayton Claudinei Vicentini<sup>1</sup>, Cristiano Legnani<sup>1</sup>, Indhira Oliveira Maciel<sup>1</sup>, Benjamin Fragneaud<sup>1</sup>, Adilson David da Silva<sup>1</sup>, Welber Gianini Quirino<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 18:00 Non-corrosive and Low-Toxicity Hydrogel-based Microbattery** **F.P2.57**  
Graziela C. Sedenho<sup>1,2</sup>, Diana D. Porcellinis<sup>1</sup>, Emily Kerr<sup>1</sup>, Sergio Granados-Focil<sup>3</sup>, Roy G. Gordon<sup>1</sup>, Michael J. Aziz<sup>1</sup>, Frank Nelson Crespilho<sup>1,2</sup>; <sup>1</sup>Harvard University, <sup>2</sup>São Carlos Institute of Chemistry, University of São Paulo, <sup>3</sup>Clark University
- 18:00 Properties of high-performance solution-processed transparent thin film transistors** **F.P2.58**  
Guilherme Rodrigues de Lima<sup>1</sup>, João Paulo Braga<sup>1</sup>, Giovani Gozzi<sup>2</sup>, Lucas Fugikawa Santos<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus São José do Rio Preto, <sup>2</sup>Universidade Estadual Paulista - Campus Rio Claro

## TUESDAY, SEPTEMBER 24

### Poster presentations

#### *SESSION F.P4 (18:00 - 19:30)*

- 18:00 Synthesis of silver nanoparticle doped zinc oxide films applied to gas sensors** **F.P4.1**  
Luana Martins de Carvalho<sup>1</sup>, César Renato Foschini<sup>1</sup>, Kleper Rocha<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

- 18:00 Study of the influence of the production process on electrical and optical properties of PEDOT:PSS films** **F.P4.2**  
Tayná Copes Rodrigues<sup>1</sup>, Cristiane Krause Santin<sup>1</sup>, Tatiana Louise Avila de Campos Rocha<sup>1</sup>; <sup>1</sup>Universidade do Vale do Rio dos Sinos
- 18:00 Multi-wall carbon nanotubes in columnar liquid crystal matrix** **F.P4.3**  
Carlos Henrique Stadtlober<sup>1</sup>, José Eduardo Silva Olegário<sup>1</sup>, Daniela Zambelli Mezalira<sup>1</sup>, Harald Bock<sup>2</sup>, Juliana Eccher<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Centre National de la Recherche Scientifique
- 18:00 Photophysical properties of emitting nanoparticles embedded in a polymeric matrix** **F.P4.4**  
Marília Regina Schalçy<sup>1</sup>, Wallison C. Costa<sup>1</sup>, Cristian Momoli Salla<sup>1</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Low-cost disposable screen-printed carbon based microfluidic electrochemical device for early diagnosis of colorectal cancer** **F.P4.5**  
Gustavo Freitas do Nascimento<sup>1</sup>, Elsa Maria Materón<sup>2</sup>, Glenda Gisela Ibañez Redin<sup>1</sup>, Ronaldo Censi Faria<sup>2</sup>, Osvaldo Novais de Oliveira Jr<sup>3</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Instituto de Física de São Carlos - USP
- 18:00 Synthesis and photophysical properties of a luminescent polymer for gold nanoparticles passivation *in situ*.** **F.P4.6**  
Hellen de Almeida Vienna<sup>1</sup>, Carla Requena Klimpovuz<sup>1</sup>, Denis Augusto Turchetti<sup>1</sup>, Marcela Mohallem Oliveira<sup>2</sup>, Leni Akcelrud<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 18:00 P3HT-based polymeric batteries: playing with the Fermi-Level alignments** **F.P4.7**  
Henrique Frulani de Paula Barbosa<sup>1</sup>, Gregorio Couto Faria<sup>1</sup>; <sup>1</sup>University of São Paulo
- 18:00 Self-assembly of new molecules derived from tetrazole ring in columnar mesophases.** **F.P4.8**  
Hugo Marchi Luciano<sup>1</sup>, Hugo Gallardo<sup>1</sup>, Edivandro Giroto<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Organic solar cells built on flexible substrates** **F.P4.9**  
Idomeneu Gomes de Souza Filho<sup>1</sup>, Roberto Mendonça Faria<sup>2</sup>, Elvira Maria Correia Fortunato<sup>3</sup>, Rodrigo Ferrão de Paiva Martins<sup>3</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>São Carlos Institute of Physics, University of São Paulo, <sup>3</sup>Universidade Nova de Lisboa
- 18:00 Modeling charge transport in organic crystals via Holstein polaron model** **F.P4.10**  
Ingrid Gomes Ribeiro<sup>1</sup>, Larissa dos Santos Born<sup>1</sup>, Leonardo Evaristo de Sousa<sup>2</sup>, Pedro Henrique de Oliveira Neto<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Estadual de Goiás
- 18:00 Synthesis and characterization of polypyrrole stimuli-responsive capsules** **F.P4.11**  
Isabela Jasper<sup>1</sup>, Gabriela Alvarenga<sup>1</sup>, Marcio Vidotti<sup>1</sup>, Izabel Cristina Riegel Vidotti<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 Energy transfer efficiency in photosynthetic systems: a combined quantum chemical and kinetic Monte Carlo study** **F.P4.12**  
Israel Pinheiro de Siqueira<sup>1</sup>, Fernando Teixeira Bueno<sup>1</sup>, Luiz Fernando Roncaratti<sup>1</sup>, Leonardo Evaristo de Sousa<sup>2</sup>, Pedro Henrique de Oliveira Neto<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Estadual de Goiás

- 18:00 Luminescent viscoelastic liquids based on lanthanides and zwitterion applied on light-emitting devices** F.P4.13  
JANILSON ALVES FERREIRA<sup>1</sup>, Edielen França Santos<sup>1</sup>, Severino Alves Júnior<sup>1</sup>, Tania Cassol<sup>2</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Study of organic compounds Connected to Gold Electrodes** F.P4.14  
Járlesson Gama Amazonas<sup>1</sup>, Jeconias Rocha Guimarães<sup>2</sup>, Jordan Del Nero<sup>3</sup>; <sup>1</sup>Universidade do Estado do Pará, <sup>2</sup>Universidade Tecnológica Federal do Paraná, <sup>3</sup>Universidade Federal do Pará
- 18:00 Asymmetries on porphyrin's absorption and emission spectra: the multi-featured Q-band** F.P4.15  
Jefferson Marcio Sanches Lopes<sup>1</sup>, Taíse Leite<sup>2</sup>, Alzir Batista<sup>2</sup>, Thiago Vargas Acunha<sup>3</sup>, Bernardo Almeida Iglesias<sup>3</sup>, Paulo Antonio Trindade Araujo<sup>4</sup>, Newton Martins Barbosa Neto<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universidade Federal de Santa Maria, <sup>4</sup>University of Alabama
- 18:00 XRD and Raman study of glycine crystal complexed with Cr<sup>3+</sup> as a function of temperature** F.P4.16  
Jéssica Andreza Oliveira Rodrigues<sup>1</sup>, João Gomes de Oliveira Neto<sup>1</sup>, Clenilton Costa dos Santos<sup>1</sup>, Alan Silva de Menezes<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 18:00 Flexible pressure sensors based on LaNiO<sub>3</sub> nanowires** F.P4.17  
Jéssica Helisa Hautrive Rossato<sup>1</sup>, Bruna Niccoli Ramirez<sup>1</sup>, Márcia Tsuyama Escote<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Analysis of electrical properties of PS and PS / PMMA ionomers with different sulphonation degrees** F.P4.18  
Jessyka Carolina Bittencourt<sup>1</sup>, Jefferson Augusto Bittencourt<sup>1</sup>, Antonio Jose Felix Carvalho<sup>2</sup>, Debora Terezia Balogh<sup>3,4</sup>, Clarissa Almeida Olivati<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente, <sup>2</sup>Escola de Engenharia de São Carlos, <sup>3</sup>Universidade de São Paulo, <sup>4</sup>São Carlos Institute of Physics, University of São Paulo
- 18:00 Synthesis and Characterization of L-Leucine Oxalate Crystals by Raman Spectroscopy in Function of Temperature** F.P4.19  
Alexandre Saraiva Costa<sup>1</sup>, João Gomes de Oliveira Neto<sup>1</sup>, Pedro de Freitas Façanha Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 18:00 Microstructure and electrical properties of solution-processed zinc-oxide films applied to thin film transistors** F.P4.20  
João Paulo Braga<sup>1</sup>, Gabriela Byzynski Soares<sup>2</sup>, Guilherme Rodrigues de Lima<sup>1</sup>, Ángel Alberto Hidalgo<sup>3</sup>, Maykol Damasceno Oliveira<sup>3</sup>, Giovanni Gozzi<sup>1</sup>, Lucas Fugikawa Santos<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>NanoChemTech Solutions, <sup>3</sup>Federal University of Piauí
- 18:00 Electric conduction in poly(methyl methacrylate) thin films characterized by corona charging with constant current** F.P4.21  
José Alberto Giacometti<sup>1</sup>, Josiani Cristina Stefanelo<sup>1</sup>, Roberto Mendonça Faria<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 18:00 UV-Induced Desorption/Absorption of Atmospheric Species in Zinc Oxide Thin Films** F.P4.22  
José Bruno Cantuária<sup>1</sup>, Giovanni Gozzi<sup>2</sup>, Lucas Fugikawa Santos<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus São José do Rio Preto, <sup>2</sup>Universidade Estadual Paulista - Campus Rio Claro



- 18:00 Preparation and characterization of CNT functionalization for photovoltaic devices application** **F.P4.23**  
José Eduardo Olegário<sup>1</sup>, Eduarda Souto<sup>1</sup>, Carlos Henrique Stadtlober<sup>1</sup>, Juliana Eccher<sup>1</sup>, Daniela Zambelli Mezalira<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Bottom gate polymer field effect transistor for water quality assessment** **F.P4.24**  
José Enrique Eirez Izquierdo<sup>1</sup>, Marco Roberto Cavallari<sup>1</sup>, Dennis Cabrera García<sup>1</sup>, Vinicius Augusto Machado Nogueira<sup>2</sup>, Jose Diogo da Silva Oliveira<sup>2</sup>, Loren Mora Pastrana<sup>1</sup>, Ioannis Jhon Kymissis<sup>3</sup>, Fernando Josepetti Fonseca<sup>1</sup>; <sup>1</sup>Escola Politécnica - Eng. Elétrica, <sup>2</sup>Instituto de Física - Universidade de São Paulo, <sup>3</sup>Columbia University New York
- 18:00 The impact of molecular aggregates and supramolecular arrangement in the photoluminescent properties in perylene PVD films** **F.P4.25**  
Jose Fernandes Fernandes<sup>1</sup>, Wallance Moreira Pazin<sup>1</sup>, Ricardo Flavio Aroca<sup>2</sup>, Wagner Dias Macedo Junior<sup>1</sup>, Silvio Rainho Teixeira<sup>1</sup>, Carlos José Leopoldo Constantino<sup>1</sup>; <sup>1</sup>Faculdade de Ciências e Tecnologia da UNESP, Campus de Presidente Prudente, <sup>2</sup>University of Windsor
- 18:00 Quantitative study of energy transfer in PFO: PTDPV blends by PLQY and photoluminescence decay time measurements.** **F.P4.26**  
Thaís dos Santos Moraes<sup>1</sup>, Wesley Renzi<sup>2</sup>, Ricardo Vignoto Fernandes<sup>1</sup>, Edson Laureto<sup>1</sup>, José Leonil Duarte<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina, <sup>2</sup>Instituto Federal do Paraná
- 18:00 Nanostructured layer-by-layer films consisting of reduced graphene oxide and MnO<sub>2</sub> as supercapacitor electrode** **F.P4.27**  
Danilo Alves Oliveira<sup>1</sup>, Jodie L. Lutkenhaus<sup>2</sup>, José Roberto Siqueira Jr.<sup>1</sup>; <sup>1</sup>Universidade Federal do Triângulo Mineiro, <sup>2</sup>Texas A&M University
- 18:00 Organic field-effect transistors fabricated using an organic layer with high dielectric constant** **F.P4.28**  
Josiani Cristina Stefanelo<sup>1</sup>, Bruno Bassi Millan Torres<sup>1</sup>, José Alberto Giacometti<sup>1</sup>, Roberto Mendonça Faria<sup>1</sup>; <sup>1</sup>São Carlos Institute of Physics, University of São Paulo
- 18:00 Detection of *Staphylococcus aureus* in Cattles with Mastitis Diseases based on Electrical Impedance Measurements** **F.P4.29**  
Juliana Coatrini Soares<sup>1</sup>, Andrey Coatrini Soares<sup>1</sup>, Valquiria Cruz Rodrigues<sup>2</sup>, Osvaldo Novais de Oliveira Jr<sup>2</sup>, Luiz Henrique Capparelli Mattoso<sup>1</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 18:00 Thermal study of conjugated copolymer/elastomer blend** **F.P4.30**  
Yasmin B Silva<sup>1</sup>, Alessandra Stacchini Menandro<sup>1</sup>, Laura Oliveira Péres<sup>1</sup>; <sup>1</sup>Federal University of Sao Paulo
- 18:00 Glycerol liquid crystals, an inspiration from nature.** **F.P4.31**  
Luana Dezingrini Lopes<sup>1</sup>, Leonardo Poloni Pavan<sup>1</sup>, Aloir Antonio Merlo<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 18:00 Electroanalytical detection of propylparaben in cosmetic using electrodes modified with Layer-by-Layer composite film** **F.P4.32**  
Lucas Felipe de Lima<sup>1</sup>, Elisabete Alves Pereira<sup>1</sup>, Marystela Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba
- 18:00 Development of Radiofrequency Antennas From the Electroless Method** **F.P4.33**  
Luíse Cambruzzi Dalló<sup>1</sup>, Cristiane Krause Santin<sup>1</sup>, Gabriela Mezetti Vieira<sup>1</sup>; <sup>1</sup>Universidade do Vale do Rio dos Sinos

- 18:00 Comparative study of spray-deposited carbon nanotube and colloidal graphite dispersions aiming electrodes applications** **F.P4.34**  
Luis Henrique Tigre Bertoldo<sup>1</sup>, Gabriel Leonardo Nogueira<sup>1</sup>, Maykel Santos Klem<sup>1</sup>, Mayk Rodrigues Nascimento<sup>1</sup>, Douglas Henrique Vieira<sup>1</sup>, Neri Alves<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente
- 18:00 Electroluminescent device production by single-step processing** **F.P4.35**  
Luiza Gualter Ramires<sup>1</sup>, Danilo Santos<sup>1</sup>, Raissa Morais Alves dos Anjos<sup>1</sup>, Matheus Henrique Quadros<sup>1</sup>, Lucas Fugikawa Santos<sup>1</sup>, Giovanni Gozzi<sup>1</sup>; <sup>1</sup>Institute of Geosciences and Exact Sciences/UNESP
- 18:00 Characterization of a new columnar liquid crystal for applications in organic optoelectronics** **F.P4.36**  
Luiza Spanemberg Silveira de Souza<sup>1</sup>, Harald Bock<sup>2</sup>, Juliana Eccher<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Centre National de la Recherche Scientifique
- 18:00 Ambipolar resistive-switching of surface-supported metal-organic framework (SURMOF) using rolled-up strained metallic nanomembranes** **F.P4.37**  
Luiz Gustavo Simão Albano<sup>1</sup>, Tatiana Parra Vello<sup>2,1</sup>, Davi Henrique Starnini de Camargo<sup>3,1</sup>, Carlos Cesar Bof Bufon<sup>3,2,1</sup>; <sup>1</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Universidade Estadual Paulista
- 18:00 Improving predictions of exciton diffusion length using time dependent density functional theory** **F.P4.38**  
Luiz Henrique Hideki Igari Cavamura<sup>1</sup>, Jacyara Flores Arbues Carneiro<sup>1</sup>, William Ferreira da Cunha<sup>1</sup>, Leonardo Evaristo de Sousa<sup>2</sup>, Pedro Henrique de Oliveira Neto<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Estadual de Goiás
- 18:00 Poly(3-hexylthiophene)/ZnO hybrid pn junctions using AZO transparent electrodes obtained by thermal diffusion** **F.P4.39**  
Maíza da Silva Ozório<sup>1</sup>, Mayk Rodrigues Nascimento<sup>1</sup>, Douglas Henrique Vieira<sup>1</sup>, Gabriel Leonardo Nogueira<sup>1</sup>, Neri Alves<sup>1</sup>; <sup>1</sup>Faculdade de Ciências e Tecnologia da UNESP, Campus de Presidente Prudente
- 18:00 amperometric biosensor using conductor polymer** **F.P4.40**  
Marcelo Cristiano Meneses Pedra Branca<sup>1</sup>, Roberto Viana de Sales<sup>1</sup>, Ana Angélica Mathias Macêdo<sup>2,1</sup>, Fernando Mendes<sup>3,4,5,6,7</sup>, Adenilson Oliveira dos Santos<sup>8,9</sup>, Rafael Mendonça Almeida<sup>2,1</sup>; <sup>1</sup>Federal Institute of Maranhão, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>3</sup>Instituto Politécnico de Coimbra, <sup>4</sup>Universidade de Coimbra, <sup>5</sup>Polytechnic Institute of Coimbra, Coimbra Health School., <sup>6</sup>University of Coimbra, <sup>7</sup>Institute for Clinical and Biomedical Research, <sup>8</sup>Universidade Federal do Maranhão, <sup>9</sup>Federal University of Maranhão
- 18:00 EIS study of a novel nanocomposite based on palladium-metallopolymer and reduced GO** **F.P4.41**  
Yuri A. Oliveira<sup>1</sup>, André Olean-Oliveira<sup>1</sup>, Diego N. David-Parra<sup>1</sup>, Celso Xavier Cardoso<sup>1</sup>, Marcos F. S. Teixeira<sup>1</sup>; <sup>1</sup>São Paulo State University
- 18:00 Synaptic behavior in reduced graphene oxide multilayers** **F.P4.42**  
Marcos Luiz Ferreira Gomes<sup>1</sup>, Mawin Javier Martinez Jimenez<sup>1</sup>, VARLEI RODRIGUES<sup>1</sup>, Angelo Luiz Gobbi<sup>2</sup>, Maria Helena Piazzetta<sup>2</sup>, Antonio Riul Jr.<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)
- 18:00 3D-printed channels and molds for passive mixing studies and applications** **F.P4.43**  
Maria Luisa Braunger<sup>1</sup>, Igor Fier<sup>2</sup>, VARLEI RODRIGUES<sup>1</sup>, Paulo E. Arratia<sup>3</sup>, Antonio Riul Jr.<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Quantum Design Latin America, <sup>3</sup>University of Pennsylvania

- 18:00 Extraction and characterization of Lycopene crystals extracted from tomatoes disposal** F.P4.44  
 Laís Sardinha Costa<sup>1</sup>, Lorena Silva Nascimento<sup>1</sup>, Francisco Ferreira de Sousa<sup>1</sup>, Kleber José do Rosário da Silva<sup>2,1</sup>, Joyce Kelly do Rosário da Silva<sup>1</sup>, Waldomiro Paschoal Jr.<sup>1</sup>; <sup>1</sup>Federal University of Pará, <sup>2</sup>Universidade do Estado do Pará
- 18:00 Scanning Electron Microscopy characterization of Lycopene crystals extracted from tomatoes disposal** F.P4.45  
 Lorena Silva Nascimento<sup>1</sup>, Laís Sardinha Costa<sup>1</sup>, Francisco Ferreira de Sousa<sup>1</sup>, Kleber José do Rosário da Silva<sup>2</sup>, Joyce Kelly do Rosário da Silva<sup>1</sup>, Waldomiro Paschoal Jr.<sup>1</sup>; <sup>1</sup>Federal University of Pará, <sup>2</sup>Universidade do Estado do Pará

## WEDNESDAY, SEPTEMBER 25

### Poster presentations

#### *SESSION F.P6 (18:00 - 19:30)*

- 18:00 Photophysical study of curcumin derivative and its complexes with zinc** F.P6.1  
Maria Antônia Rodrigues de Paulo<sup>1</sup>, Arthur Santos Espíndola<sup>1</sup>, Fernando Henrique Cristovan<sup>2</sup>, Rayssa de Souza Lopes<sup>2</sup>, Alexandre Marletta<sup>3</sup>, Erick Pioveasan<sup>3</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Universidade Federal de Jataí, <sup>3</sup>Universidade Federal de Uberlândia
- 18:00 Study of electrical transients in organic solar cells based on PBDTT-FTTE:PC<sub>71</sub>BM with and without additive solvent** F.P6.2  
Mariana Richelle Pereira da Cunha<sup>1</sup>, Daniel Roger Amorim<sup>2</sup>, Francineide Lopes de Araújo<sup>3</sup>, Roberto Mendonça Faria<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>São Carlos Institute of Physics, University of São Paulo, <sup>3</sup>Universidade Estadual de Campinas
- 18:00 Competition between aggregation-induced emission and crystallization-induced emission enhancement in a twisted hydrocarbon** F.P6.3  
Marília Regina Schaly<sup>1</sup>, Michele Duarte Tonet<sup>1</sup>, Cristian Momoli Salla<sup>1</sup>, Juliana Eccher<sup>1</sup>, Harald Bock<sup>2</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Centre National de la Recherche Scientifique
- 18:00 Detection of *Escherichia coli* O104:H4 based on immobilization of the anti-*E.coli* in Layer-by-Layer films** F.P6.4  
 Elen Rute Lira Gomes<sup>1</sup>, Elenice Deffune<sup>2</sup>, Marli Leite de Moraes<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>São Paulo State University
- 18:00 Immunosensor for detection of the anti-βA1-40 Alzheimer's disease biomarker based on the immobilization of the βA1-40 peptide encapsulated into liposomes** F.P6.5  
 Júlio César Monteiro Júnior<sup>1</sup>, Marli Leite de Moraes<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 18:00 Effects of the interaction between phthalocyanine tetrasulfonate and platinum nanoparticle in LbL films for serotonin detection** F.P6.6  
 Anna Flavia Ravanelli<sup>1</sup>, Celina Massumi Miyazaki<sup>1</sup>, MARYSTELA FERREIRA<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos

- 18:00 Dienones as a non-aromatic core for bent-shaped liquid crystals.** **F.P6.7**  
Matheus Julian Cruz Gomes<sup>1</sup>, Eduard Westphal<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Nanocomposites of SEBS/PPy.DBSA and SEBS/Mt-PPy.DBSA for evaluation of electrical and electromechanical properties.** **F.P6.8**  
 Louise Diniz Maciel<sup>1</sup>, Maurício Kubaski<sup>1</sup>, Guilherme Mariz de Oliveira Barra<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 development of an anisotropic electromechanical sensor composed of poly(styrene-*b*-ethylene-*ran*-butylene-*b*-styrene) with aligned carbon nanotubes** **F.P6.9**  
Maurício Kubaski<sup>1</sup>, Louise Diniz Maciel<sup>1</sup>, Guilherme Mariz de Oliveira Barra<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Spectroscopic ellipsometry on ZnO** **F.P6.10**  
Maykol Damasceno Oliveira<sup>1</sup>, Ángel Alberto Hidalgo<sup>1</sup>, Cleânio Luz Lima<sup>1</sup>, Lucas Fugikawa Santos<sup>2</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>São Paulo State University
- 18:00 Study of organic memristor devices prepared by spray-coating** **F.P6.11**  
Mayk Rodrigues Nascimento<sup>1</sup>, Rogério Miranda Morais<sup>1</sup>, Gabriel Leonardo Nogueira<sup>1</sup>, Maíza da Silva Ozório<sup>2,1</sup>, Neri Alves<sup>2,1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente
- 18:00 Characterization of benzotriazole based molecules in thin films** **F.P6.12**  
Michele Duarte Tonet<sup>1</sup>, Elias Regi<sup>2</sup>, André Alexandre Vieira<sup>2</sup>, Juliana Eccher<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal da Bahia
- 18:00 Study by first-principles calculations of structural and electronic properties of aluminum phthalocyanine hydroxide thin films** **F.P6.13**  
Natália Paz Neme<sup>1</sup>, Matheus Josué de Souza Matos<sup>1</sup>, Mário Sérgio de Carvalho Mazzoni<sup>2</sup>, Thiago Cazati<sup>1</sup>, Sérgio Fernando Curcio<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Universidade Federal de Minas Gerais
- 18:00 Characterization of P3TH and PCBM Nanoparticulated Layers For Photovoltaic Applications** **F.P6.14**  
Nathália Akemi Yoshioka<sup>1</sup>, Thales Alves Faraco<sup>1</sup>, Benjamin Fragneaud<sup>1</sup>, Indhira Oliveira Maciel<sup>1</sup>, Welber Gianini Quirino<sup>1</sup>, Hernane da Silva Barud<sup>2</sup>, Sidney J.L. Ribeiro<sup>3</sup>, Marco Cremona<sup>4</sup>, Cristiano Legnani<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora, <sup>2</sup>Universidade de Araraquara, <sup>3</sup>Universidade Estadual Paulista - Campus Araraquara, <sup>4</sup>Pontifícia Universidade Católica do Rio de Janeiro
- 18:00 Synthesis and characterization of reduced and sulfated graphene oxide for organic electronic applications** **F.P6.15**  
Nayton Claudinei Vicentini<sup>1</sup>, Alessandro Henrique Lima<sup>1</sup>, Giovanni Romeu Carvalho<sup>1</sup>, Janaína Luíza Cristino Lucas<sup>1</sup>, Bruno Randal de Oliveira<sup>1</sup>, João Paulo Almeida de Mendonça<sup>1</sup>, Indhira Oliveira Maciel<sup>1</sup>, Benjamin Fragneaud<sup>1</sup>, Cristiano Legnani<sup>1</sup>, Fernando Sato<sup>1</sup>, Welber Gianini Quirino<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 18:00 The use of AZO transparent electrode in a UV photodetector diode manufactured by spray pyrolysis** **F.P6.16**  
 Maíza da Silva Ozório<sup>1,2</sup>, Gabriel Leonardo Nogueira<sup>2</sup>, Mayk Rodrigues Nascimento<sup>1</sup>, Douglas Henrique Vieira<sup>2</sup>, Neri Alves<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente, <sup>2</sup>Universidade Estadual Paulista, Campus de Presidente Prudente
- 18:00 Development of new compounds derived from the 1-methyl-1*H*-benzo[*d*][1,2,3]triazole center for OLED applications** **F.P6.17**  
Nícolas Oliveira Decarli<sup>1</sup>, Ivan H. Bechtold<sup>1</sup>, André Alexandre Vieira<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal da Bahia

- 18:00 Genosensor for early detection of head and neck cancer** **F.P6.18**  
Olivia Carr<sup>1</sup>, Paulo Augusto Raymundo-Pereira<sup>2</sup>, Flávio Makoto Shimizu<sup>3</sup>, Jorge Augusto de Moura Delezuk<sup>4</sup>, Matias Eliseo Melendez<sup>5</sup>, Lidia Maria Rebolho Batista Arantes<sup>5</sup>, André Lopes Carvalho<sup>5</sup>, Rui Manuel Reis<sup>5</sup>, Osvaldo Novais de Oliveira Jr<sup>6</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>4</sup>Instituto Federal do Paraná, <sup>5</sup>Centro de Pesquisa em Oncologia Molecular (CPOM) - Hospital de Câncer de Barretos, <sup>6</sup>Instituto de Física de São Carlos - USP
- 18:00 Lateral flow immunoassay for saxitoxin detection** **F.P6.19**  
PABLO CESAR SERRANO ARAMBULO<sup>1</sup>, Gisele Elias Nunes<sup>1</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Formulation of conductive pastes containing silver microstructure for printing RFID tag antennas using screen printing** **F.P6.20**  
Iara Janaína Fernandes<sup>1</sup>, Paola Lamberty<sup>1</sup>, Angélica Farias Aroche<sup>1</sup>, Cristiane Krause Santin<sup>1</sup>, Celso Renato Peter<sup>1</sup>; <sup>1</sup>Universidade do Vale do Rio dos Sinos
- 18:00 Electrochemical and spectroelectrochemical comparison of compounds based on the dibenzophenazine core.** **F.P6.21**  
Paola Zimmermann Crocomo<sup>1</sup>, Przemyslaw Data<sup>1</sup>; <sup>1</sup>Silesian University of Technology in Gliwice
- 18:00 Liquid Crystals based on Anthraquinones Containing Azo Group** **F.P6.22**  
Patricia Akemi Tuzimoto<sup>1</sup>, Saul Ovalle<sup>2</sup>, Hugo Gallardo<sup>2</sup>; <sup>1</sup>Instituto Federal do Paraná, <sup>2</sup>Universidade Federal de Santa Catarina
- 18:00 extended gate field effect transistor system construction to study acidity variation of biological systems** **F.P6.23**  
Paula Simões Casagrande<sup>1</sup>, David Mendez Soares<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 18:00 Synthesis of photoactive banana liquid crystals containing azo and ester linkage groups derived from 2-methoxy-3-cyanopyridine** **F.P6.24**  
Priscila Pazini Abatti<sup>1</sup>, Ivan H. Bechtold<sup>1</sup>, Hugo Gallardo<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Effects of crosslinking agents on PEDOT:PSS films** **F.P6.25**  
Rafael Francisco Santiago De Souza<sup>1</sup>, Gregorio Couto Faria<sup>2,1,3</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Instituto de Física de São Carlos - USP, <sup>3</sup>University of São Paulo
- 18:00 Enzyme activity of Phenylalanine Dehydrogenase in Langmuir-Blodgett films for L-phenylalanine detection.** **F.P6.26**  
Rafael Leonardo Cruz Gomes Silva Silva<sup>1</sup>, Luciano Caseli<sup>1</sup>, Roger M Leblanc<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>University of Miami
- 18:00 Synthesis and characterization of nanomaterial ZnO/Curcumin encapsulated with EVOH for biological applications** **F.P6.27**  
Rayssa de Souza Lopes<sup>1</sup>, Tatiane Moraes Arantes<sup>2</sup>, Fernando Henrique Cristovan<sup>1</sup>; <sup>1</sup>Universidade Federal de Jataí, <sup>2</sup>Universidade Federal de Goiás
- 18:00 Study of polypyrrole nanotubes degradation during galvanostatic charge and discharge cycles** **F.P6.28**  
Renata Vieira Lima<sup>1</sup>, Bruna M. Hryniewicz<sup>1</sup>, Luis Marchesi<sup>2</sup>, Marcio Vidotti<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Tecnológica Federal do Paraná

- 18:00 Study of the kinetics of photo and thermodegradation of bougainvillea extract incorporated in polyvinyl alcohol with different acids** **F.P6.29**  
Ricardo Lima Guimarães<sup>1</sup>, José Robson Silva Filho<sup>1</sup>, Nayally Soares<sup>1</sup>, Edson Ednaldo Silva<sup>1</sup>, Flávia Rafaella Xavier Silva<sup>1</sup>, Gilmara Gonzaga Pedrosa<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 18:00 Synthesis and characterization of CsPbBr<sub>3</sub> quantum dots for light emitting diodes application** **F.P6.30**  
Rodrigo Gomes Costa<sup>1</sup>, Nathália Akemi Yoshioka<sup>1</sup>, Caroline Mayrinck<sup>2</sup>, Benjamin Fragneaud<sup>1</sup>, Indhira Oliveira Maciel<sup>1</sup>, Welber Gianini Quirino<sup>1</sup>, Marco Antonio Schiavon<sup>2</sup>, Cristiano Legnani<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora, <sup>2</sup>Universidade Federal de São João Del Rei
- 18:00 Silver-Polypyrrole nanotubes composites for different applications** **F.P6.31**  
Rodrigo Morawski<sup>1</sup>, Lara F. Loguercio<sup>1</sup>, Bruno da Silveira Noremberg<sup>2</sup>, Neftalí Lenin Villarreal Carreño<sup>2</sup>, Jacqueline Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade Federal de Pelotas
- 18:00 The influence of paper substrates on the performance of printed OEETs** **F.P6.32**  
Rogério Miranda Morais<sup>1</sup>, Maykel Santos Klem<sup>2</sup>, Neri Alves<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente, <sup>2</sup>Universidade Estadual Paulista, Campus de Presidente Prudente
- 18:00 Preparation and characterization of the MPS/PANI doped with Erbium** **F.P6.33**  
Rosimara Passos Toledo<sup>1</sup>, Adhimar Flávio Oliveira<sup>1</sup>, Danilo Roque Huanca<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 18:00 Electrical characterization of polyaniline synthesized in presence of nickel sulfate salt** **F.P6.34**  
Stefany Caroline de Souza dos Santos<sup>1</sup>, Rosimara Passos Toledo<sup>1</sup>, Danilo Roque Huanca<sup>1</sup>, Adhimar Flávio Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 18:00 Synthesis of a new molecule containing the 9H-carbazole core and 1,3,4-oxadiazole heterocycle as transporting charge** **F.P6.35**  
Saul Ovalle<sup>1</sup>, Cristian Momoli Salla<sup>1</sup>, Ivan Helmuth Bechtold<sup>1</sup>, Hugo Gallardo<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Interaction of aluminum hydroxide phthalocyanine with carbon nanomaterials in ethylic solution** **F.P6.36**  
Jonnathan Fernando de Oliveira Duarte<sup>1</sup>, Sergio Fernando Curcio<sup>1</sup>, Bruna Bueno Postacchini<sup>1</sup>, Luiz Orlando Ladeira<sup>2</sup>, Jaqueline dos Santos Soares<sup>1</sup>, Thiago Cazati<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Universidade Federal de Minas Gerais
- 18:00 Fluorescent H-aggregates in thin films of aluminum hydroxide phthalocyanine deposited by spin-coating technique** **F.P6.37**  
Sergio Fernando Curcio<sup>1</sup>, Ana Paula Moreira Barboza<sup>1</sup>, Cassiano Batesttin Costa<sup>2</sup>, Vanessa Mosqueira<sup>1</sup>, Bruna Bueno Postacchini<sup>1</sup>, Genivaldo Júlio Perpétuo<sup>1</sup>, Thiago Cazati<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Universidade Federal de Juiz de Fora
- 18:00 Characterization of aluminum hydroxide phthalocyanine with multi-wall carbon nanotubes functionalized thin films for application in organic electronic devices** **F.P6.38**  
Sergio Fernando Curcio<sup>1</sup>, Rogério Valaski<sup>2</sup>, Luiz Orlando Ladeira<sup>3</sup>, Jaqueline Soares<sup>1</sup>, Thiago Cazati<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>National Institute of Metrology, <sup>3</sup>Universidade Federal de Minas Gerais
- 18:00 Measurements of Excess-Properties in Dielectrical and Electrical Parameters of Binary Blends of Methyl Esters and Diesel S10** **F.P6.39**  
Silvania Lanfredi<sup>1</sup>, Túlio Begena Araújo<sup>1</sup>, Marcos Augusto Lima Nobre<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente

- 18:00 Polyaniline and Lignin Blends for Application in Energy Storage Systems** **F.P6.40**  
Soraia Zaiioncz<sup>1</sup>, Wagner Silva França<sup>1</sup>, João B. Floriano<sup>1</sup>, Paula C. Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Synthesis of sheet-like structures of polythiophene** **F.P6.41**  
Stefany Rodrigues Saraiva<sup>1</sup>, Yasmin Montero Quispe<sup>1</sup>, Luis Marcelo G da Silva<sup>1</sup>, Hugo Gajardoni de Lemos<sup>1</sup>, Everaldo Carlos Venancio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 3D-printed graphene electrodes applied to electronic tongue in soil analysis** **F.P6.42**  
Tatiana Americo da Silva<sup>1</sup>, Maria Luisa Braunger<sup>1</sup>, Lucas Rios do Amaral<sup>2</sup>, VARLEI RODRIGUES<sup>1</sup>, Antonio Riul Jr.<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin", Unicamp, <sup>2</sup>Faculdade de Engenharia Agrícola, Unicamp
- 18:00 Influence of the electrosynthesis method on the electrocatalytic properties of MHCF thin films** **F.P6.43**  
Thais Schroeder Rossi<sup>1</sup>, Luciane Novaes Tenório<sup>1</sup>, Herbert Winnischofer<sup>1</sup>, Marcio Vidotti<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 Fluorescent chemosensor based on organic  $\beta$ -diketone for recognition of aluminum cation** **F.P6.44**  
 Natália Lopes Zinato<sup>1</sup>, Ana Carolina Ferreira de Brito<sup>1</sup>, Rodrigo de Souza Correa<sup>1</sup>, Jason Guy Taylor<sup>1</sup>, Thiago Cazati<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto
- 18:00 Electrochemical polymerization of a D-A polymer for flexible electrochromic device** **F.P6.45**  
Uesley A. Stival<sup>1</sup>, Anderson E. X. Gavim<sup>1</sup>, Andréia G. Macedo<sup>1</sup>, Paula C. Rodrigues<sup>1</sup>, João B. Floriano<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Genosensors for the early diagnosis of prostate cancer based on DNA immobilization on polypyrrole matrices** **F.P6.46**  
Valquiria Cruz Rodrigues<sup>1</sup>, Juliana Coatrini Soares<sup>2</sup>, Andrey Coatrini Soares<sup>2</sup>, Lidia Maria Rebolho Batista Arantes<sup>3</sup>, Matias Eliseo Melendez<sup>3</sup>, André Lopes Carvalho<sup>3</sup>, Rui Manoel Reis<sup>3</sup>, Osvaldo Novais de Oliveira Jr.<sup>4,5,6</sup>; <sup>1</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>2</sup>Embrapa Instrumentação, <sup>3</sup>Centro de Pesquisa em Oncologia Molecular (CPOM) - Hospital de Câncer de Barretos, <sup>4</sup>Universidade de São Paulo, <sup>5</sup>Instituto de Física de São Carlos - USP, <sup>6</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 18:00 Theoretical study of ionization potential for bithiophe, bifuran and thienylfuran** **F.P6.47**  
Vinicius Alves Bastos<sup>1</sup>, Tales José da Silva<sup>1</sup>, Marília J. Caldas<sup>1</sup>; <sup>1</sup>Instituto de Física - Universidade de São Paulo
- 18:00 Colloidal lead-halide perovskite QDs: kinetic influence on the particle properties** **F.P6.48**  
Wallison C. Costa<sup>1</sup>, Cristian Momoli Salla<sup>1</sup>, Fernando Ely<sup>2</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Centro de Tecnologia da Informação Renato Archer
- 18:00 Luminescent liquid crystals derived from quinoxaline and thiophene** **F.P6.49**  
Welisson de Pontes Silva<sup>1</sup>, Hugo Gallardo<sup>2</sup>, Rodrigo Cristiano<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Universidade Federal de Santa Catarina





# **SYMPOSIUM G - Photonics of Materials: Solar Cells, Photocatalysis, Luminescence and Physical Optics**

**Symposium organizers:**

Sergio da Silva Cava (Universidade Federal de Pelotas)

Mario Lucio Moreira (Universidade Federal de Pelotas)

Cristiane Wienke Raubach Ratmann (Universidade Federal de Pelotas)

Pedro Lovato Gomes Jardim (Universidade Federal de Pelotas)



# MONDAY , SEPTEMBER 23

\* Invited Lecture

## *SESSION G.01.D1 (09:30 - 10:30) - Room Mediterrâneo*

- 09:30 Perovskites cells: MgTiO<sub>3</sub> nanocrystals as non-sensitized photo electrodes** **G.O1.D1.1**  
Thissiana da Cunha Fernandes<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>, Sílvia Azevedo dos Santos Cucatti<sup>1</sup>, Sérgio da Silva Cava<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 09:45 Fluorescent and large chain Additives in Dye-Sensitized Solar Cells' Performance** **G.O1.D1.2**  
Larissa A. Santa Cruz<sup>1</sup>, Maria Z. Oliveira<sup>1</sup>, Paloma B. Barreto<sup>1</sup>, Letícia B. V. Sales<sup>1</sup>, Jeice M. Santos<sup>1</sup>, Thiago André Salgueiro Soares<sup>1</sup>, Giovanna Machado<sup>1</sup>; <sup>1</sup>Centro de Tecnologias Estratégicas do Nordeste
- 10:00 Metal oxide films as charge transport layers for solution-processed organic light-emitting diodes** **G.O1.D1.3**  
Andreia de Moraes<sup>1</sup>, Ana Flávia Nogueira<sup>2</sup>, Jilian Nei de Freitas<sup>1</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer, <sup>2</sup>Universidade Estadual de Campinas
- 10:15 Band gap optimization in photovoltaic (Pb La)(Ti Ni)O<sub>3</sub> ceramics.** **G.O1.D1.4**  
Natália Florêncio da Costa Vargas<sup>1</sup>, José Antônio Eiras<sup>2</sup>, Manuel Henrique Lente<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal de São Carlos

## *SESSION G.02.D1 (11:00 - 12:00) - Room Mediterrâneo*

- 11:00 Synthesis and study of physical properties of (Na K)(Nb Er)O<sub>3</sub> piezophotonic ceramics** **G.O2.D1.1**  
Mayara Cardozo dos Santos<sup>1</sup>, Manuel Henrique Lente<sup>1</sup>, José Antônio Eiras<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal de São Carlos
- 11:15 Electromagnetic simulation of perovskite solar cells with embedded plasmonic core-shell nanoparticles** **G.O2.D1.2**  
Rogério Almeida Gouvêa<sup>1,2</sup>, Mário Lúcio Moreira<sup>3,4</sup>, Marcos Jose Leite Santos<sup>1,2</sup>; <sup>1</sup>Programa de Pós-graduação em Ciência dos Materiais (PPGCiMat), Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil., <sup>2</sup>Laboratório de materiais e interfaces (LAMAI), Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil., <sup>3</sup>Universidade Federal de Pelotas, <sup>4</sup>Grupo de Pesquisa em Crescimento de Cristais Avançados e Fotônica, Universidade Federal de Pelotas
- 11:30 Local nano-heterojunctions of CsPbBr<sub>3</sub> quantum dots on the surface of TiO<sub>2</sub> microtube** **G.O2.D1.3**  
Cynthia Marina Rivaldo Gómez<sup>1</sup>, Helder Moreira Braga<sup>1</sup>, Leonardo Soares de Oliveira<sup>1</sup>, Gustavo Martini Dalpian<sup>1</sup>, José Antônio Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:45 Electrochromic Properties of MoO<sub>3</sub> Thin Film** **G.O2.D1.4**  
Luana Uszacki Krüger<sup>1</sup>, Daniela Neves Placido<sup>1</sup>, Camila Monteiro Cholant<sup>1</sup>, Marco Paulsen Rodrigues<sup>1</sup>, César Antonio Oropesa Avellaneda<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas

**SESSION G.03.D1 (14:00 - 16:15) - Room Mediterrâneo**

- 14:00 Exploring the Properties of Niobium Oxide Films for Electron Transport Layers in Perovskite Solar Cells** **G.O3.D1.1\***  
Silvia Leticia Fernandes<sup>1</sup>, Carlos FO Graeff<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista
- 14:30 Investigation of the influence of poling and complex defects on the optical properties of hard lead-free piezophotonic ceramics** **G.O3.D1.2**  
Mayara Cardozo dos Santos<sup>1</sup>, José Antônio Eiras<sup>2</sup>, Manuel Henrique Lente<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal de São Carlos
- 14:45 Hole Transport Layers for High Efficiency of Organic Photovoltaic Devices Based on Non-fullerene Small Molecule Acceptor** **G.O3.D1.3**  
LUANA CRISTINA WOUK DE MENEZES<sup>1</sup>, Luiza de Queiroz Corrêa<sup>1</sup>, Juliana Luiza da Silva Martins<sup>1</sup>, Diego Bagnis<sup>1</sup>; <sup>1</sup>Centro de Inovações CSEM Brasil
- 15:00 Ferroelectric and Photovoltaic Properties of PZT-PFN Multiferroic Thin-Films** **G.O3.D1.4**  
José Antônio Eiras<sup>1</sup>, André Marino Gonçalves<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos
- 15:15 Perovskite solar cells: evaluating research and development into new commercial products** **G.O3.D1.5**  
Lucas Fernandes Aguiar<sup>1</sup>, Tatiana Duque Martins<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 15:30 How Can Semiconductor Coordination Compounds Improve PSCs Efficiency and Stability?** **G.O3.D1.6**  
José Carlos Germino<sup>1</sup>, LUIZ GUSTAVO BONATO<sup>1</sup>, Raphael F. Moral<sup>1</sup>, Paulo Ernesto Marchezi<sup>1</sup>, Luís Gustavo Teixeira Alves Duarte<sup>1</sup>, Teresa Diz Zambon Atvars<sup>1</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>INSTITUTE OF CHEMISTRY/UNICAMP
- 15:45 Preparation and characterization of electropolymerized hybrid films based on PANI – PVP – TiO<sub>2</sub> for photovoltaic applications** **G.O3.D1.7**  
Bruno Silva Devesa<sup>1</sup>, Alice Laura Rodrigues<sup>1</sup>, José Agenor Carvalho Júnior<sup>2</sup>, Taise Matte Manhabosco<sup>2</sup>, Jaqueline dos Santos Soares<sup>2</sup>, Ana Paula Moreira Barboza<sup>2</sup>, Bernardo Ruedger Almeida Neves<sup>3</sup>, Marcelo Machado Viana<sup>3</sup>, Cláudia Karina Barbosa de Vasconcelos<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica de Minas Gerais, <sup>2</sup>Universidade Federal de Ouro Preto, <sup>3</sup>Universidade Federal de Minas Gerais
- 16:00 Recent advances in nanocomposites based in germanate and tellurite glasses for Photonic applications** **G.O3.D1.8**  
Davinson Mariano da Silva<sup>1</sup>, Luciana Reyes Pires Kassab<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de São Paulo

**TUESDAY , SEPTEMBER 24**

\* Invited Lecture

**SESSION G.01.D2 (09:30 - 10:30) - Room Mediterrâneo**

- 09:30 Dynamic Monte Carlo simulations of organic photovoltaic devices** **G.O1.D2.1**  
Cesar Augusto Machado Moraes<sup>1</sup>, Jonas Alexandre Govatski<sup>1</sup>, Marlus Koehler<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná

- 09:45 Electronic and structural properties modeling of the CaMoO<sub>4</sub>** **G.O1.D2.2**  
Vinicius Fonseca Hernandez<sup>1</sup>, Ananda Ramires das Neves Stigger<sup>1</sup>, Mateus Ferrer<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 10:00 Theoretical study of morphological paths modification of Cu<sub>2</sub>O applied to the photonic properties** **G.O1.D2.3**  
Mateus Meneghetti Ferrer<sup>1</sup>, Julio Ricardo Sambrano<sup>2</sup>, Mário Lúcio Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>São Paulo State University
- 10:15 An ab-initio investigation on electronic structure and optical properties of plasmonic nanoparticles coated with TiO<sub>2</sub> for third generation solar cells** **G.O1.D2.4**  
Rogério Almeida Gouvêa<sup>1,2</sup>, Mateus Meneghetti Ferrer<sup>3,4</sup>, Mário Lúcio Moreira<sup>3,4</sup>, Marcos Jose Leite Santos<sup>1,2</sup>; <sup>1</sup>Programa de Pós-graduação em Ciência dos Materiais (PPGCiMat), Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil., <sup>2</sup>Laboratório de materiais e interfaces (LAMAI), Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil., <sup>3</sup>Universidade Federal de Pelotas, <sup>4</sup>Grupo de Pesquisa em Crescimento de Cristais Avançados e Fotônica, Universidade Federal de Pelotas

### *SESSION G.O2.D2 (11:00 - 12:00) - Room Mediterrâneo*

- 11:00 Heterojunctions of ZnO/MOF, ZnO/Ionic Liquid and ZnO/Fe<sub>2</sub>O<sub>3</sub>: influence of the chemical modification on the photoelectrochemical properties.** **G.O2.D2.1\***  
Tatiana Martelli Mazzo<sup>1</sup>, Letícia Guerreiro da Trindade<sup>2</sup>, Gabriela Bosco Minervino<sup>1</sup>, Gabriel Yuji Hata<sup>1</sup>, Josiane Carneiro Souza<sup>3</sup>, Mario Rodrigo dos Santos Soares<sup>3</sup>, Katiúscia Nobre Borba<sup>4</sup>, Letícia Zanchet<sup>5,4</sup>, Katia Bernardo-Gusmão<sup>5</sup>, Edson Leite<sup>3</sup>, Ernesto Chaves Pereira<sup>3</sup>, Elson Longo<sup>3</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>4</sup>Instituto de Química - UFRGS, <sup>5</sup>Universidade Federal do Rio Grande do Sul
- 11:30 TiO<sub>2</sub>-Au-polyaniline self-assembled thin films and its application in photocatalysis** **G.O2.D2.2**  
Rhauane Almeida Galvão<sup>1,2</sup>, GERMANA M M SILVA<sup>2</sup>, Paloma B. Barreto<sup>2</sup>, Letícia B. V. Sales<sup>2</sup>, Jeice M. Santos<sup>2</sup>, Giovanna Machado<sup>2</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Centro de Tecnologias Estratégicas do Nordeste
- 11:45 Photocatalytic efficiency of SrTi<sub>1-x</sub>Co<sub>x</sub>O<sub>3</sub> produced by microwave-assisted hydrothermal synthesis (MAHS)** **G.O2.D2.3**  
Fabio Calcagno Riemke<sup>1</sup>, Cátia Liane Ücker<sup>1</sup>, Eduarda Medran Rangel<sup>1</sup>, Francine Machado Nunes<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas

### *SESSION G.O3.D2 (14:00 - 16:15) - Room Mediterrâneo*

- 14:00 Deposition of ZnO in ecologic foam glass for rhodamine b dye photodegradation** **G.O3.D2.1**  
Eduarda Medran Rangel<sup>1</sup>, Cátia Liane Ücker<sup>1</sup>, Fabio Calcagno Riemke<sup>1</sup>, Francine Machado Nunes<sup>1</sup>, Caio Cesar Nogueira de Melo<sup>1</sup>, Cristiane Wienke Raubach Ratmann<sup>1</sup>, Fernando Machado<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 14:15 Strategies to improve the photocatalytic activity of suspended SrTiO<sub>3</sub> nanocubes** **G.O3.D2.2**  
Higor Andrade Centurion<sup>1</sup>, Renato Vitalino Gonçalves<sup>1</sup>; <sup>1</sup>Universidade de São Paulo

- 14:30 Self-orientated hematite electrodes for water splitting** **G.O3.D2.3**  
Nathália C Verissimo<sup>1</sup>, Cinthia Cristina Calchi Kleiner<sup>1,2</sup>, Vishnu Mogili<sup>1</sup>, Rodnei Bertazzoli<sup>1,2</sup>; <sup>1</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>2</sup>Faculdade de Engenharia Mecânica, Unicamp
- 14:45 Carbon-based nanomaterials as photoactive heterogeneous systems for singlet oxygen photogeneration** **G.O3.D2.4**  
Aleksandra Nyga<sup>1</sup>, Przemysław Podsiadły<sup>1</sup>, Alicja Duda<sup>1</sup>, Przemysław Data<sup>1</sup>, Agata Blacha-Grzechnik<sup>1</sup>; <sup>1</sup>Silesian University of Technology in Gliwice
- 15:00 Efficient Visible-Light Photocatalytic Water Splitting by Fe<sub>2</sub>TiO<sub>5</sub> Photocatalyst** **G.O3.D2.5**  
Renato Vitalino Gonçalves<sup>1</sup>, Andressa Dos Santos Correa<sup>1</sup>, Mauricio A. Melo Jr.<sup>1</sup>, Maria Ines Basso Bernardi<sup>2</sup>, Flavio Leandro Souza<sup>3</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Instituto de Física de São Carlos - USP, <sup>3</sup>Universidade Federal do ABC
- 15:15 Synthesis and performance of Ti-40wt.%Fe alloy by Ball Milling for photoelectrochemical water oxidation** **G.O3.D2.6**  
Cinthia Cristina Calchi Kleiner<sup>1,2</sup>, Vishnu Mogili<sup>2</sup>, Nathália C Verissimo<sup>2</sup>, Rodnei Bertazzoli<sup>1,2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)
- 15:30 High energy ball milling synthesis of titanium-copper nanopowders for photocatalysis applications** **G.O3.D2.7**  
Francini Aline Belz Hesse<sup>1,2</sup>, Luelc Sousa da Costa<sup>2</sup>, Nathália C Verissimo<sup>2</sup>, Rodnei Bertazzoli<sup>1,2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)
- 15:45 Sodium Niobate: Influence of particles processing route on the improvement of photocatalytic activity** **G.O3.D2.8**  
Guilhermina Ferreira Teixeira<sup>1</sup>, Euripedes Silva Junior<sup>2</sup>, Vinícius Teodoro<sup>3</sup>, Maria Aparecida Zaghet<sup>2</sup>, Elson Longo<sup>3</sup>, Flavio Colmati<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universidade Federal de São Carlos

## WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

### *SESSION G.O1.D3 (09:30 - 10:30) - Room Mediterrâneo*

- 09:30 Lead halide perovskite thin films synthesized by alternative routes** **G.O1.D3.1\***  
Francisco Chagas Marques<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin", Unicamp
- 10:00 Size control of rare earth vanadate nanoparticles synthesized by colloidal conversion using sacrificial hydroxycarbonates templates** **G.O1.D3.2**  
Gabriela Guida<sup>1</sup>, Paulo Cesar de Sousa Filho<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

- 10:15 (Y,Yb,Tm,Er)VO<sub>4</sub> nanoparticles for upconversion thermometry from cryogenic to high temperatures** **G.O1.D3.3**  
Rafael Perrella<sup>1</sup>, Paulo Cesar de Sousa Filho<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

**SESSION G.O2.D3 (11:00 - 12:00) - Room Mediterrâneo**

- 11:00 Hematite ( $\alpha$ -Fe<sub>2</sub>O<sub>3</sub>) pure and doped with Eu<sup>3+</sup> obtained by high-energy ball milling process** **G.O2.D3.1**  
 Cristian Stanhaus<sup>1</sup>, Lorena Laize Santos Alves<sup>2</sup>, Jefferson Luis FERRARI<sup>3</sup>, Janine Carvalho Padilha<sup>1</sup>, Márcio Sousa Góes<sup>1</sup>; <sup>1</sup>Universidade Federal da Integração Latino-Americana, <sup>2</sup>Universidade Federal de São João Del Rei, <sup>3</sup>Universidade Federal de Uberlândia
- 11:15 Synthesis and characterization of BiMeVOx compounds obtained by hydrothermal method** **G.O2.D3.2**  
Sayonara Andrade Eliziário<sup>1</sup>, Raissa Venancio<sup>1</sup>, Ana Paula de Moura<sup>2</sup>, Joao Ferreira Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 11:30 Optical and micro-Raman characterizations of Co<sub>3</sub>O<sub>4</sub> films aiming photovoltaic and photocatalytic applications** **G.O2.D3.3**  
José Humberto Dias da Silva<sup>1</sup>, Nilton Francelosi Azevedo Neto<sup>2</sup>, Lucas Jorge Affonço<sup>1</sup>, Allan Victor Ribeiro<sup>3</sup>, Alexys Bruno-Alfonso<sup>1</sup>, André Luis de Jesus Pereira<sup>4</sup>, Antonio Ricardo Zanatta<sup>5</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Faculdade de Tecnologia de Bauru, <sup>3</sup>Instituto Técnico Federal, <sup>4</sup>Fundação Universidade Federal da Grande Dourados, <sup>5</sup>Universidade de São Paulo
- 11:45 Alternative determination of thermal transitions of conjugated polymers through GIWAXS** **G.O2.D3.4**  
Jose Jonathan Rubio Arias<sup>1</sup>, Isabela Custódio Mota<sup>1</sup>, Maria de Fátima Vieira Marques<sup>1</sup>, Karim DAHMOUCHE<sup>1</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ

**SESSION G.O3.D3 (14:00 - 16:15) - Room Mediterrâneo**

- 14:00 Scientific opportunities at the Sirius synchrotron light source of LNLS** **G.O3.D3.1\***  
Helio Cesar Nogueira Tolentino<sup>1</sup>, Veronica de Carvalho Teixeira<sup>2</sup>; <sup>1</sup>Brazilian Synchrotron Light Laboratory, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 14:30 New Phosphorescence, NIR and Upconversion Technologies from HORIBA Instruments for Nanotechnology, Materials Research and Rare Earth Studies** **G.O3.D3.2**  
Cary Joseph Davies<sup>1</sup>, Igor Carvalho<sup>2</sup>, Joao Lucas Silva<sup>2</sup>; <sup>1</sup>HORIBA Instruments Inc., <sup>2</sup>HORIBA Scientific
- 14:45 Simultaneous Acquisition of Absorbance-Transmission and Fluorescence Spectra Through Excitation Emission Matrix Measurements: A Unique and Innovative Technology for Analysis of Drinking and Reuse Water** **G.O3.D3.3**  
Igor Carvalho<sup>1</sup>, Joao Lucas Silva<sup>1</sup>; <sup>1</sup>HORIBA Scientific
- 15:00 Optical Properties of Large Area Gallium Phosphide in the Hexagonal Phase** **G.O3.D3.4**  
 Bruno César da Silva<sup>1</sup>, Odilon Divino Damasceno Couto Júnior<sup>1</sup>, Carlos Alberto Senna<sup>2</sup>, Braulio Soares Archanjo<sup>2</sup>, Fernando Iikawa<sup>1</sup>, Monica Alonso Cotta<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>National Institute of Metrology, Standardization and Industrial Quality

- 15:15 X-ray excited optical luminescence of metal halide hybrid perovskites: Effect of the beam and temperature** **G.O3.D3.5**  
Francisco Mateus Cirilo da Silva<sup>1,2</sup>, Rodrigo Szostak<sup>1,2</sup>, Veronica de Carvalho Teixeira<sup>2</sup>, Leonardo Mitsuo Kofukuda<sup>2</sup>, José Claudio Corsaletti<sup>1,2</sup>, Guilherme Calligaris de Andrade<sup>2</sup>, Márcio Medeiros Soares<sup>2</sup>, Ana Flávia Nogueira<sup>1</sup>, Helio Cesar Nogueira Tolentino<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 15:30 Thermoluminescence of UV-illuminated  $\alpha$ -Al<sub>2</sub>O<sub>3</sub>:C,Mg.** **G.O3.D3.6**  
NEILO M TRINDADE<sup>1,2</sup>, Maicon Gois Magalhães<sup>1</sup>, Matheus Cavalcanti dos Santos Nunes<sup>1</sup>, Luiz Jacobsohn<sup>3</sup>, Elisabeth M Yoshimura<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Instituto de Física - Universidade de São Paulo, <sup>3</sup>Clemson University
- 15:45 Improving the fluorescence of copper aluminum sulfide nanocrystals through design of experiments** **G.O3.D3.7**  
Fábio Baum<sup>1</sup>, Tatiane Pretto<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 16:00 Unprecedented Luminescent Samarium (III) Complex with Mixed Ligands and Microwave-Assisted Synthesis** **G.O3.D3.8**  
Lizandra Leticia Lopes de Souza Melo<sup>1</sup>, Gerson Pereira de Castro Júnior<sup>1</sup>, Simone Maria da Cruz Gonçalves<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

## THURSDAY, SEPTEMBER 26

\* Invited Lecture

### *SESSION G.O1.D4 (09:30 - 11:00) - Room Mediterrâneo*

- 09:30 Holographic Polarization by Induced Birefringence in Doped Samples with Au and Ag Nanoparticles** **G.O1.D4.1**  
Gabriel Salomao Ferreira<sup>1,2</sup>, Eduardo Acedo Barbosa<sup>3</sup>, CARLOS FRAJUCA<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Instituto Federal de São Paulo, <sup>3</sup>Faculdade de Tecnologia de São Paulo
- 09:45 Study of charge transport behavior of methylammonium lead iodide** **G.O1.D4.2**  
Guilherme Sombrio<sup>1</sup>, Ariany Bonadio<sup>1</sup>, Leonardo Soares de Oliveira<sup>1</sup>, Fabio Furlan Ferreira<sup>1</sup>, José Antônio Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 10:00 Exciton density effects on diffusion length, lifetime and quantum efficiency in organic materials** **G.O1.D4.3**  
Fernando Teixeira Bueno<sup>1</sup>, Leonardo Evaristo de Sousa<sup>2</sup>, Fernando Marques Carvalho<sup>1</sup>, Pedro Henrique de Oliveira Neto<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Estadual de Goiás
- 10:15 White light-emitting diodes based on Eu(II)-doped silicate for lighting and Human circadian rhythm regulation** **G.O1.D4.4**  
Airton Germano Bispo-Jr<sup>1</sup>, Sergio Antonio Marques Lima<sup>1</sup>, Luis Dias Carlos<sup>2</sup>, Rute A.S. Ferreira<sup>2</sup>, Ana Maria Pires<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente, <sup>2</sup>Universidade de Aveiro, <sup>3</sup>Universidade Estadual Paulista, Campus de Presidente Prudente



- 10:30 Evaluation of the oral and inhalation acute toxicity of the mof [EU(DPA)(HDPa)]: a luminescent marker for GSR identification** **G.O1.D4.5**  
ANDRÉ LOPES RUIZ TALHARI<sup>1</sup>, Marcella Auxiliadora de Melo Lucena<sup>1</sup>, Filipe Gabriel Martinez Maurício<sup>1</sup>, Marina Firmino Lima de Oliveira<sup>1</sup>, Fabiane Hiratsuka Veiga de Souza<sup>1</sup>, Ingrid Tavora Weber<sup>1</sup>, Severino Alves Júnior<sup>2</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Federal de Pernambuco
- 10:45 One-Pot Electrochemical Synthesis of Water Highly Dispersed Near-IR CuInSe<sub>2</sub> and CuInSe<sub>2</sub>/ZnS Quantum Dots** **G.O1.D4.6**  
Stterferson Emanuel Silva<sup>1</sup>, Marcelo Navarro<sup>1</sup>, Walter Mendes de Azevedo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

## MONDAY , SEPTEMBER 23

### Poster presentations

#### *SESSION G.P2 (18:00 - 19:30)*

- 18:00 Electronic and structural characteristics of MgTiO<sub>3</sub>** **G.P2.1**  
Cristiane Schwartz Venzke<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Pedro Lovato Gomes Jardim<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Organic photovoltaics and urban sustainability** **G.P2.2**  
Talitha Ramos Canabarra dos Santos<sup>1</sup>, Anna Gabriella Tempesta<sup>1</sup>, Kaike Rosivan Maia Pacheco<sup>1</sup>, Luiz Carlos Mariano<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 Electrical properties, synthesis and characterization of BaTiO<sub>3</sub> by the sol-gel method and sol-precipitation** **G.P2.3**  
George Nascimento Almeida<sup>1</sup>, Alysson Martins Almeida Silva<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 18:00 On the optical properties of the Fe-Doped BaZrO<sub>3</sub> for potencial application of solar cells** **G.P2.4**  
Paola Gay dos Santos<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>, Silvia Azevedo dos Santos Cucatti<sup>1</sup>, Mateus Ferrer<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 2-Methyl-1,2,3-Benzotriazole-based fluorescent compounds: Synthesis and investigation of photophysical/thermal properties** **G.P2.5**  
Abad Roger Castillo Hinojosa<sup>1</sup>, Elias Regi<sup>1</sup>, Juliana Eccher<sup>2</sup>, Michele Duarte Tonet<sup>2</sup>, André Alexandre Vieira<sup>1</sup>; <sup>1</sup>Universidade Federal da Bahia, <sup>2</sup>Universidade Federal de Santa Catarina
- 18:00 Synthesis and characterization of pure and Mn doped TiO<sub>2</sub> nanoparticles synthesized by a modified hydrothermal method** **G.P2.6**  
Afonso Guilherme Norberto<sup>1</sup>, Marcilene Cristina Gomes<sup>2</sup>, Ziani de Souza Schiaber<sup>1</sup>, Luís Fernando da Silva<sup>3</sup>, Armstrong Godoy Junior<sup>4</sup>, Douglas Marcel Gonçalves Leite<sup>4</sup>, Argemiro Soares da Silva Sobrinho<sup>4</sup>, André Luis de Jesus Pereira<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal da Grande Dourados, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>3</sup>Universidade Federal de São Carlos, <sup>4</sup>Instituto Tecnológico de Aeronáutica

- 18:00 Singlet oxygen photogeneration by conjugated organic compounds applicable in optoelectronic devices** G.P2.7  
 Alicja Duda<sup>1</sup>, Aleksandra Nyga<sup>1</sup>, Agata Blacha-Grzechnik<sup>1</sup>, Przemyslaw Data<sup>1</sup>; <sup>1</sup>Silesian University of Technology in Gliwice
- 18:00 An interplay between photoluminescence, magnetic and sensor response in nanostructured lanthanum (La)-doped cerium oxide (CeO<sub>2</sub>) thick films** G.P2.8  
 Leandro Silva Rosa Rocha<sup>1</sup>, Elson Longo<sup>2</sup>, Rafael Aparecido Ciola Amoresi<sup>1</sup>, Alexandre Z. Simões<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Federal de São Carlos
- 18:00 Photonic study of pH-dependent calcium molybdate synthesis** G.P2.9  
 Ananda Ramires das Neves Stigger<sup>1</sup>, Vinicius Fonseca Hernandez<sup>1</sup>, Mateus Meneghetti Ferrer<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Effect of capping agent and irradiation with beta particles on the trapping parameters, optical and structural properties of SrMoO<sub>4</sub> phosphors** G.P2.10  
 Ana Paula de Azevedo Marques<sup>1</sup>, Nancy Kuniko Umisedo<sup>2</sup>, Elisabeth Mateus Yoshimura<sup>2</sup>, Emico Okuno<sup>2</sup>, Roseli Kunzel<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>IFSC
- 18:00 Spray pyrolysis synthesis and characterization of MgMoO<sub>4</sub> with white light emission** G.P2.11  
 Anderson Azevedo Gomes Santiago<sup>1</sup>, Ricardo Luis Tranquilin<sup>2</sup>, Carlos Alberto Paskocimas<sup>1</sup>, Fabiana Villela Motta<sup>1</sup>, Mauricio Roberto Delmonte Bomio<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Federal de São Carlos
- 18:00 Preparation and characterization of solution-processed MoO<sub>x</sub> films as hole transport layer in organic light-emitting diodes** G.P2.12  
 Andreia de Moraes<sup>1</sup>, Ana Flávia Nogueira<sup>2</sup>, Jilian Nei de Freitas<sup>1</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer, <sup>2</sup>Universidade Estadual de Campinas
- 18:00 Hybrid Density Functional Calculations of Formic Acid on Anatase TiO<sub>2</sub>(101) Surfaces** G.P2.13  
 Erika Nascimento Lima<sup>1</sup>, Andreia Luisa da Rosa<sup>2</sup>, Thomas Frauenheim<sup>3</sup>, Liangzhi Kou<sup>4</sup>; <sup>1</sup>Universidade Federal de Mato Grosso, <sup>2</sup>Universidade Federal de Goiás, <sup>3</sup>Universität Bremen, <sup>4</sup>Queensland University of Technology
- 18:00 The role of Citric Acid as Chelating Agent in the Synthesis of Mn Doped TiO<sub>2</sub> Nanoparticles by Modified Polymeric Precursor Method** G.P2.14  
 André Luis de Jesus Pereira<sup>1,2</sup>, Marcilene Cristina Gomes<sup>3</sup>, Afonso Guilherme Norberto<sup>2</sup>, Ziani de Souza Schiaber<sup>2</sup>, Luís Fernando da Silva<sup>4</sup>, Armstrong Godoy Junior<sup>1</sup>, Douglas Marcel Gonçalves Leite<sup>1</sup>, Argemiro Soares da Silva Sobrinho<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Fundação Universidade Federal da Grande Dourados, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>4</sup>Universidade Federal de São Carlos
- 18:00 TiO<sub>2</sub> surface engineering for stable nanocatalysts: the role of interface segregation** G.P2.15  
 Andre Luiz Da Silva<sup>1</sup>, Ricardo Castro<sup>2</sup>, Douglas Gouvea<sup>1</sup>; <sup>1</sup>University of São Paulo, <sup>2</sup>University of California Davis
- 18:00 Approach on structural and optical properties of molybdate magnesium** G.P2.16  
 André Renato Mello Sanches<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>, Mateus Ferrer<sup>1</sup>, Natan Mendes Casero<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Investigation of the use of ZnO in dye sensitized solar cells** G.P2.17  
 Andrielle Lange da Rosa<sup>1</sup>, Cátia Liane Ücker<sup>1</sup>, Mateus Monteiro Marques<sup>1</sup>, Francielen San Martins Rodrigues<sup>1</sup>, Wesley Radtke Schwartz<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas

- 18:00 Nano technology in semiconductor oxides applied to solar cells** **G.P2.18**  
Angela Alidia Bernal Cárdenas<sup>1</sup>, José Pedro Mansueto Serbena<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 p and n sol-gel development for spin-on dopant diffusant source** **G.P2.19**  
Angélica Denardi de Barros<sup>1</sup>, Thebano Emílio De Almeida Santos<sup>1</sup>; <sup>1</sup>Center for Information Technology Renato Archer
- 18:00 MoS<sub>2</sub> nanostructures decorated with Au NPs used for hydrogen production from water splitting: an impaired yield** **G.P2.20**  
 André Luís Silveira Fraga<sup>1</sup>, Ariadne Köche<sup>2</sup>, Marcos Jose Leite Santos<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto de Química - UFRGS
- 18:00 Synthesis and characterization of perovskite-like SrTaO<sub>2</sub>N nanostructures for H<sub>2</sub> production** **G.P2.21**  
Ariadne Köche<sup>1</sup>, Sérgio Ribeiro Teixeira<sup>2</sup>, Sherdil Khan<sup>2,1</sup>, Marcos Jose Leite Santos<sup>1</sup>; <sup>1</sup>Instituto de Química - UFRGS, <sup>2</sup>Universidade Federal do Rio Grande do Sul
- 18:00 CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> perovskite 1D formation** **G.P2.22**  
Ariany Bonadio<sup>1</sup>, Leonardo Soares de Oliveira<sup>1</sup>, José Antônio Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 TiO<sub>2</sub> Nanoparticles Deposition by Suspension Thermal Plasma Spray** **G.P2.23**  
 Armstrong Godoy Junior<sup>1</sup>, Felipe Souza Miranda<sup>1</sup>, André Luis de Jesus Pereira<sup>2</sup>, Marcilene Cristina Gomes<sup>3</sup>, Gilberto Petraconi Filho<sup>1</sup>, Rodrigo Sávio Pessoa<sup>1</sup>, Douglas Marcel Gonçalves Leite<sup>1</sup>, Argemiro Soares da Silva Sobrinho<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Fundação Universidade Federal da Grande Dourados, <sup>3</sup>Instituto Federal de São Paulo
- 18:00 Black TiO<sub>2</sub> Thin Films Obtained by Radiofrequency Capacitive N<sub>2</sub>/H<sub>2</sub> Plasma** **G.P2.24**  
Armstrong Godoy Junior<sup>1</sup>, André Luis de Jesus Pereira<sup>2</sup>, Marcilene Cristina Gomes<sup>3</sup>, Douglas Marcel Gonçalves Leite<sup>1</sup>, Rodrigo Sávio Pessoa<sup>1</sup>, M. Massi<sup>4</sup>, Argemiro Soares da Silva Sobrinho<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Fundação Universidade Federal da Grande Dourados, <sup>3</sup>Instituto Federal de São Paulo, <sup>4</sup>Universidade Presbiteriana Mackenzie
- 18:00 Study of the Format Effect of Silver Doped Cerium Oxide Nanostructures on its catalytic activity** **G.P2.25**  
Arthur Martins Gabriel<sup>1</sup>, Karla Silva Malaquias<sup>1</sup>, Tatiane Moraes Arantes<sup>1</sup>; <sup>1</sup>Universidade Federal de Jataí
- 18:00 Synthesis and characterization of titanium dioxide decorated with rare earths applied to photocatalysis** **G.P2.26**  
Beatriz Caetano Benuto<sup>1</sup>, Danilo Manzani<sup>2</sup>, Roberto de Matos<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina, <sup>2</sup>Universidade de São Paulo
- 18:00 Effect of time and temperature on the synthesis of titanium dioxide applied in the photocatalytic degradation of methylene blue** **G.P2.27**  
Beatriz Caetano Benuto<sup>1</sup>, Ana Paula Andrade Barbosa<sup>1</sup>, CAROLINE SANTANA SANTOS<sup>1</sup>, Roberto de Matos<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 18:00 Titanium dioxide mixed with cerium dioxide to apply in Dye Sensitized Solar Cells** **G.P2.28**  
Bianca Vanjura Dias<sup>1</sup>, Alexandre Guimarães Brolo<sup>2</sup>, Paulo Rogério Pinto Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Estadual do Centro Oeste, <sup>2</sup>University of Victoria British Columbia

- 18:00 Synthesis of Silica Nanoparticles for the production of 3D Photonic Crystals by self-assembly** **G.P2.29**  
Bruno da Silva Lima<sup>1</sup>, Davinson Mariano da Silva<sup>2</sup>; <sup>1</sup>FATEC São Paulo, <sup>2</sup>Faculdade de Tecnologia de São Paulo
- 18:00 Preparation of calcium molybdates doped with Tm<sup>3+</sup> and evaluation for application in humidity sensors** **G.P2.30**  
Carla Marina dos Santos Sousa<sup>1</sup>, Rogerio de Almeida Vieira<sup>1</sup>, Ana Paula de Azevedo Marques<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 18:00 Synthesis and characterization of Ba<sub>2</sub>SbNbO<sub>6</sub> double perovskite** **G.P2.31**  
Carlos Augusto Escanhoela Jr<sup>1</sup>, Guilherme Sombrio<sup>1</sup>, Leonardo Soares de Oliveira<sup>2,1</sup>, Fabio Furlan Ferreira<sup>1</sup>, José Antônio Souza<sup>2</sup>; <sup>1</sup>Centro de Ciências Naturais e Humanas - UFABC, <sup>2</sup>Universidade Federal do ABC
- 18:00 Silver nanowires synthesis and characterization for photovoltaic devices** **G.P2.32**  
Carlos Eduardo Cava<sup>1</sup>, Érika Gomes Yamamoto<sup>1</sup>, Felipe Barbosa Soares<sup>2</sup>, Sidney Alves Lourenço<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Londrina, <sup>2</sup>Universidade Estadual de Londrina
- 18:00 The influence of temperature in the performance in materials of commercial photovoltaic modules: A review** **G.P2.33**  
CARLOS FRAJUCA<sup>1</sup>, GUSTAVO NEVES MARGARIDO<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 18:00 Study of one-and two-photon absorption cross-section in CsPbBr<sub>3</sub> quantum dots** **G.P2.34**  
Carlos Henrique Domingues dos Santos<sup>1</sup>, Marcelo G. Vivas<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 18:00 Facile synthesis of novel semiconductor Bi<sub>19</sub>S<sub>27</sub>I<sub>3</sub> nanorods under mild conditions** **G.P2.35**  
Carolina Grosso<sup>1</sup>, Maia Mombrú<sup>1</sup>, Ivana Aguiar<sup>1</sup>; <sup>1</sup>Universidad de la República
- 18:00 Up and downconversion from double and simultaneous excitation of Y<sub>2</sub>O<sub>3</sub>:Er<sup>3+</sup>/Yb<sup>3+</sup>/Eu<sup>3+</sup> possible application in device for energy conversion** **G.P2.36**  
Caroline Mayrinck<sup>1</sup>, Helliomar Pereira Barbosa<sup>2</sup>, Marco Antonio Schiavon<sup>1</sup>, Jefferson Luis FERRARI<sup>2</sup>; <sup>1</sup>Universidade Federal de São João Del Rei, <sup>2</sup>Universidade Federal de Uberlândia
- 18:00 Electrochemical characterization of colloidal CsPbX<sub>3</sub> (X= Cl, Br, I) perovskite nanocrystals for photovoltaic applications** **G.P2.37**  
André Felipe Vale da Fonseca<sup>1</sup>, Caroline Mayrinck<sup>1</sup>, Arnaldo César Pereira<sup>1</sup>, Marco Antonio Schiavon<sup>1</sup>; <sup>1</sup>Universidade Federal de São João Del Rei
- 18:00 Synthesis and characterization of TiO<sub>2</sub> rutile@anatase core-shell photocatalyst** **G.P2.38**  
CAROLINE SANTANA SANTOS<sup>1</sup>, Beatriz Caetano Benuto<sup>1</sup>, Marcelo Zampieri<sup>1</sup>, Roberto de Matos<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 18:00 Interchain properties study through P3OT films photoluminescence** **G.P2.39**  
Cássio Araújo Nascimento<sup>1</sup>, Alexandre Marletta<sup>2</sup>, Edson Ferreira Chagas<sup>1</sup>, Romildo Jerônimo Ramos<sup>1</sup>, Eralci Moreira Therézio<sup>1,3</sup>; <sup>1</sup>Universidade Federal de Mato Grosso, <sup>2</sup>Universidade Federal de Uberlândia, <sup>3</sup>INSTITUTE OF CHEMISTRY/UNICAMP
- 18:00 Investigation of parameter variation in dye sensitized solar cells** **G.P2.40**  
Vitor Goetzke<sup>1</sup>, Cátia Liane Ücker<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>, Rubens Camaratta<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas

- 18:00 The photocatalytic efficiency of Nb<sub>2</sub>O<sub>5</sub> in different thermal treatments** **G.P2.41**  
Cátia Liane Ücker<sup>1</sup>, Vitor Goetzke<sup>1</sup>, Fabio Calcagno Riemke<sup>1</sup>, Eduarda Medran Rangel<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Performance of Nb<sub>2</sub>O<sub>5</sub> application in dye-sensitized solar cell** **G.P2.42**  
Cátia Liane Ücker<sup>1</sup>, Vitor Goetzke<sup>1</sup>, Fabio Calcagno Riemke<sup>1</sup>, Pedro Lovato Gomes Jardim<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Synthesis and characterization of luminescent hybrid materials based on diureasil/elastomeric polyether–polyamide containing europium β-Diketone** **G.P2.43**  
Celso Molina<sup>1</sup>, Fernanda Ferraz Camilo<sup>1</sup>, Edson Sena Pereira<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 18:00 Development and characterization of phthalocyanine – graphene oxide hybrid for optoelectronic applications** **G.P2.44**  
Amanda Filizzola Filizzola<sup>1</sup>, Bruno Kan Ping Lima I<sup>1</sup>, Rafaela Salvador Souza Lemos<sup>1</sup>, Natália Cristina Martins da Silva<sup>1</sup>, Thiago Cazati<sup>2</sup>, Bruna Bueno Postacchini<sup>2</sup>, Jaqueline dos Santos Soares<sup>2</sup>, Ana Paula Moreira Barboza<sup>2</sup>, Bernardo Ruegger Almeida Neves<sup>3</sup>, Marcelo Machado Viana<sup>3</sup>, Cláudia Karina Barbosa de Vasconcelos<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica de Minas Gerais, <sup>2</sup>Universidade Federal de Ouro Preto, <sup>3</sup>Universidade Federal de Minas Gerais
- 18:00 Non-sensitized photoelectrode of ZnO decorated with ZnS for solar cells** **G.P2.45**  
Cristian Dias Fernandes<sup>1</sup>, Luciano Gularte<sup>1</sup>, Silvia Azevedo dos Santos Cucatti<sup>1</sup>, Ramon Dadalto Carvalho<sup>1</sup>, Mateus Ferrer<sup>1</sup>, Pedro Lovato Gomes Jardim<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Studies of the Europium and Terbium Vanadates by X-Ray Diffraction** **G.P2.46**  
Cristiane Carvalho Araújo<sup>1</sup>, Rebeca Cristina Costa de Sá<sup>1</sup>, Leonardo Sobreira Rodrigues<sup>2</sup>, Adenilson Oliveira dos Santos<sup>2</sup>, Fernando Mendes<sup>3</sup>, Ana Angélica Mathias Macêdo<sup>1</sup>, Rafael Mendonça Almeida<sup>1</sup>; <sup>1</sup>Federal Institute of Maranhão, <sup>2</sup>Federal University of Maranhão, <sup>3</sup>Polytechnic Institute of Coimbra, Coimbra Health School.
- 18:00 A one-pot synthesis of highly transparent TiO<sub>2</sub> aerogels** **G.P2.47**  
Daliana Muller<sup>1</sup>, Joseane Caroline Bernardes<sup>1</sup>, Geneviève Kreibich Pinheiro<sup>1</sup>, Carlos Renato Rambo<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Electrochromic properties of V<sub>2</sub>O<sub>5</sub> thin film deposited on flexible substrate** **G.P2.48**  
Daniela Neves Placido<sup>1</sup>, Camila Monteiro Cholan<sup>1</sup>, Leandro Lemos Peres<sup>1</sup>, Luana Uszacki Krüger<sup>1</sup>, Douglas Langie da Silva<sup>1</sup>, Wladimir Hernandez Flores<sup>2</sup>, Andre Gundel<sup>2</sup>, Agnieszka Pawlicka<sup>3</sup>, César Antonio Oropesa Avellaneda<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal do Pampa, <sup>3</sup>Instituto de Química de São Carlos-USP
- 18:00 Synthesis of Carbon dots from sucrose carbonization** **G.P2.49**  
Beatriz de Vasconcelos<sup>1</sup>, Davinson Mariano da Silva<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de São Paulo
- 18:00 Synthesis of zinc oxide quantum dots by sol-gel technique for applications in fluorescent materials** **G.P2.50**  
Ana Paula Mello Rocha<sup>1</sup>, Davinson Mariano da Silva<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de São Paulo
- 18:00 Cd<sub>2</sub>SnO<sub>4</sub>/CdS/Cu<sub>2</sub>O/Ag solar cell obtained by chemical techniques.** **G.P2.51**  
Diego Osorio Rivera<sup>1</sup>, Gerardo Torres Delgado<sup>1</sup>, Rebeca Castanedo Pérez<sup>1</sup>, Joaquin Márquez Marín<sup>1</sup>, Orlando Zelaya Ángel<sup>1</sup>; <sup>1</sup>Centro de Investigación y de Estudios Avanzados

- 18:00 Synthesis and morphology optimization of silver nanoparticle assisted by visible light** **G.P2.52**  
 Giovanni Alexander Lima<sup>1</sup>, Danielle Ramos Mota<sup>1</sup>, Diogo Silva Pellosi<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 18:00 Optimization of Kb-C7 Luminescent Down-Shifting films for applications in the P3HT:PC61BM Organic Photovoltaic Device** **G.P2.53**  
 Andres David Pardo Perdomo<sup>1</sup>, Ricardo Vignoto Fernandes<sup>1</sup>, Flavio Franchello<sup>1</sup>, Neusmar Junior Artico Cordeiro<sup>1</sup>, José Leonil Duarte<sup>1</sup>, Edson Laureto Laureto<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 18:00 Microwave-assisted hydrothermal synthesis and characterization of CuFeS<sub>2</sub> powders** **G.P2.54**  
Edson Luiz Foletto<sup>1</sup>, Júlia da Silveira Salla<sup>1</sup>, Dachamir Hotza<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Maria, <sup>2</sup>Universidade Federal de Santa Catarina
- 18:00 Structural properties of ceramics Bi<sub>2</sub>Sn<sub>2(1-x)</sub>Ta<sub>2x</sub>O<sub>7</sub>** **G.P2.55**  
Eduardo da Silva Gomes<sup>1</sup>, Adenilson Oliveira dos Santos<sup>2</sup>, Diego Augusto Batista Barbosa<sup>2</sup>, Fernando Mendes<sup>3,4,5</sup>, Ana Angélica Mathias Macêdo<sup>1</sup>, Rafael Mendonça Almeida<sup>1</sup>; <sup>1</sup>Federal Institute of Maranhão, <sup>2</sup>Federal University of Maranhão, <sup>3</sup>Polytechnic Institute of Coimbra, Coimbra Health School., <sup>4</sup>University of Coimbra, <sup>5</sup>Institute for Clinical and Biomedical Research
- 18:00 Investigation of Vibrational Properties of Bismuth Stannate** **G.P2.56**  
 Rafael Mendonça Almeida<sup>1</sup>, Valéria Matos Lima<sup>2</sup>, João Pedro Lemos Morais<sup>3</sup>, Eduardo da Silva Gomes<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>2</sup>Faculdade Pitágoras Imperatriz, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão - Campus Imperatriz
- 18:00 Structural and Electronic Properties of bulk ZnX (X = F, O, S, Se, Te) and ZnO/ZnF<sub>2</sub>: A DFT Investigation within PBE, PBE + U, and hybrid-HSE Functionals** **G.P2.57**  
Efracio Mamani Flores<sup>1</sup>, Maurício Jeomar Piotrowski<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Quenching Assisted by Solvents on the Luminescence of a Metallopolymer Containing Terbium Ions** **G.P2.58**  
Emerson Cortez Gallego Campos<sup>1</sup>, Cristiano Zanlorenzi<sup>1</sup>, Denis Augusto Turchetti<sup>1</sup>, Leni Akcelrud<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 Gate-voltage control of the Persistent Photoconductivity Effect (PPC) in SnO<sub>2</sub> nanobelts** **G.P2.59**  
Emilson Ribeiro Viana Junior<sup>1</sup>, Geraldo Mathias Ribeiro<sup>2</sup>, Alfredo Gontijo de Oliveira<sup>2</sup>, Juan Carlos González<sup>2</sup>; <sup>1</sup>Federal University of Technology - Paraná, <sup>2</sup>Universidade Federal de Minas Gerais
- 18:00 Experimental and Theoretical Study of C3A with the Computational Package CRYSTAL.** **G.P2.60**  
Enio Darci Silveira da Rocha Loraci Manke Loraci Manke<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>, Pedro Lovato Gomes Jardim<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Microcrystals of α-Bi<sub>2</sub>O<sub>3</sub> obtained by microwave-assisted hydrothermal method** **G.P2.61**  
 Samara Schmidt<sup>1</sup>, Rafael Eiji Saito<sup>2</sup>, Evaldo Toniolo Kubaski<sup>2</sup>, Diogo Paschoalini Volanti<sup>3</sup>, Thiago Sequinel<sup>4</sup>, Vinícius Danilo Nonato Bezzon<sup>5</sup>, Sergio Mazurek Tebcherani<sup>6</sup>; <sup>1</sup>Instituto de Química, Unesp, <sup>2</sup>Universidade Estadual de Ponta Grossa, <sup>3</sup>São Paulo State University, <sup>4</sup>Fundação Universidade Federal da Grande Dourados, <sup>5</sup>Universidade Federal do ABC, <sup>6</sup>Federal University of Technology - Paraná

- 18:00 Structural, morphological and optical study of Eu<sup>3+</sup> doped Bi<sub>2</sub>MoO<sub>6</sub> crystals obtained by microwave assisted hydrothermal method** **G.P2.62**  
Fabio Augusto Pires<sup>1</sup>, Ivo Mateus Pinatti<sup>1</sup>, Priscila Barros de Almeida<sup>1</sup>, Elson Longo<sup>2</sup>, Ieda Lúcia Viana Rosa<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Universidade Federal de São Carlos
- 18:00 Copper antimony sulfide nanoparticles applied to solar cells** **G.P2.63**  
Fábio Baum<sup>1</sup>, Tatiane Pretto<sup>1</sup>, Matheus Costa Oliveira<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 18:00 Synthesis and application of doped titanate nanostructured semiconductors: adsorption and photocatalysis of methylene blue dye.** **G.P2.64**  
Fabírcia Emanuelli Moreira Dias<sup>1</sup>, Ariana Aragão Foratini de Oliveira<sup>1</sup>, Felipe Moessa Bezerra<sup>1</sup>, Karmel Prado Pelissari<sup>1</sup>, Mariana Yumi Simões Kuramoto<sup>1</sup>, Rony Gonçalves de Oliveira<sup>1</sup>, Ademir dos Anjos<sup>1</sup>, Daniela Cristina Manfroi Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Estadual de Mato Grosso do Sul
- 18:00 Potassium Niobate for application in photovoltaic devices** **G.P2.65**  
Francielen San Martins Rodrigues<sup>1</sup>, Cátia Liane Ücker<sup>1</sup>, Wesley Radtke Schwartz<sup>1</sup>, Gustavo Prado dos Passos<sup>1</sup>, Lucas Rafael Quirino de Andrade<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Assembly Considerations for Perovskite Solar Modules** **G.P2.66**  
Francineide Lopes de Araújo<sup>1,2</sup>, Marcelo Kioshi Hirata<sup>2</sup>, Ana Flávia Nogueira<sup>1</sup>, Jilian Nei de Freitas<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Center for Information Technology Renato Archer
- 18:00 Synthesis and characterization of a heterojunction based on SnO<sub>2</sub> modified with Nb<sub>2</sub>O<sub>5</sub> for photocatalytic application** **G.P2.67**  
Geovânia Cordeiro de Assis<sup>1</sup>, Thatiane Veríssimo Dos Santos<sup>1</sup>, Igor Matheus Amorim Silva<sup>1</sup>, Dhara Beatriz de Amorim Pryston<sup>1</sup>, Mario Roberto Meneghetti<sup>1</sup>, Simoni Margareti Plentz Meneghetti<sup>1</sup>; <sup>1</sup>Universidade Federal de Alagoas
- 18:00 Impedance spectroscopy degradation study on flexible organic photovoltaic module** **G.P2.68**  
Gerson Santos<sup>1,2</sup>, Diego Bagnis<sup>3</sup>, Gabriela Amorim Soares<sup>3</sup>, Roberto Zilles<sup>1</sup>; <sup>1</sup>Instituto de Energia e Ambiente, <sup>2</sup>FACULDADE ESTÁCIO DE SÃO PAULO, <sup>3</sup>Centro de Inovações CSEM Brasil
- 18:00 Synthesis and characterization of a photocatalytic system based on nitridation of Ta<sub>2</sub>O<sub>5</sub> nanotubes** **G.P2.69**  
Henrique Barbosa Gonçalves<sup>1</sup>, Thiago André Salgueiro Soares<sup>1,2</sup>, Plínio Antoninho de Freitas<sup>1</sup>, Sherdil Khan<sup>3,4</sup>, Giovanna Machado<sup>2</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Centro de Tecnologias Estratégicas do Nordeste, <sup>3</sup>Universidade Federal do Rio Grande do Sul, <sup>4</sup>Instituto de Química - UFRGS
- 18:00 Synthesis and characterization of crystalline phases of the Bi<sub>6</sub>Te<sub>1,8</sub>Si<sub>0,2</sub>O<sub>15</sub> composition** **G.P2.70**  
Gisane Gasparotto<sup>1</sup>, Katiúscia Daiane Ferreira<sup>1,2</sup>, Lauro June Queiroz Maia<sup>1</sup>, Jesiel Freitas Carvalho<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Instituto Federal de Goiás
- 18:00 Synthesis of TiO<sub>2</sub> micro/nanosticks and CsPbBr<sub>3</sub> perovskite nanocrystal composites for photocatalysis applications** **G.P2.71**  
Grace Kelly Quarteiro Ganharu<sup>1</sup>, Guilherme Sombrio<sup>1</sup>, Cynthia Marina Rivaldo Gómez<sup>1</sup>, Marcia Tsuyama Escote<sup>1</sup>, José Antônio Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Solar Cells Sensitized by Natural Dye using Perovskita (CaTiO<sub>3</sub>)** **G.P2.72**  
Icoana Lais Leitão Mascarenhas Martins<sup>1</sup>, Vanessa Lacerda Menzandes<sup>1</sup>, Diego Cardoso de Souza<sup>1</sup>, Pilar Hidalgo Falla<sup>1</sup>; <sup>1</sup>Universidade de Brasília

- 18:00 Interaction and Redox Processes of Zinc Oxide Nanostructures with Cytochrome C: Systems Applicable to Spintronics** **G.P2.73**  
David da Mata Lopes<sup>1</sup>, Denise Criado<sup>1</sup>, Iseli L Nantes-Cardoso<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 One-pot aqueous synthesis of Ag<sub>2</sub>X quantum dots** **G.P2.74**  
IZABEL GOMES DE SOUZA SOBRINHA<sup>1</sup>, Isabelle Moraes Amorim Viegas<sup>1</sup>, Ingrid Waleessa Valeriano Gonçalves<sup>1</sup>, Beate S Santos<sup>1</sup>, Adriana Fontes<sup>1</sup>, Claudete Fernandes Pereira<sup>1</sup>, Goreti Pereira<sup>1</sup>, Giovannia Araújo Pereira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 18:00 Application of FTIR spectroscopy for evaluation of hydrophilicity variation of ABO<sub>3</sub> thin films: effect on optical properties** **G.P2.75**  
J. L. Clabel<sup>1</sup>, A. T. Iram<sup>1</sup>, Máximo Siu Li<sup>1</sup>, E. Jr. Marega<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 18:00 Correlation between Structure and Properties of Siloxane-Polyethers Hybrid Electrolytes for Application in Dye-sensitized Solar Cells** **G.P2.76**  
Yngrid Synara de Sena Silva<sup>1</sup>, Karim Dahmouche<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 18:00 Photocurrent Generation in Environmentally Friendly Processed Organic Solar Cells: Exploring the Contribution of the Fullerene and Non-Fullerene-Based Molecules** **G.P2.77**  
Leandro Benatto<sup>1</sup>, LUANA CRISTINA DE MENEZES DE MENEZES<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>, Marlus Koehler<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 Evaluation on the influence of different routes of Nb<sub>2</sub>O<sub>5</sub> synthesis for application in Dye Sensitized Solar Cells** **G.P2.78**  
Lucas Rafael Quirino de Andrade<sup>1</sup>, Cátia Liane Ücker<sup>1</sup>, Fabio Calcagno Riemke<sup>1</sup>, Gustavo Prado dos Passos<sup>1</sup>, Maicon Dinael Ücker<sup>1</sup>, Marcelo Lucas Vitale<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 A case of organic photovoltaic (OPV) cells application in a solar plant.** **G.P2.79**  
Luiz Carlos Mariano<sup>1</sup>, Talitha Ramos Canabarra dos Santos<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 An application of organic photovoltaic cells (OPV) plant to provide electric power for a bus station tube-type.** **G.P2.80**  
Luiz Carlos Mariano<sup>1</sup>, Anna Gabriella Tempesta<sup>1</sup>, Kaike Rosivan Maia Pacheco<sup>1</sup>, Talitha Ramos Canabarra dos Santos<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 Obtaining Nb<sub>2</sub>O<sub>5</sub> by the Sol-Gel route for photocatalytic application** **G.P2.81**  
Maicon Dinael Ücker<sup>1</sup>, Cátia Liane Ücker<sup>1</sup>, Marcelo Lucas Vitale<sup>1</sup>, Lucas Rafael Quirino de Andrade<sup>1</sup>, Andriele Lange da Rosa<sup>1</sup>, Fabio Calcagno Riemke<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Synthesis and characterization of Al<sub>2</sub>O<sub>3</sub> and Nb<sub>2</sub>O<sub>5</sub>-doped TiO<sub>2</sub> for application in dye-sensitized solar cells** **G.P2.82**  
Marcelo Lucas Vitale<sup>1</sup>, Cátia Liane Ücker<sup>1</sup>, Fabio Calcagno Riemke<sup>1</sup>, Lucas Rafael Quirino de Andrade<sup>1</sup>, Maicon Dinael Ücker<sup>1</sup>, Pedro Henrique Sangaletti<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Theoretical study of MgMoO<sub>4</sub> using calculations of first principles** **G.P2.83**  
Natan Mendes Casero<sup>1</sup>, Mateus Ferrer<sup>1</sup>, André Renato Mello Sanches<sup>1</sup>, Mário Lúcio Moreira<sup>1,2</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Grupo de Pesquisa em Crescimento de Cristais Avançados e Fotônica, Universidade Federal de Pelotas



- 18:00 Solar-driven water splitting over rGO/Hematite nanocomposite** **G.P2.84**  
 Jairo Breno Francisco de Oliveira Barauna<sup>1</sup>, Luelc Sousa da Costa<sup>1</sup>, Francini Aline Belz Hesse<sup>1</sup>, Nathália C Verissimo<sup>1</sup>, Rodnei Bertazzoli<sup>2,1,3,4</sup>, <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>4</sup>Faculdade de Engenharia Mecânica, Unicamp
- 18:00 Characterization of thin films of PVK/N2200 heterojunction for use as active layer in an all-polymer solar cell** **G.P2.85**  
Patrick Pascoal de Brito Silva<sup>1</sup>, Lallamand Canedo de Souza<sup>1</sup>, Artemis Marti Ceschin<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 18:00 Microwave-assisted solvothermal synthesis and characterization of TiNb<sub>2</sub>O<sub>7</sub> for application in semiconductor-based devices** **G.P2.86**  
Pedro Henrique Sangaletti<sup>1</sup>, Gustavo Prado dos Passos<sup>1</sup>, Cátia Liane Ücker<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>, Mateus Monteiro Marques<sup>1</sup>, Wesley Radtke Schwartz<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 High-transmittance nanostructured thin film applied to solar cell encapsulation** **G.P2.87**  
Ramon Dadalto Carvalho<sup>1</sup>, Caroline Schmechel Schiavon<sup>1</sup>, Cristian Dias Fernandes<sup>1</sup>, Luciano Timm Gularte<sup>1</sup>, Silvia Azevedo dos Santos Cucatti<sup>1</sup>, Pedro L. G. Jardim<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Synthesis and application of CdS / ZnS nanoparticles as lds layer in organic photovoltaic device** **G.P2.88**  
Roberto Masahiko Aoki<sup>1</sup>, João Paulo Almirão de Jesus<sup>1</sup>, Éverton Tiago dos Santos Torres<sup>1</sup>, Ricardo Vignoto Fernandes<sup>2</sup>, Marco Aurélio Toledo da Silva<sup>1,3</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade Estadual de Londrina, <sup>3</sup>Universidade Tecnológica Federal do Paraná - Londrina
- 18:00 Electrical circuit simulation for Dye sensitized solar cells** **G.P2.89**  
ROCELITO LOPES ANDRADE<sup>1</sup>, Marcos Jose Leite Santos<sup>2</sup>, Matheus Costa Oliveira<sup>1</sup>, EMERSON Kohlrausch<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto de Química - UFRGS
- 18:00 In-situ formation of NiTiO<sub>3</sub> in TiO<sub>2</sub> for inorganic sensitized solar cells** **G.P2.90**  
Rodrigo Matte Rios Fernandez<sup>1</sup>, EMERSON Kohlrausch<sup>2</sup>, Marcos Jose Leite Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto de Química - UFRGS
- 18:00 Synthesis and characterization of carbon dots for the manufacture of counter electrodes for quantum dots sensitized solar cells** **G.P2.91**  
Sarah Lima<sup>1</sup>, Letícia Gazola Tartuci<sup>1</sup>, Roberto Vaz<sup>1</sup>, Marco Antonio Schiavon<sup>1</sup>; <sup>1</sup>Universidade Federal de São João Del Rei
- 18:00 Potassium niobate as a photoelectrode for dye-sensitive solar cell** **G.P2.92**  
Silvia Azevedo dos Santos Cucatti<sup>1</sup>, Luciano Timm Gularte<sup>1</sup>, Cristian Dias Fernandes<sup>1</sup>, Ramon Dadalto Carvalho<sup>1</sup>, Mateus Ferrer<sup>1</sup>, Pedro Lovato Gomes Jardim<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Synthesis and characterization of N-doped TiO<sub>2</sub> nanotubes by ionic implantation** **G.P2.93**  
Thiago Luiz de Almeida Cortiz<sup>1</sup>, Katia Franklin Albertin Torres<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

- 18:00 Study of the use of ceramic composite materials applied to the manufacture of photovoltaic solar cells: a technological propection** **G.P2.94**  
 Hitalo de Jesus Bezerra da Silva<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>,  
 Moisés das Virgens Santana<sup>1</sup>, Humberto Denys De Almeida Silva<sup>2</sup>, José Milton  
 Elias de Matos<sup>1</sup>, Maria Rita de Moraes Chaves Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do  
 Piauí, <sup>2</sup>Faculdade do Vale do Itapecurú
- 18:00 Technological mapping of the use of advanced ceramics in the photocatalysis process aiming at the degradation of drugs** **G.P2.95**  
 Humberto Denys De Almeida Silva<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>2</sup>,  
 Hitalo de Jesus Bezerra da Silva<sup>2</sup>, Moisés das Virgens Santana<sup>2</sup>; <sup>1</sup>Faculdade do  
 Vale do Itapecurú, <sup>2</sup>Universidade Federal do Piauí
- 18:00 Morphological characterization of hybrid thin films of polythiophene:fulerene doped with CoFe<sub>2</sub>O<sub>4</sub> nanoparticles for photovoltaic applications** **G.P2.96**  
Vitória Maria Rodrigues Vasconcelos<sup>1</sup>, Milliane Passos da Silva Palacio<sup>1</sup>,  
 Francisco Gilvane Sampaio de Oliveira<sup>1</sup>, Maurício Sousa Pereira<sup>1</sup>, Francisco  
 Anderson de Sousa Lima<sup>1</sup>, Igor Frota Vasconcelos<sup>1</sup>; <sup>1</sup>Universidade Federal do  
 Ceará
- 18:00 Prospective survey of the use of advanced ceramic materials in solar cells** **G.P2.97**  
Vitoria Regina Sousa Bispo<sup>1</sup>, Sabrina Anicácia de Brito Correia<sup>1</sup>, Albert Santos  
 Silva<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>, Daniella Stepheny Carvalho  
 Andrade<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 Photocatalytic activity of TiO<sub>2</sub> with mixture of anatase/rutile phases synthesized by a new synthetic route** **G.P2.98**  
Maykon André Montanhera<sup>1</sup>, Éder Alves Pereira<sup>1</sup>, Fernando Rogério de  
 Paula<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista

## TUESDAY , SEPTEMBER 24

### Poster presentations

#### *SESSION G.P4 (18:00 - 19:30)*

- 18:00 Morphological and spectroscopic studies of AgMoO<sub>4</sub>/Ca<sub>10</sub>(PO<sub>4</sub>)<sub>6</sub>(OH)<sub>2</sub> composites** **G.P4.1**  
Jussara Soares da Silva<sup>1</sup>, Priscila Barros de Almeida<sup>1</sup>, Máximo Siu Li<sup>2</sup>, Ieda Lúcia  
 Viana Rosa<sup>1</sup>, Elson Longo<sup>1,3</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São  
 Carlos, <sup>2</sup>São Carlos Institute of Physics, University of São Paulo, <sup>3</sup>Universidade  
 Federal de São Carlos
- 18:00 Hydrothermal synthesis of nitrogen and copper-doped TiO<sub>2</sub> nanotubes and their characterization for photoelectrochemical applications** **G.P4.2**  
Larissa da Mota Heerd<sup>1</sup>, Márcia Cardoso Manique<sup>2</sup>, Daniela Zambelli  
 Mezalira<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal do Rio  
 Grande do Sul
- 18:00 Analysis of photocatalytic activity of mixed catalysts for discoloration of binary dyes mixtures** **G.P4.3**  
Fabiano Rafael Praxedes<sup>1</sup>, Marcos Augusto Lima Nobre<sup>1</sup>, Silvania  
 Lanfredi<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente

- 18:00 The temperature influence on the optical and structural properties of the  $\text{Ge}_2\text{Y}_{1.96}\text{Eu}_{0.04}\text{O}_7$  crystalline phase** **G.P4.4**  
Itália Vallerini Barbosa<sup>1</sup>, Lauro June Queiroz Maia<sup>1</sup>, Leandro Felix Bufaical<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 18:00 Study of the degradation of PSIF-DBT in films processed by different solvent** **G.P4.5**  
Kaike Rosivan Maia Pacheco<sup>1</sup>, LUANA CRISTINA DE MENEZES DE MENEZES<sup>1</sup>, MAIARA DE JESUS BASSI<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 Intensification of the emission efficiency of Eu(III) through the formation of a new Eu(III)-Ir(III) heterobimetallic complex** **G.P4.6**  
Felipe Manrique Canisares<sup>1</sup>, Sergio Antonio Marques Lima<sup>1</sup>, Ana Maria Pires<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente
- 18:00 Investigation of Nd<sup>3+</sup> down conversion in transparent ferroelectric ceramic hosts** **G.P4.7**  
Guilherme Ilário Correr<sup>1</sup>, Marcio Peron Franco de Godoy<sup>1</sup>, Ducinei Garcia<sup>1</sup>, Eriton Rodrigo Botero<sup>1</sup>, Flávio Paulo Milton<sup>1</sup>, Fernando Andrés Londoño Badillo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 18:00 Investigating exciton diffusion in the polymeric limit** **G.P4.8**  
Laura Simonassi Raso de Paiva<sup>1</sup>, Tiago de Sousa Araújo Cassiano<sup>1</sup>, Leonardo Evaristo de Sousa<sup>2</sup>, Pedro Henrique de Oliveira Neto<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Estadual de Goiás
- 18:00 The role of molecular vibrations on exciton dynamics** **G.P4.9**  
Larissa dos Santos Born<sup>1</sup>, Ingrid Gomes Ribeiro<sup>1</sup>, Wiliam Ferreira da Cunha<sup>1</sup>, Leonardo Evaristo de Sousa<sup>2</sup>, Pedro Henrique de Oliveira Neto<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Estadual de Goiás
- 18:00 Silver nanocubes SERS substrate: performance statistics analyses based on local properties of field intensification** **G.P4.10**  
Adriana Santinom<sup>1</sup>, Italo Odone Mazali<sup>1</sup>, Alexandre Guimarães Brolo<sup>2</sup>, Diego Pereira dos Santos<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>University of Victoria British Columbia
- 18:00 Fluorescence lifetime in organic/Silica hybrids xerogels doped with Rhodamine-B** **G.P4.11**  
 Diego da Silva Manoel<sup>1</sup>, Adriano J.G. Otuka<sup>1</sup>, Leandro Zucolotto Cocca<sup>1</sup>, Fabio Simões de Vicente<sup>2</sup>, Leonardo De Boni<sup>1</sup>, Cleber R. Mendonça<sup>1</sup>; <sup>1</sup>São Carlos Institute of Physics, University of São Paulo, <sup>2</sup>Instituto de Geociências e Ciências Exatas
- 18:00 Photocatalytic activity of TiO<sub>2</sub>-Bacterial Celulose Nanocomposites Spheres in Wastewater Contaminant Removal** **G.P4.12**  
Alexandre Barbosa da Silva<sup>1</sup>, Tassiane Neves Astuti<sup>1</sup>, Gilberto Falk<sup>1</sup>, Karina Cesca<sup>1</sup>, Dachamir Hotza<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Photocatalytic degradation of organic contaminants using the Ag<sub>3</sub>PO<sub>4</sub>: W catalyst.** **G.P4.13**  
Aline Barrios Trench<sup>1</sup>, Thales Rafael Machado<sup>1</sup>, Isaac Sánchez Montes<sup>1</sup>, Mayara Mondego Teixeira<sup>2</sup>, Elson Longo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos
- 18:00 Judd-Ofelt analysis in ZnAlEu layered double hydroxides** **G.P4.14**  
Alysson Ferreira Morais<sup>1</sup>, Felipe Oliveira Machado<sup>1</sup>, Alexandre Cândido Teixeira<sup>1</sup>, Ivan Guide Nunes da Silva<sup>1</sup>, Danilo Mustafa<sup>1</sup>; <sup>1</sup>Instituto de Física - Universidade de São Paulo

- 18:00 Aminofunctionalized core@multishell green/red emitter for light converting devices** **G.P4.15**  
Alessandro Bruno Silva Garcia<sup>1</sup>, Sergio Antonio Marques Lima<sup>1</sup>, Ana Maria Pires<sup>1</sup>; <sup>1</sup>Faculdade de Ciências e Tecnologia da UNESP, Campus de Presidente Prudente
- 18:00 Pollutants Photodegradation: In situ Monitoring by Voltammetric Method and Boron Doped Diamond Electrode** **G.P4.16**  
Ana Paula Andrade Barbosa<sup>1</sup>, Beatriz Caetano Benuto<sup>1</sup>, Maiyara Carolyne Prete<sup>1</sup>, César Ricardo Teixeira Tarley<sup>1</sup>, Luiz Henrique Dall Antonia<sup>1</sup>, Roberta Antigo Medeiros<sup>1</sup>, Roberto de Matos<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 18:00 Assembly between chiral/achiral polymers** **G.P4.17**  
Ana Paula Glislere<sup>1</sup>, Denis Augusto Turchetti<sup>1</sup>, Cristiano Zanlorenzi<sup>1</sup>, Leni Akcelrud<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 Water-suspended MoO<sub>3</sub> nanoparticles prepared by LASIS and fast processing as thin film by ultrasonic spray deposition** **G.P4.18**  
Anderson E. X. Gavim<sup>1</sup>, Mariana Richelle Pereira Cunha<sup>2</sup>, Edna Regina Spada<sup>3</sup>, Thiago Neves Machado<sup>1</sup>, Arandi Ginane Bezerra-Jr<sup>1</sup>, Wido Herwig Schreiner<sup>4</sup>, Paula C. Rodrigues<sup>1</sup>, Abd. Rashid bin Mohd Yusoff<sup>5</sup>, Andreia Gerniski Macedo<sup>1,6</sup>, Roberto Mendonça Faria<sup>3</sup>, Wilson José Da Silva<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>São Carlos Institute of Physics, University of São Paulo, <sup>4</sup>Universidade Federal do Paraná, <sup>5</sup>Yonsei University, <sup>6</sup>Graduate Program in Physics and Astronomy, Federal University of Technology, Curitiba – PR – Brazil
- 18:00 CO<sub>2</sub> and H<sub>2</sub>O Adsorption on Nanocrystalline TiO<sub>2</sub> Anatase for Artificial Photosynthesis Application** **G.P4.19**  
Andre Luiz Da Silva<sup>1</sup>, Lili Wu<sup>2</sup>, Ricardo Castro<sup>2</sup>, Douglas Gouvea<sup>1</sup>; <sup>1</sup>University of São Paulo, <sup>2</sup>University of California Davis
- 18:00 Development of heterostructures containing MoS<sub>2</sub> for the application in heterogeneous photocatalysis** **G.P4.20**  
Bruna Proença de Albuquerque<sup>1</sup>, Vagner Romito de Mendonça<sup>1</sup>, Douglas Mendes Duque<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 18:00 Rattan-derived biomorphous Al<sub>2</sub>O<sub>3</sub> coated with TiO<sub>2</sub> aerogels for photocatalysis** **G.P4.21**  
Joseane Caroline Bernardes<sup>1</sup>, Tobias Fey<sup>2</sup>, Rafael Bento Serpa<sup>1</sup>, Eloah Latocheski<sup>1</sup>, Daliana Muller<sup>1</sup>, Reinoldo Grudtner Kuntze Jr.<sup>1</sup>, Josiel Barbosa Domingos<sup>1</sup>, Carlos Renato Rambo<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Friedrich Alexander Universität Erlangen Nürnberg
- 18:00 Obtaining and characterization of photocatalysts based on TiO<sub>2</sub>-S** **G.P4.22**  
Chrystopher Allan Miranda Pereira<sup>1</sup>, Rafael Aparecido Ciola Amoresi<sup>2</sup>, Ubirajara Coletto Junior<sup>1</sup>, Elias de Souza Monteiro Filho<sup>1</sup>, Maria Aparecida Zaghete<sup>1</sup>, Leinig Antonio Perazolli<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil, <sup>2</sup>Universidade Estadual de São Paulo - Campus Guaratinguetá
- 18:00 Fabrication of AgInSe<sub>2</sub>/TiO<sub>2</sub> hybrid photocatalysts for photoelectrochemical water splitting** **G.P4.23**  
Danilo Alfonso Piña Velasquez<sup>1,2</sup>, Thiago André Salgueiro Soares<sup>1,2</sup>, Felipe Leon Nascimento de Sousa<sup>1</sup>, Denilson de Vasconcelos Freitas<sup>1</sup>, Marcelo Navarro<sup>1</sup>, Giovanna Machado<sup>2</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Centro de Tecnologias Estratégicas do Nordeste

- 18:00 Ratiometric thermochromism of a metallopolymer complexed with europium ions** **G.P4.24**  
Denis Augusto Turchetti<sup>1</sup>, Alisson de Jesus Santana<sup>1</sup>, Luís Gustavo Teixeira Alves Duarte<sup>2</sup>, Teresa Dib Zambon Atvars<sup>2</sup>, Raquel Aparecida Domingues<sup>3</sup>, Leni Akcelrud<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Universidade Federal de São Paulo
- 18:00 Stabilization of the V<sub>2</sub>O<sub>5</sub> Phase by Thermal Oxidation Method** **G.P4.25**  
 Alex da Cunha Campos<sup>1</sup>, Elder Wagner Lobo Ribeiro<sup>1</sup>, Gabriela Martins Silva<sup>1</sup>, Renata Viana Santos<sup>1</sup>, Suzilene Vasconcelos Santos<sup>1</sup>, Pedro Paulo Rodrigues Pinheiro<sup>1</sup>, Cleidilane Sena Costa<sup>1,2</sup>, Gabriel Cabrera Pasca<sup>1,2</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Instituto de Pesquisas Energeticas e Nucleares
- 18:00 Correlation between structural properties and photocatalytic activity of ZnWO<sub>4</sub> nanocrystals** **G.P4.26**  
Eliezer Costa Silva<sup>1</sup>, Pablo Santana Lemos<sup>2</sup>, Içamira Costa Nogueira<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Universidade Federal de São Carlos
- 18:00 CdSe quantum dots as fluorescent nanomarkers for diesel oil** **G.P4.27**  
 Aquiles Silva Nascimento<sup>1</sup>, Paulo Cabral Filho<sup>1</sup>, Adriana Fontes<sup>1</sup>, Beate Saegesser Santos<sup>1</sup>, Florival Rodrigues Carvalho<sup>1</sup>, Luiz Stragevitch<sup>1</sup>, Elisa Soares Leite<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 18:00 Photocatalytic activity of PbMoO<sub>4</sub> nanocrystals synthesized by sonochemistry method** **G.P4.28**  
Elton Ribeiro da Silva<sup>1</sup>, Francisco Xavier Nobre<sup>2</sup>, Rodrigo Muniz de Sousa<sup>1</sup>, Yurimiler Leyet Ruiz<sup>1</sup>, Paulo Rogério da Costa Couceiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Amazonas
- 18:00 Parametric study on photoluminescence: color shift from solid state lighting devices** **G.P4.29**  
Elvo Calixto Burini Junior<sup>1</sup>, Emerson Roberto Santos<sup>1</sup>, Roberto Koji Onmori<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 18:00 Fundamental aspects of photodynamic therapy associated to the ultrasound for the treatment of non-melanoma skin cancer** **G.P4.30**  
Erika Toneth Ponce Ayala<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 18:00 Development of catalysts for the oxidation of water based on ferrite of cobalt supported on hematite.** **G.P4.31**  
Fabiana Vieira Silva<sup>1,2</sup>, Aparecido Ribeiro Souza<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Institute of Chemistry
- 18:00 Performance of Au/p-Si/n-ZnO/C photodiode obtained by the calcination of thin films of ZnO<sub>2</sub> grown by SILAR technique.** **G.P4.32**  
Faustino Aqui Romero<sup>1</sup>, Francisco Javier Willars Rodriguez<sup>1</sup>, Iker Rodrigo Chávez Urbiola<sup>2</sup>, Yuri V Vorobiev<sup>1</sup>, Rafael Ramírez-Bon<sup>1</sup>; <sup>1</sup>Centro de Investigación y de Estudios Avanzados, <sup>2</sup>The University of Texas at Dallas
- 18:00 Ratiometric thermal sensing of the Eu<sup>3+</sup> doped lead borosilicate glass: Effect of Europium concentration** **G.P4.33**  
Filippe de Bernardino Bernardino<sup>1</sup>, Sidney Alves Lourenço<sup>2</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Londrina, <sup>2</sup>Universidade Tecnológica Federal do Paraná

- 18:00 Observation of a Te<sup>4+</sup> center with broad red emission band and high fluorescence quantum efficiency in TeO<sub>2</sub>-Li<sub>2</sub>O glass** **G.P4.34**  
Francine Bettio Costa<sup>1</sup>, Ana Kely R Souza<sup>2</sup>, Junior Reis Silva<sup>2</sup>, João Carlos Silos Moraes<sup>1</sup>, Luiz Antonio de Oliveira Nunes<sup>3</sup>, Luis H C Andrade<sup>2</sup>, Sandro Marcio Lima<sup>2</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Estadual de Mato Grosso do Sul, <sup>3</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 18:00 Effects of aluminum doping in CdS thin films prepared by CBD and the performance on Schottky diodes TCO/CdS:Al/C** **G.P4.35**  
Francisco Javier Willars Rodriguez<sup>1</sup>, Iker Rodrigo Chávez Urbiola<sup>2</sup>, Rafael Ramírez-Bon<sup>1</sup>, Pavel Vorobiev<sup>3</sup>, Yuri V Vorobiev<sup>1</sup>; <sup>1</sup>Centro de Investigación y de Estudios Avanzados, <sup>2</sup>The University of Texas at Dallas, <sup>3</sup>Centro de Investigación en Materiales Avanzados
- 18:00 X-ray excited optical luminescence of metal halide hybrid perovskites: Effect of the beam and temperature** **G.P4.36**  
Francisco Mateus Cirilo da Silva<sup>1,2</sup>, Rodrigo Szostak<sup>1,2</sup>, Veronica de Carvalho Teixeira<sup>2</sup>, Leonardo Mitsuo Kofukuda<sup>2</sup>, José Claudio Corsaletti<sup>1,2</sup>, Guilherme Calligaris de Andrade<sup>2</sup>, Márcio Medeiros Soares<sup>2</sup>, Ana Flávia Nogueira<sup>1</sup>, Helio Cesar Nogueira Tolentino<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 18:00 Spectroscopic properties and Judd-Ofelt analysis of Er<sup>3+</sup>/Yb<sup>3+</sup>/Tm<sup>3+</sup> doped tellurite glasses** **G.P4.37**  
Gaston Lozano Calderón<sup>1</sup>, Otávio de Brito Silva<sup>1</sup>, Rogéria Rocha Gonçalves<sup>2</sup>, Víctor Anthony García Rivera<sup>3</sup>, E. Marega Jr.<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto, <sup>3</sup>Universidad Nacional Mayor de San Marcos
- 18:00 Luminescent polyurethane films containing CdSe quantum dots for photonic applications** **G.P4.38**  
Giovanna Ferreira Bigotto Gonçalves<sup>1</sup>, João Batista Souza Junior<sup>2</sup>, Ricardo Bortoletto-Santos<sup>3</sup>, Wagner Luiz Polito<sup>1</sup>, Danilo Manzani<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos-USP, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Embrapa Instrumentação
- 18:00 Nanotubes of TiO<sub>2</sub> Sensitized with Ag and Au nanoparticles for H<sub>2</sub> production Photocatalysis of water** **G.P4.39**  
Jeice M. Santos<sup>1</sup>, Letícia B. V. Sales<sup>1</sup>, Rhauane Almeida Galvão<sup>1</sup>, Paloma B. Barreto<sup>1</sup>, Giovanna Machado<sup>1</sup>; <sup>1</sup>Centro de Tecnologias Estratégicas do Nordeste
- 18:00 Surface functionalization of YVO<sub>4</sub> nanoparticles with cucurbit[n]urils: potential hybrid systems for thermal sensing in photodynamic therapy** **G.P4.40**  
Giulia Rinaldi<sup>1</sup>, Rafael Perrella<sup>1</sup>, Gabriela Guida<sup>1</sup>, Paulo Cesar de Sousa Filho<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 18:00 One-step microwave assisted "self-impregnation" of TiO<sub>2</sub> nanostructures with Ag for boosted photocatalytic hydrogen production** **G.P4.41**  
Guilherme Boenny Strapasson<sup>1</sup>, Nicole Haas Lazzari<sup>1</sup>, Daniel Eduardo Weibel<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 18:00 Ultrafast spectroscopy of hollow AgAu nanoparticles at high pulse fluence** **G.P4.42**  
Guilherme Ferreira Ferbonink<sup>1</sup>, Thenner Silva Rodrigues<sup>2</sup>, Pedro Henrique Cury Camargo<sup>3</sup>, Rodrigo Queiroz Albuquerque<sup>4</sup>, René Alfonso Nome<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal do Rio de Janeiro, <sup>3</sup>Universidade de São Paulo, <sup>4</sup>WWU Münster

- 18:00 Study of the parameters used to obtain PVDF / TiO<sub>2</sub> fibers via solution blow spinning** **G.P4.43**  
Guilherme Schiavão Padovani<sup>1,2</sup>, Tiago Cesar Gimenes<sup>2</sup>, Fernando Rogério de Paula<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Universidade Estadual Paulista Faculdade de Engenharia de Ilha Solteira, <sup>3</sup>São Paulo State University
- 18:00 Colloidal rare earth phosphovanadates for luminescent thermometry** **G.P4.44**  
Gustavo Fabri Derroso<sup>1</sup>, Rafael Perrella<sup>1</sup>, Gabriela Guida<sup>1</sup>, Paulo Cesar de Sousa Filho<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 18:00 Synthesis, optical properties, and functionalization of halide perovskite quantum dots** **G.P4.45**  
Helder Moreira Braga<sup>1</sup>, Cynthia Marina Rivaldo Gómez<sup>1</sup>, José Antônio Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Study of the photoluminescence of the zinc tungstate crystals obtained by different methods of chemical synthesis** **G.P4.46**  
 Eliezer Costa Silva<sup>1</sup>, Marcelo de Assis de Assis<sup>2</sup>, Edson Roberto Leite<sup>3</sup>, Içamira Costa Nogueira<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)
- 18:00 Enhancement in fluorescence of label free ds DNA using plasmonic nano antennas** **G.P4.47**  
Iram Taj Awan<sup>1</sup>, Manoel Messias Pereira de Miranda<sup>1</sup>, J. L. Clabel<sup>1</sup>, Otavio de Brito Silva<sup>1</sup>, E. Marega Jr.<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 18:00 Study of Chemical Kinetics of P3HT Synthesis by Grignard metathesis** **G.P4.48**  
Isabela Custódio Mota<sup>1</sup>, Maria de Fátima Vieira Marques<sup>1</sup>, Jonathan Jose Rubio Arias<sup>1</sup>, Raphael Értola Pereira de Deus Santos<sup>2</sup>, Luísa Banar Guedes<sup>2</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ, <sup>2</sup>Universidade Federal do Rio de Janeiro
- 18:00 Modified niobium(V) oxide-based mesoporous nanomaterials and its technological applications in photocatalysis** **G.P4.49**  
Iza Fonte Boa Silva<sup>1,2</sup>, VITOR DE ALMEIDA DE ALMEIDA<sup>2</sup>, Tatiana Aparecida Ribeiro dos Santos<sup>2</sup>, Marcelo Gonçalves Rosmaninho<sup>3</sup>, Flávia Cristina Camilo Moura<sup>2</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica de Minas Gerais, <sup>2</sup>Universidade Federal de Minas Gerais, <sup>3</sup>Universidade Federal de Ouro Preto
- 18:00 Gold nanorods alignment in microfabricated channels applied to SERS platforms** **G.P4.50**  
Jaciara Bär<sup>1,2</sup>, Anerise de Barros<sup>2</sup>, Davi Henrique Starnini de Camargo<sup>1</sup>, Carlos Cesar Bof Bufon<sup>1,2</sup>, Italo Odone Mazali<sup>2</sup>; <sup>1</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>2</sup>Instituto de Química (IQ) - Universidade Estadual de Campinas (Unicamp)
- 18:00 Assessing the reliability of protocols for exciton diffusion length estimation** **G.P4.51**  
Jacyara Flores Arbues Carneiro<sup>1</sup>, Luiz Henrique Hideki Igari Cavamura<sup>1</sup>, Leonardo Evaristo de Sousa<sup>2</sup>, Pedro Henrique de Oliveira Neto<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Estadual de Goiás
- 18:00 New one-pot aqueous synthesis of plasmonic copper chalcogenides** **G.P4.52**  
Jailson José da Silva<sup>1</sup>, Wedja Maciel dos Santos<sup>1</sup>, Rafael da Silva Fernandes<sup>1</sup>, Adriana Fontes<sup>1</sup>, Giovannia Araújo Pereira<sup>1</sup>, Goreti Pereira<sup>1</sup>, Claudete Fernandes Pereira<sup>1</sup>, Beate S Santos<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

- 18:00 Performance of DPP-PDI-DPP as electron acceptor material in organic photovoltaics** **G.P4.53**  
JAQUELINE CRISTINE DESORDI<sup>1</sup>, Mariana Richelle Pereira da Cunha<sup>2</sup>, Edna Regina Spada<sup>2</sup>, PAULA CRISTINA RODRIGUES<sup>1</sup>, Roberto Mendonça Faria<sup>2</sup>, Emilson Ribeiro Viana Junior<sup>1</sup>, Andreia Gerniski Macedo<sup>1</sup>; <sup>1</sup>Federal University of Technology, Curitiba - PR, <sup>2</sup>University of São Paulo, São Carlos – SP
- 18:00 Synthesis and self-assembly of all inorganic perovskite quantum dots** **G.P4.54**  
João Batista Souza Junior<sup>1</sup>, Gabriel Ravanhani Schleder<sup>1</sup>, Jefferson Bettini<sup>1</sup>, Edson Roberto Leite<sup>2,1</sup>; <sup>1</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>2</sup>Universidade Federal de São Carlos
- 18:00 Synthesis and characterization of CdSe/CdS core/shell type Quantum Dots via hot injection route** **G.P4.55**  
João Paulo Almirão de Jesus<sup>1</sup>, Ricardo Vignoto Fernandes<sup>2</sup>, Wesley Renzi<sup>3</sup>, Sidney Alves Lourenço<sup>4</sup>, Marco Aurélio Toledo da Silva<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade Estadual de Londrina, <sup>3</sup>Instituto Federal do Paraná, <sup>4</sup>Universidade Tecnológica Federal do Paraná - Londrina
- 18:00 synthesis and characterization of nickel oxide nanoparticles by the sol-gel method** **G.P4.56**  
João Victor Justulin Fanton<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Londrina
- 18:00 Pd/TiO<sub>2</sub> aerogels for mixed catalysis in wide-spectrum UV-vis** **G.P4.57**  
Joseane Caroline Bernardes<sup>1</sup>, Eloah Latocheski<sup>1</sup>, Daliana Muller<sup>1</sup>, Josiel Barbosa Domingos<sup>1</sup>, Carlos Renato Rambo<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Multiphase TiO<sub>2</sub> aerogels for photocatalytic degradation of *p*-nitrophenol** **G.P4.58**  
Joseane Caroline Bernardes<sup>1</sup>, Daliana Muller<sup>1</sup>, Geneviève Kreibich Pinheiro<sup>1</sup>, Eloah Latocheski<sup>1</sup>, Josiel Barbosa Domingos<sup>1</sup>, Carlos Renato Rambo<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Randon Lasing in Lead Germanate glasses doped with Nd<sup>3+</sup> and containing silver NPs** **G.P4.59**  
Josivanir Gomes Câmara<sup>1</sup>, Davinson Mariano da Silva<sup>2</sup>, Luciana Reyes Pires Kassab<sup>2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Faculdade de Tecnologia de São Paulo
- 18:00 Photoactive material with silver and gold nanoparticles for photocatalytic activity study** **G.P4.60**  
Joziel Alves de Oliveira<sup>1</sup>, Alexandro de Sousa Sá<sup>1</sup>, Marcelo Barbosa Furtini<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>, Josy Antevéli Osajima<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 Photocatalytic degradation of Brilliant Yellow azo dye using TiO<sub>2</sub>** **G.P4.61**  
Joziel Alves de Oliveira<sup>1</sup>, Layane Rodrigues Almeida<sup>1</sup>, Marcelo Barbosa Furtini<sup>1</sup>, Luzia Maria Castro Honório<sup>1</sup>, Durcilene Alves Silva<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>, Josy Antevéli Osajima<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 Tungsten based photocatalysts: synthesis and performance** **G.P4.62**  
Julia Cristina Oliveira Pazinato<sup>1,2</sup>, IRENE TERESINHA SANTOS GARCIA<sup>1,2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto de Química - UFRGS
- 18:00 Promising photoelectrochemical activity of Bi<sub>2</sub>WO<sub>6</sub> and TiO<sub>2</sub> photoanodes for glycerol valorization** **G.P4.63**  
Juliane Zacour Marinho<sup>1</sup>, Lucas Leão Nascimento<sup>1</sup>, Antônio Eduardo Hora Machado<sup>2</sup>, ANTONIO OTAVIO T PATROCINIO<sup>1,3</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Universidade Federal de Goiás, <sup>3</sup>UFU



- 18:00 Vertical heterostructures built from graphene and transition metal dichalcogenides for photovoltaic applications** **G.P4.64**  
Julian Vieira Silveira<sup>1</sup>, Rafael Besse<sup>2</sup>, Juarez L. F. Da Silva<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos-USP, <sup>2</sup>Instituto de Física de São Carlos - USP
- 18:00 Synthesis and Applications of Nitrogen-Doped Carbon Dots with Blue Fluorescence** **G.P4.65**  
 Marco César Soares<sup>1</sup>, Julio Roberto Bartoli<sup>1</sup>, Francesco Amato<sup>2</sup>, Michele Cacioppo<sup>2</sup>, Francesca Arcudi<sup>2</sup>, Marcelo N.P. Carreño<sup>3</sup>, Inès Pereyra<sup>3</sup>, Eric Fujiwara<sup>1</sup>, Carlos K. Suzuki<sup>1</sup>, Maurizio Prato<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Università degli Studi di Trieste, <sup>3</sup>Universidade de São Paulo
- 18:00 Synthesis of titanates with network modifiers to increase the dye adsorption rate** **G.P4.66**  
Karmel Prado Pelissari<sup>1</sup>, Mariana Yumi Simões Kuramoto<sup>1</sup>, Fabrícia Emanuelli Moreira Dias<sup>1</sup>, Rony Gonçalves de Oliveira<sup>1</sup>, Ademir dos Anjos<sup>1</sup>, Daniela Cristina Manfroi Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Estadual de Mato Grosso do Sul
- 18:00 Evaluation of structural, photoluminescence and morphological characteristics of zinc titanate** **G.P4.67**  
Katharina Rodrigues Malafaia Macedo<sup>1</sup>, Gabriel Amaral Crispim Oliveira<sup>1</sup>, Luis Claudio Mendes<sup>1</sup>, Kaio Alves Brayner Pereira<sup>1</sup>, André Souza Araújo<sup>2</sup>, Ricardo Jorgensen Cassella<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Universidade Federal Fluminense
- 18:00 Synthesis and characterization of Tb<sub>2</sub>TeO<sub>6</sub> composition** **G.P4.68**  
Katiúscia Daiane Ferreira<sup>1,2</sup>, Gisane Gasparotto<sup>2</sup>, Lauro June Queiroz Maia<sup>2</sup>, Jesiel Freitas Carvalho<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de Goiás, <sup>2</sup>Universidade Federal de Goiás
- 18:00 Syntheses and characterization of crystalline phases in the 3Bi<sub>2</sub>O<sub>3</sub>:2TeO<sub>2</sub> system** **G.P4.69**  
Katiúscia Daiane Ferreira<sup>1,2</sup>, Gisane Gasparotto<sup>2</sup>, Lauro June Queiroz Maia<sup>2</sup>, Jesiel Freitas Carvalho<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de Goiás, <sup>2</sup>Universidade Federal de Goiás
- 18:00 Green simultaneous synthesis and passivation of luminescent carbon quantum dots in acetone aqueous solution** **G.P4.70**  
 Thais Rosana Cugnier Machado<sup>1</sup>, Jaquelline Vanelli<sup>1</sup>, Lucas Natálio Chavero<sup>1</sup>, Lara Fernandes dos Santos Lavelli<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Probing the sensitivity of exciton diffusion length to energetic disorder in different organic compounds** **G.P4.71**  
Larissa dos Santos Born<sup>1</sup>, Ingrid Gomes Ribeiro<sup>1</sup>, Leonardo Evaristo de Sousa<sup>2</sup>, Pedro Henrique de Oliveira Neto<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Estadual de Goiás
- 18:00 Zinc titanates obtained by the microwave-assisted solvothermal method: optical and structural properties** **G.P4.72**  
Leandro Lemos Gonzales<sup>1,2</sup>, Sergio da Silva Cava<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia Sul, <sup>2</sup>Universidade Federal de Pelotas
- 18:00 Gas sensor based on mesoporous CdTe@SiO<sub>2</sub> nanocomposites** **G.P4.73**  
Leandro Piaggi Ravaró<sup>1</sup>, Andrea Simone Stucchi de Camargo<sup>2</sup>, Peter C Ford<sup>3</sup>; <sup>1</sup>IFSC, <sup>2</sup>Instituto de Física de São Carlos - USP, <sup>3</sup>University of California Santa Barbara
- 18:00 Colloidal synthesis of NaYF<sub>4</sub> nanocrystals by sacrificial template method** **G.P4.74**  
Leonardo Junio da Cruz<sup>1</sup>, Paulo Cesar de Sousa Filho<sup>1</sup>, Gabriela Guida<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

- 18:00 Reversible optical storage in guest-host films containing v-shaped azoaromatic compounds dispersed in a polymethylmethacrylate matrix** **G.P4.75**  
Lidiana Maranesi Silva<sup>1</sup>, Marcelo G. Vivas<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 18:00 Photocatalytic activity of SrSnO<sub>3</sub> and TiO<sub>2</sub> loaded with Ag nanoparticles** **G.P4.76**  
Luzia Maria Castro Honório<sup>1</sup>, Pollyana Trigueiro<sup>1</sup>, Iêda Maria Garcia dos Santos<sup>2</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>, Josy Anteveli Osajima<sup>1</sup>, Albert Santos Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Federal da Paraíba
- 18:00 Influence of the support on the photocatalytic activity of SrSnO<sub>3</sub>** **G.P4.77**  
Luzia Maria Castro Honório<sup>1</sup>, Pollyana Trigueiro<sup>1</sup>, Iêda Maria Garcia dos Santos<sup>2</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>, Josy Anteveli Osajima<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Federal da Paraíba
- 18:00 Bismuth niobate/tungsten oxide heterojunctions with application as photoanodes for water splitting** **G.P4.78**  
Maria Kuznetsova<sup>1</sup>, Juliana Dos Santos Souza<sup>1</sup>, Sibila de Almeida de Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Titanates modified with copper by ionic exchange and its dye removal activity** **G.P4.79**  
 Julia Bortolusso Sampaio<sup>1</sup>, Thais da Silva<sup>1</sup>, Kauane Kashiya Pessoa<sup>1</sup>, Mariana Yumi Simões Kuramoto<sup>1</sup>, Karmel Prado Pelissari<sup>1</sup>, Fabrícia Emanuelli Moreira Dias<sup>1</sup>, Rony Gonçalves de Oliveira<sup>1</sup>, Ademir dos Anjos<sup>1</sup>, Daniela Cristina Manfroi Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Estadual de Mato Grosso do Sul
- 18:00 Influence of the heat treatment on the photodegradation efficiency of the supported TiO<sub>2</sub> catalysts obtained by a facile airbrush spray-coating** **G.P4.80**  
 Tatyana Christina Faccin borazanian<sup>1</sup>, Olandir Vercino Correa<sup>1</sup>, Rodrigo Teixeira Bento<sup>1</sup>, Marina Fuser Pillis<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energeticas e Nucleares
- 18:00 Investigation of the C/TiO<sub>2</sub> system for photocatalytic applications** **G.P4.81**  
Mateus Monteiro Marques<sup>1</sup>, Renato de Gouveia Cantoneiro<sup>1</sup>, Eduarda Medran Rangel<sup>1</sup>, Fernando Machado<sup>1</sup>, Marcelo Lucas Vitale<sup>1</sup>, Andriele Lange da Rosa<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Study of photoluminescence of CaMoO<sub>4</sub>:Eu<sup>3+</sup> synthesized by spray pyrolysis method** **G.P4.82**  
 Mauricio Roberto Delmonte Bomio<sup>1</sup>, Claudio Romero Rodrigues de Almeida<sup>1</sup>, Laura Ximena Lovisa<sup>1</sup>, Anderson Azevedo Gomes Santiago<sup>1</sup>, Elson Longo<sup>2</sup>, Carlos Alberto Paskocimas<sup>1</sup>, Fabiana Villela Motta<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Federal de São Carlos
- 18:00 Effect of the thickness of TiO<sub>2</sub> films on the photodegradation of methyl orange dye** **G.P4.83**  
 Bianca Alves Marcello<sup>1</sup>, Olandir Vercino Correa<sup>1</sup>, Rodrigo Teixeira Bento<sup>1</sup>, Marina Fuser Pillis<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energeticas e Nucleares

## WEDNESDAY, SEPTEMBER 25

### Poster presentations

**SESSION G.P6 (18:00 - 19:30)**

- 18:00 Morphological and Structural Modification of  $\text{Ca}_{10}\text{V}_6\text{O}_{25}$  with Different Solvents** **G.P6.1**  
Mayara Mondego Teixeira<sup>1</sup>, Aline Barrios Trench<sup>1</sup>, Regiane Cristina Oliveira<sup>1</sup>, Marcio Daldin Teodoro<sup>1</sup>, Elson Longo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos
- 18:00 Photocatalytic activity of BNT-BT05 in the degradation of methylene blue** **G.P6.2**  
Gabriel Barbosa Brasileiro<sup>1</sup>, Luzia Maria Castro Honório<sup>1</sup>, Josy Antevelli Osajima<sup>1</sup>, Valdeci Bosco dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 18:00 Flexible polymeric nanofiber random laser as potential sensor application** **G.P6.3**  
Lucas Fiocco Sciuti<sup>1</sup>, Luiza Amim Mercante<sup>2</sup>, Nathália Tomazio<sup>3</sup>, Cléber Mendonça<sup>3</sup>, Daniel Souza Corrêa<sup>2</sup>, Leonardo De Boni<sup>3</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Embrapa Instrumentação, <sup>3</sup>Instituto de Física de São Carlos - USP
- 18:00 Synthesis and characterization of strontium aluminate doped with terbium by the reverse polymer emulsion method and the influence of pH on polymorphism** **G.P6.4**  
Talyta Silva Prado<sup>1</sup>, Paulo Neilson Marques dos Anjos<sup>1</sup>; <sup>1</sup>Universidade Estadual de Santa Cruz
- 18:00 Synthesis of stable  $\text{Cs}_3\text{Sb}_2\text{X}_9$ , X = Cl, Br, I by hot injection method** **G.P6.5**  
Lilian Gulgielmin<sup>1</sup>, Fábio Baum<sup>1</sup>, Jacqueline F Leite Santos<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 18:00 Preparation of ZnO/g- $\text{C}_3\text{N}_4$  heterostructures for the photodegradation of amiloride under visible light** **G.P6.6**  
Nailma de Jesus Martins<sup>1</sup>, Gelson Tiago dos Santos Tavares Silva<sup>2</sup>, Waldir Avansi Junior<sup>3</sup>, Cauê Ribeiro Oliveira<sup>2</sup>, Andréa Renata Malagutti<sup>1</sup>, Henrique Aparecido de Jesus Loures Mourão<sup>1</sup>; <sup>1</sup>Universidade Federal dos Vales do Jequitinhonha e Mucuri, <sup>2</sup>Embrapa Instrumentação, <sup>3</sup>Universidade Federal de São Carlos
- 18:00 Thermoluminescent properties of  $\text{BeAl}_2\text{O}_4:\text{Cr}^{3+}$**  **G.P6.7**  
Stephanie Lins Dardengo Cavalcanti<sup>1</sup>, Matheus Cavalcanti dos Santos Nunes<sup>1</sup>, Elisabeth M Yoshimura<sup>2</sup>, NEILO M TRINDADE<sup>1,2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Instituto de Física - Universidade de São Paulo
- 18:00 Development of a radiation detector from a Brazilian mineral** **G.P6.8**  
Matheus Cavalcanti dos Santos Nunes<sup>1</sup>, Luan Santos Lima<sup>2</sup>, Anna L. M. C. Malthez<sup>3</sup>, Leonardo V. S. França<sup>4</sup>, Oswaldo Baffa Filho<sup>4</sup>, Elisabeth M Yoshimura<sup>2</sup>, NEILO M TRINDADE<sup>1,2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Instituto de Física - Universidade de São Paulo, <sup>3</sup>Universidade Tecnológica Federal do Paraná, <sup>4</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto
- 18:00 Optically stimulated luminescence of UV-illuminated  $\alpha\text{-Al}_2\text{O}_3:\text{C,Mg}$**  **G.P6.9**  
Maicon Gois Magalhães<sup>1</sup>, Matheus Cavalcanti dos Santos Nunes<sup>1</sup>, Luiz Jacobsohn<sup>2</sup>, Elisabeth M Yoshimura<sup>3</sup>, NEILO M TRINDADE<sup>1,4</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Clemson University, <sup>3</sup>Instituto de Física - Universidade de São Paulo, <sup>4</sup>Universidade de São Paulo

- 18:00 Characterization of the photoluminescent properties of MWO<sub>4</sub> (M = Zn and Ca) synthesized by spray pyrolysis** **G.P6.10**  
Anderson Azevedo Gomes Santiago<sup>1</sup>, Yuri Leandro Rodrigues Lopes Fernandes<sup>1</sup>, Ricardo Luis Tranquilin<sup>2</sup>, Carlos Alberto Paskocimas<sup>1</sup>, Fabiana Villela Motta<sup>1</sup>, Mauricio Roberto Delmonte Bomio<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Federal de São Carlos
- 18:00 High cell efficiency in ultra-thin perovskite solar cells by use of light trapping: In-depth analyses** **G.P6.11**  
 Manfred Georg Kratzenberg<sup>1</sup>, Ricardo Ruther<sup>1</sup>, Carlos Renato Rambo<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Morphological and photophysical properties of thin films of polyvinylcarbazole deposited via spin-coating** **G.P6.12**  
Diérickson Sousa Cordeiro<sup>1</sup>, Tatiana Duque Martins<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 18:00 Luminescent and morphological properties of Eu<sup>3+</sup> doped hydroxyapatite** **G.P6.13**  
Jailton Romão Viana<sup>1</sup>, Ana Angélica Mathias Macêdo<sup>2,3</sup>, Adenilson Oliveira dos Santos<sup>1,4</sup>, Cléber Cândido Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>3</sup>Federal Institute of Maranhão, <sup>4</sup>Federal University of Maranhão
- 18:00 Synthesis route optimization of ZnO nanoparticles for industrial applications** **G.P6.14**  
Lorena Portela Brazuna<sup>1</sup>, Thiago Galeote Tabuti<sup>1</sup>, Rebeca Bacani<sup>1</sup>, Eduardo Rezende Triboni<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena - USP
- 18:00 Ultrafast transient absorption spectroscopy in curcumin solution: ultrafast induced photoreaction** **G.P6.15**  
Lucas Fiocco Sciuti<sup>1</sup>, Leandro Zucolotto Cocca<sup>1</sup>, Jonathas Paula Siqueira<sup>1</sup>, Cléber Mendonça<sup>2</sup>, Leonardo De Boni<sup>2</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Instituto de Física de São Carlos - USP
- 18:00 Two photon absorption of several amino-styryl purines for application in fluorescent probes and biological imaging** **G.P6.16**  
 Leandro Zucolotto Cocca<sup>1</sup>, Lucas Fiocco Sciuti<sup>2</sup>, Jonathas Paula Siqueira<sup>1</sup>, Luis M. G. Abegão<sup>3</sup>, Cléber Mendonça<sup>2</sup>, Sandrine Piguel<sup>4</sup>, Leonardo De Boni<sup>2</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Instituto de Física de São Carlos - USP, <sup>3</sup>Yale University, <sup>4</sup>Paris-Sud University
- 18:00 Monocrystalline perovskite based on SrTiO<sub>3</sub> and BaTiO<sub>3</sub> obtained by solvothermal method and the study of photocatalytic performance in the water-splitting reaction.** **G.P6.17**  
Luelc Sousa da Costa<sup>1</sup>, Jairo Breno Francisco de Oliveira Barauna<sup>1</sup>, Nathália C Verissimo<sup>1</sup>, Rodnei Bertazzoli<sup>2,1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Universidade Estadual de Campinas
- 18:00 Photoactive material based on bismuto and zinc with application potential and renewable fuel cell** **G.P6.18**  
Luele Ribeiro de Sousa Barbosa<sup>1</sup>, Pedro Emílio Amador Salomão<sup>1</sup>, Márcio César Pereira<sup>1</sup>; <sup>1</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri
- 18:00 Optical Setup for Laser Microfabrication: Development of Photonic Devices** **G.P6.19**  
LUIS RICARDO PEREIRA MUCCIARONI<sup>1</sup>, Marcelo G. Vivas<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas

- 18:00 Optical properties of stacked InAs/GaAs quantum dots** **G.P6.20**  
Maicon Rogério de Souza<sup>1</sup>, Luiz Carlos Carlos Pocas<sup>2</sup>, Wesley Renzi<sup>1</sup>, Ricardo Vignoto Fernandes<sup>3</sup>, Sidney Alves Lourenço<sup>2</sup>, Marco Aurélio Toledo da Silva<sup>4,2</sup>, Marcio Daldin Teodoro<sup>5</sup>; <sup>1</sup>Instituto Federal do Paraná - Campus Pitanga, <sup>2</sup>Universidade Tecnológica Federal do Paraná - Londrina, <sup>3</sup>Universidade Estadual de Londrina, <sup>4</sup>Universidade Tecnológica Federal do Paraná, <sup>5</sup>Universidade Federal de São Carlos - Campus São Carlos
- 18:00 Study of the Properties of TiO<sub>2</sub> Nanoparticles doped with Vanadium: Evaluation of the Photocatalytic Potential** **G.P6.21**  
Marcilene Cristina Gomes<sup>1</sup>, André Luis de Jesus Pereira<sup>2</sup>, Afonso Guilherme Norberto<sup>2</sup>, Ziani de Souza Schiaber<sup>2</sup>, Luís Fernando da Silva<sup>3</sup>, Armstrong Godoy Junior<sup>4</sup>, Douglas Marcel Gonçalves Leite<sup>4</sup>, Argemiro Soares da Silva Sobrinho<sup>4</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Fundação Universidade Federal da Grande Dourados, <sup>3</sup>Universidade Federal de São Carlos, <sup>4</sup>Instituto Tecnológico de Aeronáutica
- 18:00 Hydrothermal synthesis and copper modification of titanate nanostructures from an alkoxide precursor** **G.P6.22**  
Kauane Kashiya Pessoa<sup>1</sup>, Julia Bortolusso Sampaio<sup>1</sup>, Thais da Silva<sup>1</sup>, Mariana Yumi Simões Kuramoto<sup>1</sup>, Karmel Prado Pelissari<sup>1</sup>, Fabrícia Emanuelli Moreira Dias<sup>1</sup>, Rony Gonçalves de Oliveira<sup>1</sup>, Ademir dos Anjos<sup>1</sup>, Daniela Cristina Manfroi Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Estadual de Mato Grosso do Sul
- 18:00 Decontamination of methylene blue over graphene-titanate nanocomposites** **G.P6.23**  
Mariana Yumi Simões Kuramoto<sup>1</sup>, Julia Bortolusso Sampaio<sup>1</sup>, Kauane Kashiya Pessoa<sup>1</sup>, Thais da Silva<sup>1</sup>, Fabrícia Emanuelli Moreira Dias<sup>1</sup>, Rony Gonçalves de Oliveira<sup>1</sup>, Ademir dos Anjos<sup>1</sup>, Daniela Cristina Manfroi Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Estadual de Mato Grosso do Sul
- 18:00 Correlations between structure, morphology and electro-optical-properties of alternated copolymers of thiophene-fluorene, and the influence of the insertion of a double bond between conjugated units D-A** **G.P6.24**  
Marister Oliveira Froehlich<sup>1</sup>, Denis Augusto Turchetti<sup>1</sup>, Leni Akcelrud<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 Machine Learning-based design of quantum dots synthesis** **G.P6.25**  
MATHEUS AVENCOURT SOARES AVENCOURT SOARES<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>, Fábio Baum<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 18:00 Study of growth dynamics of the synthesis of zinc selenide quantum dots via hot injection method** **G.P6.26**  
Fábio Baum<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>, Ester Schmidt Rieder<sup>2</sup>, MATHEUS AVENCOURT SOARES AVENCOURT SOARES<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade Luterana do Brasil
- 18:00 Development of chalcogens doped SrTiO<sub>3</sub>** **G.P6.27**  
Matheus Costa Oliveira<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>; <sup>1</sup>Instituto de Química - UFRGS
- 18:00 Photoluminescence characterization of the hybrid systems SIO<sub>2</sub>-PMMA and TIO<sub>2</sub>-PMMA doped with europium ions** **G.P6.29**  
Mayra Lucila Melgoza Ramírez<sup>1</sup>, Rafael Ramírez-Bon<sup>1</sup>; <sup>1</sup>Centro de Investigación y de Estudios Avanzados
- 18:00 Synthesis and Optical Characterization of Calcium Aluminate Glasses doped with Tm<sup>3+</sup>** **G.P6.30**  
Meríci de Fátima Machado<sup>1</sup>, Perpétua Maria Rodolphi Fabre<sup>1</sup>, Juraci Aparecido Sampaio<sup>1</sup>, Max Erik Soffner<sup>1</sup>; <sup>1</sup>Universidade Estadual do Norte Fluminense Darcy Ribeiro

- 18:00 Synthesis and Study of Electronic Coupling of the Transition in Bi/Bi<sub>2</sub>O<sub>3</sub> Nanoparticles.** **G.P6.31**  
Miguel Gonzalez Balanta<sup>1</sup>, pablo henrique menezes<sup>1</sup>, Victor Ciro Solano Reynoso<sup>2</sup>, Raul Fernando Cuevas<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Universidade Estadual Paulista
- 18:00 Optical characterization of thin films of P3HT: PCBM doped with cobalt ferrite magnetic nanoparticles** **G.P6.32**  
Milliane Passos da Silva Palacio<sup>1</sup>, Vitória Maria Rodrigues Vasconcelos<sup>1</sup>, Francisco Gilvane Sampaio de Oliveira<sup>1</sup>, Maurício Sousa Pereira<sup>1</sup>, Francisco Anderson de Sousa Lima<sup>1</sup>, Igor Frota Vasconcelos<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará
- 18:00 Intensification of Luminescence in Quaternary Europium Complexes** **G.P6.33**  
Miriam Kézia Nicolau Gregório de Oliveira<sup>1</sup>, Rayanne Priscila Gonçalves da Silva<sup>1</sup>, Simone Maria da Cruz Gonçalves<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 18:00 Study of the degradation of PSIF-DBT films in differents solutions and differents deposition methods** **G.P6.34**  
Morgana muller de França<sup>1</sup>, Kaike Rosivan Maia Pacheco<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 Study of the influence of the pH OF BIVO<sub>4</sub>, and its photocatalytic properties and antimicrobial propection in vitro** **G.P6.35**  
Murillo Henrique de Matos Rodrigues<sup>1</sup>, Kellen Cristina Mesquita Borges<sup>2</sup>, Rosana de Fátima Gonçalves<sup>2</sup>, Maria Rita de Cássia Santos<sup>2</sup>, Román Alvarez Roca<sup>3</sup>, Edson Roberto Leite<sup>4</sup>, Mario Godinho Junior<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Universidade Federal de Goiás, <sup>3</sup>Universidade Federal de São Carlos, <sup>4</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)
- 18:00 Adsorption behavior and photocatalytic study of CuWO<sub>4</sub> on the degradation of Rhodamine-B** **G.P6.36**  
Naiara Lima Lima<sup>1</sup>, Lorena Dariane da Silva Alencar<sup>2</sup>, Renato Vitalino Gonçalves<sup>1</sup>, Maria Ines Basso Bernardi<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto Federal de Mato Grosso do Sul
- 18:00 One-step method for the easy preparation of ZnO\_δ-FeOOH composites at room temperature** **G.P6.37**  
Nailma de Jesus Martins<sup>1</sup>, Wanessa Lima Oliveira<sup>1</sup>, Isabel Carolina Hutter Gomes<sup>1</sup>, João Paulo de Mesquita<sup>1</sup>, Henrique Aparecido de Jesus Loures Mourão<sup>1</sup>; <sup>1</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri
- 18:00 Investigation of TL and its relation with EPR centers in magnesium and calcium silicate** **G.P6.38**  
Nilo Francisco Cano-Mamani<sup>1</sup>, Shiguelo Watanabe<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade de São Paulo
- 18:00 Structural investigation of cobalt oxide films grown by reactive DC magnetron sputtering** **G.P6.39**  
Nilton Francelosi Azevedo Neto<sup>1</sup>, Lucas Jorge Affonço<sup>2</sup>, João Carlos Angélico<sup>2</sup>, Antonio Ricardo Zanatta<sup>3</sup>, Márcio Medeiros Soares<sup>4</sup>, José Humberto Dias da Silva<sup>2</sup>; <sup>1</sup>Faculdade de Tecnologia de Bauru, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universidade de São Paulo, <sup>4</sup>Centro Nacional de Pesquisa em Energia e Materiais

- 18:00 Spin coating Bi<sub>2</sub>O<sub>3</sub> thin films deposition and evaluation of its photocatalytic potential under UV radiation** **G.P6.40**  
Paulo Henrique Eleuterio Falsetti<sup>1</sup>, Douglas Mendes da Silva Del Duque<sup>1</sup>, Vagner Romito de Mendonça<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 18:00 Growth and Characterization of Cu<sub>2</sub>O/Ni(OH)<sub>2</sub> Photocathodes for Hydrogen Generation** **G.P6.41**  
Paulo Roberto Innocente<sup>1</sup>, André Avelino Pasa<sup>2</sup>, Iuri Stefani Brandt<sup>2</sup>, Luana Carina Benetti<sup>2</sup>, Luis Torres Quispe<sup>2</sup>, Fabrício Luiz Fanta<sup>3</sup>; <sup>1</sup>Universidade Comunitária da Região de Chapecó, <sup>2</sup>Universidade Federal de Santa Catarina, <sup>3</sup>Universidade Federal do Rio Grande do Sul
- 18:00 The Main Physical Mechanisms to Engineering High Efficiency Organic Interfaces** **G.P6.42**  
Pedro Henrique de Oliveira Neto<sup>1</sup>, Fernando Teixeira Bueno<sup>1</sup>, Luciano Ribeiro<sup>2</sup>, Leonardo Evaristo de Sousa<sup>2</sup>, Demetrio A da Silva Filho<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Estadual de Goiás
- 18:00 Optical properties of calcium aluminate glasses doped with manganese** **G.P6.43**  
Perpétua Maria Rodolphi Fabre<sup>1</sup>, Meríci de Fátima Machado<sup>1</sup>, Juraci Aparecido Sampaio<sup>1</sup>, Max Erik Soffner<sup>1</sup>; <sup>1</sup>Universidade Estadual do Norte Fluminense Darcy Ribeiro
- 18:00 Structural, morphological and spectroscopic study of the β-Ag<sub>2</sub>MoO<sub>4</sub>:Eu<sup>3+</sup>/Ca<sub>10</sub>(PO<sub>4</sub>)<sub>6</sub>(OH)<sub>2</sub> hybrid material obtained in different molar proportions** **G.P6.44**  
Priscila Barros de Almeida<sup>1</sup>, Jussara Soares da Silva<sup>1</sup>, Mayara Mondego Teixeira<sup>1</sup>, Regiane Cristina Oliveira<sup>2</sup>, Ieda Lúcia Viana Rosa<sup>1</sup>, Elson Longo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>São Paulo State University
- 18:00 Photoluminescence properties of α – Bi<sub>2</sub>O<sub>3</sub> obtained by precipitation and microwave-assisted hydrothermal methods** **G.P6.45**  
Samara Schmidt<sup>1</sup>, Rafael Eiji Saito<sup>2</sup>, Evaldo Toniolo Kubaski<sup>2</sup>, Máximo Siu Li<sup>3</sup>, Vinícius Danilo Nonato Bezzon<sup>4</sup>, Thiago Sequinel<sup>5</sup>, Sergio Mazurek Tebcherani<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade Estadual de Ponta Grossa, <sup>3</sup>Instituto de Física de São Carlos - USP, <sup>4</sup>Universidade Federal do ABC, <sup>5</sup>Fundação Universidade Federal da Grande Dourados
- 18:00 Photoluminescence behavior of ZnO powder: effect of temperature and pressure of treatment** **G.P6.46**  
Yago Valencio Pacheco<sup>1</sup>, Rafael Eiji Saito<sup>1</sup>, Robson Couto da Silva<sup>2</sup>, Sergio Mazurek Tebcherani<sup>2</sup>, Vitor Santaella Zanuto<sup>3</sup>, Nelson G. C. Astrath<sup>3</sup>, Vinícius Danilo Nonato Bezzon<sup>4</sup>, Evaldo Toniolo Kubaski<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Universidade Tecnológica Federal do Paraná, <sup>3</sup>Universidade Estadual de Maringá, <sup>4</sup>Universidade Federal do ABC
- 18:00 Chemosensor turn-off fluorene-derivative for ions Fe<sup>3+</sup>** **G.P6.47**  
Rafael Frasson Monteiro<sup>1</sup>, Leticia Aparecida da Silva<sup>1</sup>, Fabiane dos Santos Carlos<sup>1</sup>, Cristiano Zanlorenzi<sup>1</sup>, Fábio Souza Nunes<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 18:00 Chemosensor acridine derivative and fluorescent enhancement for Al<sup>3+</sup>** **G.P6.48**  
Rafael Frasson Monteiro<sup>1</sup>, Thomas Antonio Cardozo Martins<sup>1</sup>, Fabiane dos Santos Carlos<sup>1</sup>, Cristiano Zanlorenzi<sup>1</sup>, Fábio Souza Nunes<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná

- 18:00 Dyes photodegradation mechanism verification in the presence of ZnO under uv radiation** **G.P6.49**  
Rafaella Hissae Koga<sup>1</sup>, Paulo Henrique Eleuterio Falsetti<sup>1</sup>, Douglas Mendes da Silva Del Duque<sup>1</sup>, Vagner Romito de Mendonça<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 18:00 Study Local of Octahedral Cluster ZrO<sub>6</sub> Pure and Doped with Yb in the Matrix BaZrO<sub>3</sub>** **G.P6.50**  
Rafael Uarth Fassbender<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>, VERONICA DE CARVALHO TEIXEIRA<sup>2</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Laboratorio Nacional de Luz Sincrotron
- 18:00 Luminescent properties of the metal-organic framework Zn(pvmb)** **G.P6.51**  
 Yuri Dezotti<sup>1</sup>, Raphael Capruni Vaz<sup>1</sup>, Marcos Antonio Ribeiro<sup>2</sup>, Wdeson Pereira Barros<sup>1</sup>; <sup>1</sup>INSTITUTE OF CHEMISTRY/UNICAMP, <sup>2</sup>Universidade Federal do Espírito Santo
- 18:00 TiO<sub>2</sub>/ ZIF-67 composite for application in DSSCs** **G.P6.52**  
Raquel Dantas Campos<sup>1</sup>, Iêda Maria Garcia dos Santos<sup>1</sup>, Fauston Fred da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba
- 18:00 Luminescent hybrid materials based on highly emissive Ir(III) complexes** **G.P6.53**  
Raquel Riciati do Couto Vilela<sup>1</sup>, Kassio Papi da Silva Zanoni<sup>2</sup>, Fabio Simões de Vicente<sup>3</sup>, Andrea Simone Stucchi de Camargo<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Instituto de Física de São Carlos - USP, <sup>3</sup>Instituto de Geociências e Ciências Exatas
- 18:00 Aqueous Synthesis of Nanostructured Bismuth Particles: Optical and Electrochemical Characteristics** **G.P6.54**  
Raul Fernando Cuevas<sup>1</sup>, pablo henrique menezes<sup>1</sup>, Victor Ciro Solano Reynoso<sup>2</sup>, Miguel Gonzalez Balanta<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Universidade Estadual Paulista Faculdade de Engenharia de Ilha Solteira
- 18:00 Synthesis of MnTiO<sub>3</sub> by combustion reaction via microwave** **G.P6.55**  
Rayssa Cristina Viana Costa<sup>1</sup>, José Hilton Gomes Rangel<sup>1</sup>, Gleison Neres Marques<sup>1</sup>, Thayane Portela Oliveira<sup>1</sup>, Marcelo Moizinho Oliveira<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão
- 18:00 Optical and structural characterization of ZnO nanoparticles with different morphologies for photocatalytic applications** **G.P6.56**  
Rebeca Bacani<sup>1</sup>, Lorena Portela Brazuna<sup>1</sup>, Eduardo Rezende Triboni<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena - USP
- 18:00 Photoacoustic study of SnO<sub>2</sub> thin films deposited by spin coating technique** **G.P6.57**  
Regiane Gordia Drabeski<sup>1</sup>, Gelson Biscaia de Souza<sup>2</sup>, Evaldo Toniolo Kubaski<sup>2</sup>, Daniele Toniolo Dias<sup>3</sup>, Sergio Mazurek Tebcherani<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade Estadual de Ponta Grossa, <sup>3</sup>Federal University of Technology - Paraná
- 18:00 Curcumin derivative as a ligand for luminescent Eu<sup>3+</sup> complex** **G.P6.58**  
Renan Caike Silva<sup>1</sup>, Ana Maria Pires<sup>1</sup>, Sergio Antonio Marques Lima<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente
- 18:00 Poly(ethylene-co-Vinyl acetate) film doped with β-diketone lanthanide complex** **G.P6.59**  
 Maria Izabel Xavier Scapolan<sup>1</sup>, Lucas do Prado Cardoso<sup>1</sup>, Daniel Hachiya de Oliveira<sup>1</sup>, Renata Danielle Adati<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná



- 18:00 Photocatalytic ceramic support using waste glass and seashell as precursors.** **G.P6.60**  
RENATO DE CANTONEIRO CANTONEIRO<sup>1</sup>, Eduarda Medran Rangel<sup>1</sup>,  
 Mateus Monteiro Marques<sup>1</sup>, Fernando Machado<sup>1</sup>, Maicon Dinael Ücker<sup>1</sup>,  
 Francielen San Martins Rodrigues<sup>1</sup>, Fabio Calcagno Riemke<sup>1</sup>, Sergio da Silva  
 Cava<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Silver nanoparticles as co-catalysts of Ta<sub>2</sub>O<sub>5</sub> nanotubes in hydrogen photogeneration** **G.P6.61**  
 Letícia B. V. Sales<sup>1</sup>, Rhauane Almeida Galvão<sup>2,1</sup>, Jeice M. Santos<sup>1</sup>, Paloma B.  
 Barreto<sup>1</sup>, Larissa A. Santa Cruz<sup>2,1</sup>, NOELIA V. F. RONDÓN<sup>3,1</sup>, Giovanna  
 Machado<sup>1</sup>; <sup>1</sup>Centro de Tecnologias Estratégicas do Nordeste, <sup>2</sup>Universidade  
 Federal de Pernambuco, <sup>3</sup>Universidade Federal do Rio de Janeiro
- 18:00 Microstructural and optical property study of Samarium ferrite (SmFeO<sub>3</sub>) powder via hydrothermal microwave.** **G.P6.62**  
Ricardo Luis Tranquilin<sup>1</sup>, Mauricio Roberto Bomio Delmonte<sup>2</sup>, Márcio Luiz dos  
 Santos<sup>3</sup>, Elson Longo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade  
 Federal do Rio Grande do Norte, <sup>3</sup>Universidade Anhanguera de São Paulo
- 18:00 Ru<sub>2</sub>Si<sub>3</sub> semiconducting nanostructures formation in Ru<sup>+</sup> implanted SiO<sub>2</sub>/Si followed by thermal annealing: A study of their properties** **G.P6.63**  
Ricardo Valli<sup>1</sup>, Guilherme Calligaris de Andrade<sup>2</sup>, Rossano Lang<sup>1</sup>; <sup>1</sup>Universidade  
 Federal de São Paulo, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 18:00 Eu<sup>3+</sup> as a spectroscopic probe to monitor the synthesis of the red emitter heterobimetallic Eu<sup>3+</sup>/Ni<sup>2+</sup> complex containing crown-ether as ligand** **G.P6.64**  
Rodolpho Alessandro Nesta Silva<sup>1</sup>, Marian Rosaly Davolos<sup>1</sup>, Sergio Antonio  
 Marques Lima<sup>2,3</sup>, Karina Passalacqua Morelli Frin<sup>4</sup>, Ana Maria Pires<sup>3</sup>; <sup>1</sup>Instituto de  
 Química, Unesp, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" -  
 Campus Presidente Prudente, <sup>3</sup>Faculdade de Ciências e Tecnologia da UNESP,  
 Campus de Presidente Prudente, <sup>4</sup>Centro de Ciências Naturais e Humanas -  
 UFABC
- 18:00 Photophysical properties of the azido-functionalised coumarins used as fluorescence probe in drug nanocarriers.** **G.P6.65**  
Rodrigo Moreira Valerio<sup>1</sup>, Gwenaelle Pound-Lana<sup>1</sup>, Junnia de Jesus Ferreira<sup>1</sup>,  
 Bruna Bueno Postacchini<sup>1</sup>, Thiago Cazati<sup>1</sup>, Vanessa Mosqueira<sup>1</sup>; <sup>1</sup>Universidade  
 Federal de Ouro Preto
- 18:00 Photophysics of fluorescent probe (DiI) applied into endocytosis quantification of the polymeric nanocapsules.** **G.P6.66**  
Rodrigo Moreira Valerio<sup>1</sup>, Bruna Bueno Postacchini<sup>1</sup>, Izabel Trindade<sup>1</sup>, Caio Cesar  
 de Paula<sup>1</sup>, Gwenaelle Pound-Lana<sup>1</sup>, Vanessa Mosqueira<sup>1</sup>; <sup>1</sup>Universidade Federal de  
 Ouro Preto
- 18:00 Synthesis, characterization and photocatalytic activity of CaMoO<sub>4</sub> nanocrystals obtained by sonochemistry method** **G.P6.67**  
Rodrigo Muniz de Sousa<sup>1</sup>, Francisco Xavier Nobre<sup>2,1</sup>, Elton Ribeiro da Silva<sup>1</sup>,  
 Yurimiler Leyet Ruiz<sup>1</sup>, Paulo Rogério da Costa Couceiro<sup>1</sup>; <sup>1</sup>Universidade Federal  
 do Amazonas, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Amazonas
- 18:00 Barium titanate powder synthesis via sol-gel method and band gap energy influence over transition metal doping.** **G.P6.68**  
Rodrigo Nunes De Souza<sup>1</sup>, Alysson Martins Almeida Silva<sup>1</sup>; <sup>1</sup>Universidade de  
 Brasília

- 18:00 Effects of beta-particle irradiation, hydrothermal and heat treatments on the structural and luminescent properties of SrMoO<sub>4</sub> phosphors** **G.P6.69**  
Roseli Kunzel<sup>1</sup>, Nancy K. Umisedo<sup>2</sup>, Elisabeth M Yoshimura<sup>2</sup>, Emico Okuno<sup>2</sup>, Ana Paula de Azevedo Marques<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto de Física - Universidade de São Paulo
- 18:00 Nonlinear refractive index of nanofluids of silsesquioxane-capped gold nanoparticles determined by spatial self-phase modulation** **G.P6.70**  
 Marcos Vinicius Bittencourt<sup>1</sup>, Luana Gonçalves<sup>1</sup>, Luma Clarindo Lopes<sup>1</sup>, Dhésmon Lima<sup>1</sup>, Rozane Fátima Turchiello<sup>2</sup>, Christiana Andrade Pessoa<sup>1</sup>, Sergio Leonardo Gómez<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Determination of the Thermal Diffusivity of Plasmonic Nanofluids Containing PVP-Coated Ag Nanoparticles Using Mode-Mismatched Dual-Beam Thermal Lens Technique** **G.P6.71**  
 Cristiano Santos Lopes<sup>1</sup>, Vinicius Mariani Lenart<sup>2</sup>, Sergio Leonardo Gómez<sup>1</sup>, Rozane Fátima Turchiello<sup>2</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Synthesis of calcium titanate from gallinaceous egg shell** **G.P6.72**  
Rubiane Ganascim Marques<sup>1</sup>, Larissa Solano de Almeida<sup>2</sup>, Elidiane C. Rangel<sup>3</sup>, Nilson C Cruz<sup>3</sup>, Vitor J. P. Vilar<sup>4</sup>, Evandro Porto dos Santos<sup>1</sup>, Ana Maria Ferrari Lima<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Campus Apucarana, <sup>2</sup>Instituto de Ciência e Tecnologia - Câmpus de Sorocaba, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>Universidade do Porto
- 18:00 Synthesize Nanoparticles of Iron Immobilize in a Polymer Matrix of Alginate Crosslinked with Calcium and Zinc** **G.P6.73**  
Rubiane Ganascim Marques<sup>1</sup>, Cintia Andreia Alves Pereira<sup>2</sup>, Márcio Barreto Rodrigues<sup>2</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Campus Apucarana, <sup>2</sup>Federal University of Technology - Paraná
- 18:00 N-Acetylbenzamide as ligand in luminescent complexes of trivalent europium ions.** **G.P6.74**  
Sarah Emanuelle Pereira da Silva<sup>1</sup>, Jéssika Cavalcanti de Lima<sup>1</sup>, Rodolfo Rodrigues Nunes da Silva<sup>1</sup>, Cristiane Kelly de Oliveira<sup>1</sup>, Ricardo Luiz Longo<sup>1</sup>, Ivani Malvestiti<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 18:00 Use of hydrothermal synthesis to modify perylene molecules** **G.P6.75**  
Sara Luiza Gusso<sup>1</sup>, Letícia Barros Prado<sup>1</sup>, Paula C. Rodrigues<sup>1</sup>, Andréia G. Macedo<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Red light emitting LED prototype based on Eu<sup>3+</sup> complex/polymer film and near-UV emitting LED** **G.P6.76**  
 Camila Mareco Bento Leite Silva<sup>1</sup>, Airton Germano Bispo Junior<sup>1</sup>, Sergio Antonio Marques Lima<sup>2</sup>, Ana Maria Pires<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente
- 18:00 Microwave-assisted synthesis of Ag/Bismuth niobate heterojunctions with photocatalytic properties** **G.P6.77**  
Sibila de Almeida de Oliveira<sup>1</sup>, Maria Kuznetsova<sup>1</sup>, Juliana Dos Santos Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Increasing the conductivity of niobium pentoxide hole blocking layer deposited by reactive sputtering** **G.P6.78**  
Silvia Leticia Fernandes<sup>1</sup>, Roberto de Aguiar Ramos Jr.<sup>1</sup>, José Humberto Dias da Silva<sup>1</sup>, Elson Longo<sup>2</sup>, Carlos FO Graeff<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Universidade Federal de São Carlos

- 18:00 Random laser in dye-doped xerogel with inhomogeneous scatterers density** **G.P6.79**  
 Lucas Fiocco Sciuti<sup>1</sup>, Tássia Souza Gonçalves<sup>2</sup>, Nathália Tomazio<sup>1</sup>, Andrea Simone Stucchi de Camargo<sup>1</sup>, Cléber Mendonça<sup>1</sup>, Leonardo De Boni<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP, <sup>2</sup>Universidade Federal de Uberlândia
- 18:00 Factorial design applied to optimize the synthesis of copper and antimony sulfide nanoparticles** **G.P6.80**  
Tatiane Pretto<sup>1</sup>, Fábio Baum<sup>1</sup>, Marcos Jose Leite Santos<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto de Química - UFRGS
- 18:00 Synthesis, processing and environmental application of titanate-silver nanocomposite.** **G.P6.81**  
Thais da Silva<sup>1</sup>, Julia Bortolusso Sampaio<sup>1</sup>, Kauane Kashiya Pessoa<sup>1</sup>, Mariana Yumi Simões Kuramoto<sup>1</sup>, Karmel Prado Pelissari<sup>1</sup>, Fabrícia Emanuelli Moreira Dias<sup>1</sup>, Rony Gonçalves de Oliveira<sup>1</sup>, Ademir dos Anjos<sup>1</sup>, Daniela Cristina Manfroi Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Estadual de Mato Grosso do Sul
- 18:00 Synthesis and characterization of ZnFe<sub>2</sub>O<sub>4</sub> nanoparticles obtained by combustion reaction in solution** **G.P6.82**  
Thayane Portela Oliveira<sup>1</sup>, Marcelo Moizinho Oliveira<sup>1</sup>, Gleison Neres Marques<sup>1</sup>, Rayssa Cristina Viana Costa<sup>1</sup>, José Hilton Gomes Rangel<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão
- 18:00 Electrochemical single-step synthesis of cobalt oxide and titania nanotubes composite.** **G.P6.83**  
Thiago André Salgueiro Soares<sup>1,2</sup>, Pedro Felype Ferreira Araújo<sup>1,2</sup>, Sherdil Khan<sup>3,4</sup>, Giovanna Machado<sup>2</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Centro de Tecnologias Estratégicas do Nordeste, <sup>3</sup>Universidade Federal do Rio Grande do Sul, <sup>4</sup>Instituto de Química - UFRGS
- 18:00 Structural and electrical properties of FeSe thin films prepared by spray pyrolysis in glass substrate** **G.P6.84**  
Victor Ciro Solano Reynoso<sup>1</sup>, Miguel Gonzalez Balanta<sup>2</sup>, Raul Fernando Cuevas<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista Faculdade de Engenharia de Ilha Solteira, <sup>2</sup>Universidade Federal de Uberlândia
- 18:00 Analyzes of the electrochemical properties of cellulose acetate gels doped with KI compared to LiClO<sub>4</sub>** **G.P6.85**  
Victoria Goulart<sup>1</sup>, Raphael Dorneles Caldeira Balboni<sup>1</sup>, César Antonio Oropesa Avellaneda<sup>1</sup>, Wladimir Hernandez Flores<sup>2</sup>, Agnieszka Pawlicka<sup>3</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal do Pampa, <sup>3</sup>Instituto de Química de São Carlos-USP
- 18:00 Electronic Properties and Spin-Orbit Coupling in Corrol Tetrapyrroles** **G.P6.86**  
Vinícius do Nascimento da Rocha<sup>1</sup>, Paulo Cesar Piquini<sup>1</sup>, Mateus Henrique Köhler<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Maria
- 18:00 Photocatalytic production of H<sub>2</sub> via water splitting using as catalyst a composite involving SiO<sub>2</sub> nanoparticles coated by TiO<sub>2</sub>** **G.P6.87**  
Werick Alves Machado<sup>1</sup>, Guilherme Fernandes de Souza Miguel<sup>1,2</sup>, Antônio Eduardo Hora Machado<sup>3,1</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>UFU, <sup>3</sup>Universidade Federal de Goiás
- 18:00 AZO (Al:ZnO) thin films obtained by microwave hydrothermal synthesis for transparent conducting oxide.** **G.P6.88**  
Wesley Radtke Schwartz<sup>1</sup>, Fabio Calcagno Riemke<sup>1</sup>, Cátia Liane Ücker<sup>1</sup>, Andriele Lange da Rosa<sup>1</sup>, Pedro Henrique Sangaletti<sup>1</sup>, Renato de Gouveia Cantoneiro<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas

**18:00 Towards the understand surfactant effects on ZnS nanoparticles synthesis. G.P6.89  
Structural and optical effects.**

YURI VINICIUS BRUSCHI DE SANTANA<sup>1</sup>, Elson Longo<sup>2</sup>, Luís Fernando da Silva<sup>2</sup>, Valmor Roberto Mastelaro<sup>3</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - câmpus Cornélio Procópio, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)

# **SYMPOSIUM H - 2nd Hydrogen Storage Alloys Workshop**

## **Symposium organizers:**

Daniel Rodrigo Leiva (Universidade Federal de São Carlos)

Guilherme Zepon (Universidade Federal de São Carlos)

Jacques Huot (Université du Québec à Trois-Rivières)



# MONDAY , SEPTEMBER 23

\* Invited Lecture

## *SESSION H.01.D1 (09:30 - 10:30) - Room Egeu*

- 09:30 Mg-based composites for hydrogen storage** **H.01.D1.1\***  
Walter José Botta<sup>1</sup>, Ricardo Mendes Leal Neto<sup>2</sup>, Alberto Moreira Jorge Junior<sup>1</sup>, Guilherme Zepon<sup>1</sup>, tomaz ishikawa ishikawa<sup>1</sup>, Claudemiro Bolfarini<sup>1</sup>, Claudio S. Kiminami<sup>1</sup>, Daniel Rodrigo Leiva<sup>3</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Instituto de Pesquisas Energeticas e Nucleares, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos
- 09:45 Mechanical activation of TiFe for hydrogen storage: ball milling x cold rolling** **H.01.D1.2\***  
Ricardo Mendes Leal Neto<sup>1</sup>, Luis Esteban Romero Vega<sup>2</sup>, Railson Bolsoni Falcão<sup>1</sup>, Daniel Rodrigo Leiva<sup>3</sup>, Cláudio José Rocha<sup>1</sup>, tomaz ishikawa ishikawa<sup>3</sup>, Claudio S. Kiminami<sup>3</sup>, Walter José Botta<sup>3</sup>; <sup>1</sup>Instituto de Pesquisas Energeticas e Nucleares, <sup>2</sup>Programa de Pós-Graduação em Ciência e Engenharia de Materiais (UFSCar), <sup>3</sup>Universidade Federal de São Carlos
- 10:00 Production of bulk Mg based composites for hydrogen storage by SPD and thermomechanical processes** **H.01.D1.3\***  
Gisele Ferreira Lima<sup>1</sup>, Kátia Regina Cardoso<sup>1</sup>, Dilermando Nagle Travessa<sup>1</sup>, tomaz ishikawa ishikawa<sup>2</sup>, Daniel Rodrigo Leiva<sup>3,2</sup>, Alberto Moreira Jorge Junior<sup>3,4</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>4</sup>Departamento de Engenharia de Materiais - UFSCar (São Carlos)
- 10:15 Hydrogen storage in Mg, Mg-alloys, and Mg composites processed by severe or extensive plastic deformation.** **H.01.D1.4\***  
Alberto Moreira Jorge Junior<sup>1</sup>, Juliano Soyama<sup>2</sup>, Ricardo Floriano<sup>2</sup>, tomaz ishikawa ishikawa<sup>1</sup>, Claudemiro Bolfarini<sup>1</sup>, Claudio S. Kiminami<sup>1</sup>, Daniel Rodrigo Leiva<sup>3</sup>, Walter José Botta<sup>3</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos

## *SESSION H.02.D1 (11:00 - 12:00) - Room Egeu*

- 11:00 Design Porous Materials For Hydrogen Storage and Gas Separation** **H.02.D1.1\***  
Adam Duong<sup>1</sup>; <sup>1</sup>Université du Québec à Trois-Rivières
- 11:15 Solving some laboratory and industrial problems using hydride forming materials** **H.02.D1.2\***  
Gabriel MEYER<sup>1</sup>; <sup>1</sup>Comis. Nac. Energía Atómica
- 11:30 Hydrogen Diffusivity and storage capacity of Fe and Ti based High entropy alloys** **H.02.D1.3\***  
Sara Correa Marques<sup>1</sup>, Amanda Ventura Castilho<sup>2</sup>, Ligia Yassuda<sup>1</sup>, Dilson Silva Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Universidade Federal do Rio de Janeiro/COPPE

- 11:45 New insights on the absorption reaction of the NaH+MgB<sub>2</sub> system** **H.O2.D1.4**  
Daphiny Pottmaier<sup>1</sup>, Marcello Baricco<sup>1</sup>, Sebastiano Garroni<sup>2</sup>, Maria D. Baro<sup>3</sup>,  
 Claudio Pistidda<sup>4</sup>, Martin Dornheim<sup>4</sup>; <sup>1</sup>Università degli Studi di  
 Torino, <sup>2</sup>Universidad de Burgos, <sup>3</sup>Universitat Autònoma de Barcelona, <sup>4</sup>Helmholtz-  
 Zentrum Geesthacht
- SESSION H.O3.D1 (14:00 - 16:15) - Room Egeu**
- 14:00 Development of polymer-metal composites for moderate temperature hydrogen storage** **H.O3.D1.1\***  
 Cesar Augusto Gonçalves Beatrice<sup>1,2</sup>, Gabriel Rodrigues Almeida Neto<sup>3</sup>, Gabriel MEYER<sup>4</sup>, tomaz ishikawa ishikawa<sup>1</sup>, Daniel Rodrigo Leiva<sup>1</sup>, Luiz Antonio Pessan<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Departamento de Engenharia de Materiais - UFSCar (São Carlos), <sup>3</sup>Programa de Pós-Graduação em Ciência e Engenharia de Materiais (UFSCar), <sup>4</sup>Comis. Nac. Energía Atómica
- 14:15 Cold rolling as a synthesis route of the polymer-coated TiFe intermetallic compound for hydrogen storage** **H.O3.D1.2**  
Verona Biancardi Oliveira<sup>1,2</sup>, Daniel Rodrigo Leiva<sup>3</sup>, Cesar Augusto Gonçalves Beatrice<sup>2</sup>, Erenilton Pereira Silva<sup>4,5</sup>, Wágner Batista Silva<sup>3</sup>, Walter José Botta<sup>2</sup>; <sup>1</sup>Universidade do Estado do Rio de Janeiro, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>4</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri, <sup>5</sup>Escola de Engenharia de São Carlos
- 14:30 Hydrogenation properties of TiFe-based alloy synthesized by gas atomization** **H.O3.D1.3**  
Elena Rosemarie Ulate-Kolitsky<sup>1</sup>, Bernard Tougas<sup>2</sup>, Bettina Neumann<sup>3</sup>, Jacques Huot<sup>1</sup>; <sup>1</sup>Université du Québec à Trois-Rivières, <sup>2</sup>Centre de Métallurgie du Québec, <sup>3</sup>GKN Sinter Metals Engineering GmbH
- 14:45 Synthesis and Characterization of High Entropy Alloys based on TiFe System** **H.O3.D1.4\***  
Ricardo Floriano<sup>1</sup>, Kaveh Edalati<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>International Institute for Carbon-Neutral Energy Research
- 15:00 Hydrogen sorption in Multi-Principal-Element Alloys based on refractory elements.** **H.O3.D1.5**  
 Claudia Zlotea<sup>1</sup>, Jorge Montero Banuelos<sup>1</sup>; <sup>1</sup>Institut de Chimie et des Materiaux Paris-Est
- 15:15 Hydrogen Storage in MgH<sub>2</sub>-Mg<sub>2</sub>FeH<sub>6</sub> Nanocomposites Produced by Reactive Milling** **H.O3.D1.6**  
Flavio Jose Antiqureira<sup>1</sup>, Daniel Rodrigo Leiva<sup>1</sup>, Guilherme Zepon<sup>1</sup>, tomaz ishikawa ishikawa<sup>2</sup>, Walter José Botta<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Universidade Federal de São Carlos
- 15:30 Effect of MgH<sub>2</sub>-carbon nanotubes for hydrogen storage application** **H.O3.D1.7**  
Rodrigo Bezerra Vasconcelos Campos<sup>1</sup>, Sérgio de Souza Camargo Jr.<sup>1</sup>, Dilson Silva Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 15:45 XAFS studies of Local Structures in High-entropy Alloys applied in hydrogen storage** **H.O3.D1.8\***  
Santiago J.A. Figueroa<sup>1</sup>, Guilherme Zepon<sup>2</sup>, Daniel Rodrigo Leiva<sup>2</sup>, Renato Belli Strozi<sup>2</sup>, Audrey Marie Bedoch<sup>2</sup>, tomaz ishikawa ishikawa<sup>2</sup>, Walter José Botta<sup>2</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Universidade Federal de São Carlos



# TUESDAY , SEPTEMBER 24

## Poster presentations

### SESSION H.P3 (11:00 - 12:30)

- 11:00 Electrochemical hydrogen storage in the TiVCr alloy** **H.P3.1**  
Audrey Marie Bedoch<sup>1</sup>, Guilherme Zepon<sup>1</sup>, Guilherme Yuuki Koga<sup>1</sup>, Walter José Botta<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 11:00 Hydrogen Storage Properties of Mg-5Fe-5Ti- SWCNT Mixtures Processed by High-Energy Ball Milling and Equal-Channel Angular Pressing** **H.P3.2**  
Bruno Diego de Oliveira<sup>1</sup>, Erika Biral Baptistella<sup>1</sup>, Kátia Regina Cardoso<sup>1</sup>, Daniel Rodrigo Leiva<sup>2</sup>, André M Neves<sup>3</sup>, Gisele Ferreira Lima<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>3</sup>Universidade Federal de São Carlos
- 11:00 Hydrogen storage on magnesium chips produced by cryogenic machining** **H.P3.3**  
Filipe Ferrari Galan Déo<sup>1</sup>, Wágner Batista Silva<sup>2</sup>, Armando Ítalo Sette Antonialli<sup>1</sup>, Leonardo Pollettini Marcos<sup>1</sup>, Daniel Rodrigo Leiva<sup>1</sup>, Walter José Botta<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos
- 11:00 Processing of Mg-Ti composites by high energy ball milling and accumulative roll-bonding for application in hydrogen storage.** **H.P3.4**  
Erika Biral Baptistella<sup>1</sup>, Bruno Diego de Oliveira<sup>1</sup>, Gisele Ferreira Lima<sup>1</sup>, Dilermando Travessa<sup>1</sup>, Daniel Rodrigo Leiva<sup>2</sup>, André M Neves<sup>3</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>3</sup>Universidade Federal de São Carlos
- 11:00 Mg-containing multi-principal element alloy synthesized using high-energy ball milling (HEBM) for hydrogen storage** **H.P3.5**  
Felipe Marques<sup>1</sup>, Guilherme Zepon<sup>1</sup>, Haroldo Cavalcanti Pinto<sup>2</sup>, Walter José Botta<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Escola de Engenharia de São Carlos
- 11:00 Measurement of vessel strain during hydride formation** **H.P3.6**  
Gabriel MEYER<sup>1</sup>, Andrés BIASETTI<sup>1</sup>, Emiliano Manque BORZONE<sup>1</sup>, Julio MARIN<sup>1</sup>, Alberto Baruj<sup>1</sup>; <sup>1</sup>Comis. Nac. Energía Atómica
- 11:00 Hydrogen storage of Mg-containing high entropy alloys** **H.P3.7**  
Guilherme Zepon<sup>1</sup>, Renato Belli Strozi<sup>1</sup>, Felipe Marques<sup>2</sup>, Audrey Marie Bedoch<sup>1</sup>, Vinícius Aranda<sup>2</sup>, Alexandre Jorge Cruz<sup>1</sup>, Daniel Rodrigo Leiva<sup>2</sup>, Walter José Botta<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos
- 11:00 Effect of HPT process in the first hydrogenation of  $Ti_{0.5}Zr_{0.5}(Mn_{1-x}Fe_x)Cr_1$ ,  $x = 0, 0.2$  and  $0.4$ .** **H.P3.8**  
Jacqueline Andrea Hidalgo<sup>1</sup>, Jorge Cubero-Sesín<sup>1</sup>, Kaveh Edalati<sup>2</sup>, Sakine Khajavi<sup>3</sup>, Jacques Huot<sup>3</sup>; <sup>1</sup>Instituto Tecnológico de Costa Rica, <sup>2</sup>Kyushu University, <sup>3</sup>Université du Québec à Trois-Rivières

- 11:00 Texture and Microstructure of ECAPed Mg for Hydrogen Storage** **H.P3.9**  
João Rodrigues de Barros Neto<sup>1</sup>, Hamilton Ferreira Gomes de Abreu<sup>1</sup>, Erenilton Pereira Silva<sup>2,3</sup>, Wágner Batista Silva<sup>4</sup>, tomaz ishikawa ishikawa<sup>5</sup>, Daniel Rodrigo Leiva<sup>4</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri, <sup>3</sup>Escola de Engenharia de São Carlos, <sup>4</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>5</sup>Universidade Federal de São Carlos
- 11:00 Pulverization of TiCr<sub>1.1</sub>V<sub>0.9</sub> Alloy for hydrogen storage** **H.P3.10**  
Mateus Keniti Nakashima Sinzato<sup>1</sup>, Wágner Batista Silva<sup>1</sup>, Daniel Rodrigo Leiva<sup>1</sup>, Ricardo Floriano<sup>2</sup>, Armando Ítalo Sette Antonialli<sup>3</sup>, Verona Biancardi Oliveira<sup>4,3</sup>, Conrado Ramos Moreira Afonso<sup>3</sup>, tomaz ishikawa ishikawa<sup>3</sup>, Walter José Botta<sup>3</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Faculdade de Ciências Aplicadas, Unicamp, <sup>3</sup>Universidade Federal de São Carlos, <sup>4</sup>Universidade do Estado do Rio de Janeiro
- 11:00 Morphology, Crystal Structure and Hydrogen Storage Properties of Melt Spun Mg<sub>74</sub>Zn<sub>22</sub>Nd<sub>4</sub> Alloy** **H.P3.11**  
Priyanka Bhatt<sup>1</sup>, Joseph Hazan<sup>2</sup>, Jacques Huot<sup>1</sup>; <sup>1</sup>Université du Québec à Trois-Rivières, <sup>2</sup>Techion- Isreal Institute of Technology
- 11:00 Microstructure and Hydrogen Storage Properties of Multiphase Ti<sub>0.3</sub>V<sub>0.3</sub>Mn<sub>0.2</sub>Fe<sub>0.1</sub>Ni<sub>0.1</sub> Alloy** **H.P3.12**  
 Jacques Huot<sup>1</sup>, Salma Sleiman<sup>1</sup>; <sup>1</sup>Université du Québec à Trois-Rivières
- 11:00 Oxidation Analysis of pure Mg processed by ECAP and cold rolling** **H.P3.13**  
Samantha Sousa de Melo<sup>1</sup>, Eduardo Saito<sup>2</sup>, Gisele Ferreira de Lima<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto Tecnológico de Aeronáutica
- 11:00 Improvement of hydrogen absorption in Mg + MgH<sub>2</sub> composites through compaction - initial results** **H.P3.14**  
 Lucas Faccioni Chanchetti<sup>1</sup>, Daniel Rodrigo Leiva<sup>1</sup>, tomaz ishikawa ishikawa<sup>2</sup>, Jacques Huot<sup>3</sup>, Walter José Botta<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Université du Québec à Trois-Rivières
- 11:00 Prospective study on hydrogen storage alloys** **H.P3.15**  
 Laura Almeida Pereira Almeida<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>, Lucas Wendell Gonzaga Magalhães<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 11:00 Hydrogen storage properties of MgZrTiVFe High Entropy Alloy** **H.P3.16**  
Vinícius Aranda<sup>1</sup>, Daniel Rodrigo Leiva<sup>1</sup>, Jacques Huot<sup>2</sup>, Walter José Botta<sup>1</sup>, Guilherme Zepon<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Université du Québec à Trois-Rivières

# **SYMPOSIUM I - Innovative applications for textile materials**

## **Symposium organizers:**

Lizandra Maria Zimmermann (FURB)

Jürgen Andraus (FURB)

Ivonete Oliveira Barcellos (FURB)

Eduardo Guilherme Cividini Neiva (FURB)



## WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

### *SESSION I.O1.D3 (14:00 - 16:15) - Room Java*

- 14:00 Sustainable processing of textiles with enzymes** **I.O1.D3.1\***  
Jürgen ANDREAU<sup>1</sup>; <sup>1</sup>Universidade Regional de Blumenau
- 14:25 Green Impregnation Process with Supercritical CO<sub>2</sub> to Develop Active Textile Dressings: Specific Phenomena Involved in The Impregnation of Two Compounds** **I.O1.D3.2**  
Isabela Trindade Coutinho<sup>1</sup>, Mathilde Julienne Gisèle Champeau Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 14:40 Stability of Shear Thickening Fluids and their Application in Liquid Body Armor** **I.O1.D3.3**  
Daniel Alves Heinze<sup>1</sup>, Danilo Justino Carastan<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 14:55 The environmental impact of digital printing** **I.O1.D3.4\***  
Bianca Nastri Penteado Zaghini<sup>1,2</sup>, Gunther Pasold<sup>1,2</sup>, Bianca Nastri Penteado Zaghini<sup>1,2</sup>; <sup>1</sup>Universidade Regional de Blumenau, <sup>2</sup>Aupicor Química LTDA
- 15:15 Glyphosate-resistant hydrophobic fabric treated with silanes and TiO<sub>2</sub>** **I.O1.D3.5**  
Melina Espanhol Soares<sup>1</sup>, Amanda Beatriz Nascimento<sup>1</sup>, Flávio Soares Silva<sup>1</sup>, Milady Renata Apolinário Silva<sup>1</sup>, Rossano Gimenes<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 15:30 Innovatives methods for smart textiles** **I.O1.D3.6\***  
Renan Serrano<sup>1</sup>, Sirlene Maria da Costa<sup>1</sup>, Renata Cristiano Nome<sup>2</sup>, Fernando Ely<sup>2</sup>, Silgia Aparecida Costa<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Centro de Tecnologia da Informação Renato Archer
- 16:00 Functional Fabrics with Nanotechnology** **I.O1.D3.7**  
Vera Lucia Santos<sup>1</sup>, Betina Giehl Zanetti-Ramos<sup>2</sup>; <sup>1</sup>Instituto SENAI de Tecnologia em Logística da Produção, <sup>2</sup>Nanovetores

## THURSDAY, SEPTEMBER 26

### Poster presentations

#### *SESSION I.P7 (09:30 - 11:00)*

- 09:30 Synthesis and characterization of nanocomposites between graphene oxide, polyaniline and manganese oxide for electrochemical sensors** **I.P7.1**  
Gabriel Zeplin<sup>1</sup>, Mayara Raimondi Martina<sup>1</sup>, Eduardo Guilherme Cividini Neiva<sup>1</sup>; <sup>1</sup>Universidade Regional de Blumenau

- 09:30 Synthesis and characterization of nanocomposites between graphene and zinc oxide nanoparticles applied in photocatalysis** **I.P7.2**  
Pamela Busarello<sup>1</sup>, Gabriel Zeplin<sup>1</sup>, Samara de Quadros<sup>1</sup>, Lizandra M. Zimmermann<sup>1</sup>, Eduardo Guilherme Cividini Neiva<sup>1</sup>; <sup>1</sup>Universidade Regional de Blumenau
- 09:30 Low Cost Wearable Wifi Energy Harvesting Prototype Optimization** **I.P7.3**  
Filipe Leoncio Braga<sup>1</sup>, Emmanuela Sternberg<sup>2</sup>, Soraia Cristina Gonzaga Neves Braga<sup>2</sup>; <sup>1</sup>Instituto Federal do Espírito Santo, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo
- 09:30 Dyeing of polyester/spandex fabric using water treated with residues food industry** **I.P7.4**  
Ivone Oliveira Barcellos<sup>1</sup>, Glaucia Cristina Müller<sup>1</sup>, Martinho Rau<sup>1</sup>; <sup>1</sup>Universidade Regional de Blumenau
- 09:30 Synthesis and Characterization of Melamine-Formaldehyde Resin Microcapsules** **I.P7.5**  
Jaqueline Pereira Rosado<sup>1</sup>, Cleber Faller Bauer<sup>1</sup>, Everaldo Carlos Venancio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 09:30 Oxygen plasma treatment in silk textile materials** **I.P7.6**  
João Batista Giordano<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Americana
- 09:30 Innovative alternative dyeing of textiles with Ionic liquids or Deep Eutectic Solvents – A critical reflection** **I.P7.7**  
Laís Feltrin Sidou<sup>1</sup>, Camila Laís Vorpapel<sup>1</sup>, Joana Gonçalves Forster<sup>1</sup>, Lucas Panini Valcanaia<sup>1</sup>, Rodrigo Borges<sup>1</sup>, Bruno Eduardo Piske<sup>1</sup>, Jürgen ANDREAUS<sup>1</sup>; <sup>1</sup>Universidade Regional de Blumenau
- 09:30 Photocatalytic degradation of textile dyes using quantum dots of ZnO and ZnO-Fe(III)** **I.P7.8**  
Lizandra M. Zimmermann<sup>1</sup>, Samara de Quadros<sup>1</sup>; <sup>1</sup>Universidade Regional de Blumenau
- 09:30 Preparation of polymer nanolatexes via semicontinuous emulsion polymerization for application in cotton fabric.** **I.P7.9**  
Luiz Felipe da Hora<sup>1</sup>, Juliana de Souza Nunes<sup>1</sup>, José Heriberto Oliveira Nascimento<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 09:30 Hydrophobic glyphosate-repellent coating to fabric using PVDF and TiO<sub>2</sub>** **I.P7.10**  
Melina Espanhol Soares<sup>1</sup>, Amanda Beatriz Nascimento<sup>1</sup>, Flávio Soares Silva<sup>1</sup>, Milady Renata Apolinário Silva<sup>1</sup>, Rossano Gimenes<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 09:30 Nanotechnological functionalization of terry cotton fabrics: the role of nano-TiO<sub>2</sub> stabilization and citric acid concentration on coating durability** **I.P7.11**  
Mirele Horsth de Paiva Teixeira<sup>1</sup>, Sergio Yesid Gómez González<sup>1</sup>, Dachamir Hotza<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Influence of scouring of cotton textile waste on properties of cellulose nanofibrils** **I.P7.12**  
Jessica Jenifer Sornas<sup>1</sup>, Renato Poli Mari<sup>1</sup>, Catia Rosana Lange de Aguiar<sup>1</sup>, Andrea C. K. Bierhalz<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Ecological textiles from the pseudostem of brazilian biodiversity** **I.P7.13**  
Ricardo Rodrigo Ramos Cecci<sup>1</sup>, Adriano Alves Passos<sup>1</sup>, Thales Calmon de Aguiar Neto<sup>1</sup>, Leandro Alves Silva<sup>2</sup>; <sup>1</sup>Instituto Senai de Inovação em Biossintéticos, <sup>2</sup>MusaFiber

- 09:30 Effect of graphene nanoplatelets presence on the thermal and mechanical properties of polypropylene fibers produced by melt spinning** **I.P7.14**  
Ricardo Rodrigo Ramos Cecci<sup>1,2</sup>, Maria Inês Bruno Tavares<sup>1</sup>, Adriano Alves Passos<sup>1,2</sup>, Nathan Riany Valério Albino<sup>2</sup>, José Carlos Dutra Filho<sup>2</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ, <sup>2</sup>Instituto Senai de Inovação em Biossintéticos
- 09:30 Use of plant fibers in textile products: A Technological Prospecting** **I.P7.15**  
Yvo Borges da Silva<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>, Millena de Cassia Sousa e Silva<sup>1</sup>, Lucas Wendell Gonzaga Magalhães<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 09:30 Prospective study of methods of treatment of textile effluents** **I.P7.16**  
Hitalo de Jesus Bezerra da Silva<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>, Moisés das Virgens Santana<sup>1</sup>, Humberto Denys De Almeida Silva<sup>2</sup>, José Milton Elias de Matos<sup>1</sup>, Maria Rita de Moraes Chaves Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Faculdade do Vale do Itapecurú
- 09:30 Intelligent Fabrics: the insertion of fibers and nano particles to obtain them** **I.P7.17**  
Vera Lucia Vogel Faustino dos Santos<sup>1</sup>, Rosaura Piccoli<sup>1</sup>; <sup>1</sup>Instituto SENAI de Tecnologia em Logística da Produção
- 09:30 Photocatalytic application of ZnO quantum dots dispersed in a discotic liquid crystal** **I.P7.18**  
Wallison C. Costa<sup>1</sup>, Crislaine Sandri<sup>1</sup>, Samara de Quadros<sup>2</sup>, Juliana Eccher<sup>1</sup>, Lizandra M. Zimmermann<sup>2</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Regional de Blumenau





# **SYMPOSIUM J - Glass and Glass-Ceramics: Breakthrough Materials from Synthesis to Applications**

**Symposium organizers:**

Mohammad Reza Dousti (Universidade Federal Rural de Pernambuco)  
Danilo Manzani (Universidade de São Paulo)  
Gaël Yves Poirier (Universidade Federal de Alfenas)  
Jefferson Luis Ferrari (Universidade Federal de Uberlândia)



## TUESDAY, SEPTEMBER 24

\* Invited Lecture

### *SESSION J.O1.D2 (09:30 - 10:30) - Room Egeu*

**09:30 Photonic properties of borate and germanate nanostructures containing lanthanide ions** J.O1.D2.1\*

Lauro June Queiroz Maia<sup>1</sup>, Itália Vallerini Barbosa<sup>1</sup>, Eduardo Sousa Silva<sup>1</sup>, Michelly Patrícia Santana de Almeida Fógia<sup>2</sup>, Gisane Gasparotto<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de Goiás

**10:00 From UV radiation sensing to near-infrared laser action - Contributions from LEMAF for the development and characterization of new RE-doped glasses** J.O1.D2.2\*

Andrea Simone Stucchi de Camargo<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP

### *SESSION J.O2.D2 (11:00 - 12:00) - Room Egeu*

**11:00 Substitution of Ge<sup>4+</sup> by M<sup>3+</sup> (M = Ga, Sc, Y) in NASICON Glass-Ceramics probed by Impedance Spectroscopy and Solid-State NMR** J.O2.D2.1

Igor d'Anciães Almeida Silva<sup>1</sup>, Adriana Nieto-Munoz<sup>2</sup>, Ana Candida Martins Rodrigues<sup>2</sup>, Hellmut Eckert<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>2</sup>Universidade Federal de São Carlos

**11:15 Characterization of Phosphates Glasses containing monodisperse Fe<sub>3</sub>-δO<sub>4</sub>@SiO<sub>2</sub> magnetic nanoparticles** J.O2.D2.2

Juliane Resges Orives<sup>1</sup>, Benoit P. Pichon<sup>2</sup>, Damien Mertz<sup>2</sup>, Kevin Sartori<sup>2</sup>, Wesley Renato Viali<sup>1</sup>, Sidney J.L. Ribeiro<sup>1</sup>, Marcelo Nalin<sup>1</sup>; <sup>1</sup>Instituto de Química, Unesp, <sup>2</sup>Université de Strasbourg

**11:30 Performance evaluation of hybrid colorimetric sensors based on bromocresol purple** J.O2.D2.3

MATHEUS CICHERO CICHERO<sup>1</sup>, João Henrique Zimnhoch dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

### *SESSION J.O3.D2 (14:00 - 16:15) - Room Egeu*

**14:00 Multicolor emission in organic-inorganic hybrids composed by core/shell/shell upconversion nanoparticles and siloxanes** J.O3.D2.1\*

Sidney JL Ribeiro<sup>1</sup>, York ES Correales<sup>1</sup>, Chanchal Hazra<sup>1</sup>, Sajjad Ullah<sup>2</sup>; <sup>1</sup>Instituto de Química, Unesp, <sup>2</sup>University of Peshawar

**14:30 Thermal and spectroscopic properties of optical materials by using the thermal lens technique** J.O3.D2.2\*

Carlos Jacinto<sup>1</sup>; <sup>1</sup>Universidade Federal de Alagoas

**15:00 Photochromic properties of silver doped tungsten phosphate glasses** J.O3.D2.3

Flavia Paulino de Souza Santos<sup>1</sup>, Mohammad Reza Dousti<sup>2</sup>, Marcos Oliveira Junior<sup>3</sup>, Marcos Vinícius Dias Vermelho<sup>1</sup>; <sup>1</sup>Universidade Federal de Alagoas, <sup>2</sup>Universidade Federal Rural de Pernambuco, <sup>3</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)

- 15:15 Determination of the dependence on radius of the melting temperature of nanoparticles using small-angle X-ray scattering** **J.O3.D2.4**  
Felipe Leonardo de Carvalho Pereira<sup>1</sup>, Guinther Kellermann<sup>1</sup>, Hermann Franz Degenhardt<sup>2</sup>, Aldo Felix Craievich<sup>2</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade de São Paulo
- 15:30 Structural Characterization of Boron-Containing Biosilicates Using Multinuclear NMR** **J.O3.D2.5**  
 Bianca Machado Cerrutti<sup>1</sup>, Henrik Bradtmüller<sup>2</sup>, Marina Trevelin Souza<sup>3</sup>, Edgar Dutra Zanotto<sup>3</sup>, Hellmut Eckert<sup>1</sup>, Igor d'Anciães Almeida Silva<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP, <sup>2</sup>Westfälische Wilhelms-Universität Münster, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos
- 15:45 Theoretical study and simulation of the propagation of a sound wave in a GLAZE-COATED ceramic brick** **J.O3.D2.6**  
 Mateus de Albuquerque Souza Costa<sup>1</sup>, Vinícius Dantas de Araújo<sup>1</sup>; <sup>1</sup>Universidade Federal Rural de Pernambuco

## THURSDAY, SEPTEMBER 26

\* Invited Lecture

### *SESSION J.O1.D4 (09:30 - 11:00) - Room Java*

- 09:30 OH<sup>-</sup> free calcium aluminosilicate glasses as optical converters for hybrid solar cells** **J.O1.D4.1\***  
Mauro Luciano Baesso<sup>1</sup>, Jurandir Hillmann Rohling<sup>1</sup>, Otavio Augusto Capeloto<sup>1</sup>, Robson Ferrari Muniz<sup>1</sup>, Luiz Antonio de Oliveira Nunes<sup>2</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Instituto de Física de São Carlos - USP
- 10:00 Synthesis and characterization of Er<sup>3+</sup>/Yb<sup>3+</sup> co-doped tellurite glasses and glass-ceramics containing Bi<sub>4</sub>TeO<sub>8</sub> crystals** **J.O1.D4.2**  
Joacilia Mazzini Marques de Souza<sup>1</sup>, Karmel Oliveira Lima<sup>2</sup>, Rogéria Rocha Gonçalves<sup>2</sup>, Marcelo Nalin<sup>3</sup>, Danilo Manzani<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos-USP, <sup>2</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto, <sup>3</sup>Universidade Estadual Paulista
- 10:15 Effect of sonication time on semiconductive properties in Na<sub>2</sub>Ti<sub>6</sub>O<sub>13</sub> ceramics** **J.O1.D4.3**  
Juliana Pereira da Silva<sup>1</sup>, Yurimiler Leyet Ruiz<sup>1</sup>, Nathalia Guimarães Fagundes<sup>1</sup>, Augusto Dias Melo<sup>1</sup>, Bruna Bandeira do Nascimento<sup>1</sup>, Luana Leal Carvalho<sup>1</sup>, Francisco Xavier Nobre<sup>2,1</sup>, Jose Anglada Rivera<sup>2</sup>, Lianet Aguilera Domínguez<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Amazonas
- 10:30 Structural study of the Germanium-aluminum-borate glass system by solid state NMR and Raman spectroscopies** **J.O1.D4.4**  
 Roger Gomes Fernandes<sup>1</sup>, Douglas Faza Franco<sup>1</sup>, Silvia Helena Santagneli<sup>1</sup>, Marcelo Nalin<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil

# WEDNESDAY, SEPTEMBER 25

## Poster presentations

### SESSION J.P5 (11:00 - 12:30)

- 11:00 Formation of NiSi<sub>2</sub> nanocrystalline platelets endotaxially growth in Si(001) wafer** **J.P5.1**  
Daniel Silva Costa<sup>1</sup>, Guinther Kellermann<sup>1</sup>, Aldo Felix Craievich<sup>2</sup>, Lisandro Giovanetti<sup>3</sup>, Cristan Huck-Iriart<sup>4</sup>, Felix G. Requejo<sup>3</sup>, Igor Giacomelli Zanella<sup>1</sup>, Rodrigo Perito Cardoso<sup>1</sup>, Irineu Mazzaro<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Universidad Nacional de la Plata, <sup>4</sup>Universidad Nacional de San Martín Argentina
- 11:00 Manufacture of biomaterials based on hydroxiapatite and bioactive glass via freeze-drying** **J.P5.2**  
Pedro Fernandes Zenóbio<sup>1</sup>, Agda Oliveira<sup>2</sup>, Manuel Houmard<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>JHS Biomateriais
- 11:00 Effect of niobium percentage on the wettability of TiO<sub>2</sub>:Nb films** **J.P5.3**  
Aline Medeiros Morais<sup>1</sup>, Luis Cesar Fontana<sup>1</sup>; <sup>1</sup>Fundação Universidade do Estado de Santa Catarina
- 11:00 Multifunctional mesoporous materials based on heterojunction titania-PB supported by SBA-15** **J.P5.4**  
Amanda Pasquoto Perissinotto<sup>1</sup>, Elias Paiva Ferreira Neto<sup>2</sup>, Fabio Simões de Vicente<sup>3</sup>, Ubirajara Pereira Rodrigues-Filho<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos-USP, <sup>2</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil, <sup>3</sup>Institute of Geosciences and Exact Sciences/UNESP
- 11:00 Synthesis and solubility studies of a multicomponent phosphate glass for fertilizer application** **J.P5.5**  
Ana Caroline Alves de Moura<sup>1</sup>, Eduardo Bellini Ferreira<sup>2</sup>, Danilo Manzani<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos - Universidade de São Paulo, <sup>2</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP)
- 11:00 Effect of particle granulometry on the sinter-crystallization kinetics of diopside glasses enriched with Al<sub>2</sub>O<sub>3</sub>** **J.P5.6**  
André Balogh Carvalho<sup>1</sup>, Guilherme da Silva Macena<sup>1</sup>, Eduardo Bellini Ferreira<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP)
- 11:00 Bioresorbable phosphate glass to be used as radiopaque markers** **J.P5.7**  
Bruna Michelle de Freitas<sup>1</sup>, Denise Stolle da Luz Weiss<sup>1</sup>, Paulo Soares<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Paraná
- 11:00 Bactericidal action of bioglass with different concentrations of silver** **J.P5.8**  
Camila Dias de Oliveira<sup>1</sup>, Claudio Vinicius Da Silva Zampieri<sup>1</sup>, Milena Noronha<sup>1</sup>, Juliana Cheleski<sup>1</sup>, Elvio Antonio de Campos<sup>1</sup>, Silvia Denofre De Campos<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 11:00 The influence of the surface structures declivity in wetting states** **J.P5.9**  
Caroline Schmechel Schiavon<sup>1,2</sup>, Pedro L. G. Jardim<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal do Pampa

- 11:00 Pervaporation performance improvement of polyvinyl alcohol membranes induced by electromagnetic radiation** **J.P5.10**  
Cláudio Backes<sup>1</sup>, Daniel Eduardo Weibel<sup>1</sup>; <sup>1</sup>Instituto de Química - UFRGS
- 11:00 Bismuth phosphate glasses: Optical and structural properties for photocatalysis application** **J.P5.11**  
Daniel Santos Francisco<sup>1</sup>, Elias Paiva Ferreira Neto<sup>2</sup>, Thiago Rubio<sup>1</sup>, Danilo Manzani<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos-USP, <sup>2</sup>Instituto de Química - Universidade Estadual Paulista
- 11:00 Synthesis and characterization of fluorophosphate glasses containing CdS quantum dots** **J.P5.12**  
Renato Grigolon Capelo<sup>1</sup>, Giulia Alves dos Santos<sup>2</sup>, Danilo Manzani<sup>2</sup>; <sup>1</sup>Instituto de Química de São Carlos-USP, <sup>2</sup>Instituto de Química de São Carlos - Universidade de São Paulo
- 11:00 CuO nanowires produced by thermal oxidation of Cu-Zr-Al metallic glasses** **J.P5.13**  
Denise Criado<sup>1</sup>, Marcela Bergamaschi Tercini<sup>1</sup>, Alejandro Zuniga<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Antibacterial properties of phosphate glasses doped with Ag, Zn or B** **J.P5.14**  
Denise Stolle da Luz Weiss<sup>1</sup>, Luciana de Oliveira Roque Santos<sup>1</sup>, Bernardo Ayres Fabiensi da Silva<sup>1</sup>, Fernando Alexandre Fucci<sup>1</sup>, Rodrigo Amauri Nogoceke<sup>1</sup>, Edvaldo Rosa<sup>1</sup>, Selene Elifio Esposito<sup>1</sup>, Luciane Sopchenski Santos<sup>1</sup>, Paulo Soares<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Paraná
- 11:00 Optical and Structural Evolution of Nd<sup>3+</sup>/Yb<sup>3+</sup> Co-doped Compounds Obtained from 50BaO + 50Y<sub>2</sub>O<sub>3</sub> System** **J.P5.15**  
Eduardo Sousa Silva<sup>1</sup>, Michelly Patrícia Santana de Almeida Fógia<sup>2</sup>, Gisane Gasparotto<sup>1</sup>, Lauro June Queiroz Maia<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de Goiás
- 11:00 Composites based on propene/ethene copolymers and hollow glass spheres** **J.P5.16**  
Kellen de Lima Rosendo<sup>1</sup>, Melina Espanhol Soares<sup>1</sup>, Milady Renata Apolinário Silva<sup>1</sup>, Rossano Gimenes<sup>1</sup>, Flávio Soares Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 11:00 Eu<sup>3+</sup>-doped and Er<sup>3+</sup>/Yb<sup>3+</sup>-codoped niobium germanate glasses and glass-ceramics for device applications** **J.P5.17**  
Lia Mara Marcondes<sup>1</sup>, Fabia Cassanjes<sup>1</sup>, Gael Yves Poirier<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 11:00 Multicolor tunable emission from Er<sup>3+</sup>-doped niobium germanate glasses and glass-ceramics** **J.P5.18**  
Lia Mara Marcondes<sup>1</sup>, Fabia Cassanjes<sup>1</sup>, Gael Yves Poirier<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 11:00 Study of the bioactivity of glass-ceramics obtained by controlled crystallization** **J.P5.19**  
Gleison Lopes da Silva<sup>1</sup>, Franciana Pedrochi<sup>1</sup>, Alysson Steimacher<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 11:00 A study on tialite formation from high energy milling** **J.P5.20**  
Gustavo Henrique dos Santos Domingos<sup>1</sup>, Elíria Maria de Jesus Agnolon Pallone<sup>2</sup>, Sylma Carvalho Maestrelli<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Universidade de São Paulo
- 11:00 Obtaining composites powders of Al<sub>2</sub>O<sub>3</sub> - 5%Ni and Al<sub>2</sub>O<sub>3</sub> - 5%Nb by mechanical alloying** **J.P5.21**  
Arthur Gabriel Ferreira de Oliveira<sup>1</sup>, Hérik Dantas De Lima<sup>1</sup>, Uílame Umbelino Gomes<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte

- 11:00 Eu<sup>3+</sup> and Dy<sup>3+</sup>-doped fluorophosphate glasses for ultraviolet sensing** **J.P5.22**  
Iago Carvalho Pinto<sup>1</sup>, Andrea Simone Stucchi de Camargo<sup>1</sup>, Gustavo Galleani<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP
- 11:00 Synthesis of a heterogeneous Pd/silsesquioxane catalyst** **J.P5.23**  
João Paulo Winiarski<sup>1</sup>, Rosely Aparecida Peralta<sup>1</sup>, Cristiane Luisa Jost<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Electrical properties of the biphasic ceramic system Na<sub>2</sub>Ti<sub>3</sub>O<sub>7</sub>-Na<sub>2</sub>Ti<sub>6</sub>O<sub>13</sub>** **J.P5.24**  
Jorge de Souza Passos Junior<sup>1</sup>, Nathalia Guimarães Fagundes<sup>1</sup>, Francisco Xavier Nobre<sup>2,1</sup>, Yurimiler Leyet Ruiz<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Amazonas
- 11:00 Electrochemical study of an hybrid film containing phosphomolibdic acid in the presence of melamine** **J.P5.25**  
Julia Helena De Paula<sup>1</sup>, Victória Oliveira Margarido<sup>1</sup>, Adriano L Souza<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Araras
- 11:00 Thermal, structural and optical characterization of CdTe/Er<sup>3+</sup>-doped SiO<sub>2</sub>-Nb<sub>2</sub>O<sub>5</sub>-based nanocomposite** **J.P5.26**  
Lia Mara Marcondes<sup>1</sup>, Leandro Piaggi Ravaro<sup>2</sup>, Andrea Simone Stucchi de Camargo<sup>3</sup>, Gael Yves Poirier<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>IFSC, <sup>3</sup>Instituto de Física de São Carlos - USP
- 11:00 Characterization of ceramic glass seals for manufacturing of ceramic chambers used in synchrotron light source - Sirius** **J.P5.27**  
Fernanda Regina Francisco<sup>1,2</sup>, Ricardo Luiz Parise<sup>2</sup>, Osmar Roberto Bagnato<sup>3,2</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Laboratorio Nacional de Luz Sincrotron, <sup>3</sup>Universidade São Francisco
- 11:00 Investigations of the Physical Properties in Ferroelectric-based Glass-ceramics** **J.P5.28**  
Renato Cruvinel de Oliveira<sup>1</sup>, Anielle Christine Almeida Silva<sup>2</sup>, Noélio Oliveira Dantas<sup>2</sup>, José de los Santos Guerra<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Universidade Federal de Uberlândia
- 11:00 Tellurite glasses containing PbS quantum dots: synthesis, characterization and photoluminescence investigations** **J.P5.29**  
Renato Grigolon Capelo<sup>1</sup>, Danilo Manzani<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos-USP
- 11:00 Synthesis and study of glasses and glass ceramics in the system GeO<sub>2</sub>-Na<sub>2</sub>O-Ta<sub>2</sub>O<sub>5</sub> for second harmonic generation** **J.P5.30**  
Renato Oliveira Evangelista<sup>1</sup>, Gael Yves Poirier<sup>1</sup>, Lia Mara Marcondes<sup>1</sup>, Cristiano Ramos Cunha<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 11:00 Synthesis of Ta-CeO<sub>2</sub> system by mechanical milling** **J.P5.31**  
Roberta Bernardino<sup>1</sup>, Daniela Menegon Trichês<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 11:00 Effect of Tb<sup>3+</sup>/ Yb<sup>3+</sup> in the nonlinear refractive spectrum of CaLiBO glasses** **J.P5.32**  
Sabrina Nicoleti Carvalho dos Santos<sup>1</sup>, Kelly Tasso de Paula<sup>1</sup>, Juliana M. P. Almeida<sup>1,2</sup>, Antonio Carlos Hernandes<sup>1</sup>, Cleber R. Mendonça<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP)
- 11:00 Crystallization kinetics of glassy fluorine-free mold flux for continuous casting of high-Al steel** **J.P5.33**  
Samuel Lucas Santos Medeiros<sup>1</sup>, Jeferson Leandro Klug<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará

- 11:00 Evaluation of silicates formed from silica-magnesia catalysts synthesis by thermal analysis and XRD to obtain green 1,3-butadiene** **J.P5.34**  
 Silmara Furtado<sup>1</sup>, Luiza Cardoso Cintra<sup>1</sup>, Maria Letícia Murta Valle<sup>1</sup>, Jo Dweck<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 11:00 Tb 3+ -activated tungsten gallo-phosphate scintillating glass** **J.P5.35**  
Thiago Augusto Lodi<sup>1</sup>, Gustavo Galleani<sup>2</sup>, Andrea Simone Stucchi de Camargo<sup>2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto de Física de São Carlos - USP
- 11:00 Synthesis and characterization of oxide glass containing silver nanoparticles for heterogeneous catalysis application** **J.P5.36**  
Thiago Rubio<sup>1</sup>, Daniel Santos Francisco<sup>1</sup>, Danilo Manzani<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos-USP
- 11:00 Technological and Scientific Mapping on the use of Bioactive Glass Scaffolds** **J.P5.37**  
 Yvo Borges da Silva<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>, Millena de Cassia Sousa e Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 11:00 Production and characterization of Calcium and Barium perovskite glass ceramics produced by solid state process.** **J.P5.38**  
wagner da silveira<sup>1</sup>; <sup>1</sup>São Paulo State University
- 11:00 Optical thermometry based on Nd<sup>3+</sup>/Yb<sup>3+</sup>-doped fluorophosphate glasses** **J.P5.39**  
Walter Jose Gomes Juste Faria<sup>1</sup>, Tássia Souza Gonçalves<sup>2</sup>, Andrea Simone Stucchi de Camargo<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP, <sup>2</sup>Universidade Federal de Uberlândia



# **SYMPOSIUM K - *i*-Caloric Materials and Applications**

## **Symposium organizers:**

Alexandre Magnus Gomes Carvalho (CNPEM)

Mario de Souza Reis Junior (UFF)

Jader R. Barbosa Jr. (UFSC)

Vladimir I. Zverev (M. V. Lomonosov Moscow State University)



## WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

### *SESSION K.O1.D3 (09:30 - 10:30) - Room Mariscal Lateral*

- 09:30 Designing Thermomagnetic Devices: An Overview of Magnetic Heat Pumps and Thermomagnetic Motors** K.O1.D3.1\*  
Paulo V Trevizoli<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 10:00 Novel Processing Route for Obtaining LaFe<sub>13-x</sub>Si<sub>x</sub> Magnetocaloric Composites** K.O1.D3.2  
Marcelo Augusto Rosa<sup>1</sup>, Gustavo Henrique Truppel<sup>1</sup>, Deise Schafer<sup>1</sup>, Cristiano da Silva Teixeira<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 10:15 Barocaloric materials: challenges and promising perspectives for solid-state cooling** K.O1.D3.3  
Enric Stern-Taulats<sup>1</sup>, Juan Manuel Bermúdez-García<sup>1</sup>, Antonio D'Ammaro<sup>2</sup>, Adam Robinson<sup>2</sup>, Xavier Moya<sup>1</sup>; <sup>1</sup>University of Cambridge, <sup>2</sup>Beko PLC R&D Centre

### *SESSION K.O2.D3 (11:00 - 12:00) - Room Mariscal Lateral*

- 11:00 Magnetocaloric Effect: From Energy Efficient Refrigeration to Fundamental Studies of Phase Transitions** K.O2.D3.1\*  
Victorino Franco<sup>1</sup>; <sup>1</sup>Universidad de Sevilla
- 11:30 Recent theoretical developments on spin crossover compounds for solid-state refrigeration** K.O2.D3.2  
Bruno de Pinho Alho<sup>1</sup>, Paula de Oliveira Ribeiro Alho<sup>1</sup>, Rafael Marques Ribas<sup>1</sup>, Vinicius de Sousa<sup>1</sup>, Eduardo Nóbrega<sup>1</sup>, Pedro Jorge von Ranke<sup>1</sup>; <sup>1</sup>Universidade do Estado do Rio de Janeiro
- 11:45 Study of magnetocaloric Gd<sub>5</sub>(Si,Ge)<sub>4</sub> microparticles embedded into PVDF** K.O2.D3.3  
Vivian Maria Andrade<sup>1,2</sup>, Nathalie Barroca<sup>2</sup>, João Horta Belo<sup>2</sup>, Ana Pires<sup>2</sup>, Andre Pereira<sup>2</sup>, João Pedro Esteves Araujo<sup>2</sup>, Abdulkarim Amirov<sup>3</sup>, Dibir Yusupov<sup>4</sup>, Mario de Souza Reis<sup>5</sup>, Manuel Valente Almeida<sup>6</sup>, Kleber Roberto Pirota<sup>7</sup>; <sup>1</sup>Instituto de Física Gleb Wataghin da Universidade Estadual de Campinas, <sup>2</sup>Instituto de Física dos Materiais Avançados, Nanotecnologia e Fotónica da Universidade do Porto, <sup>3</sup>Laboratory of Novel Magnetic Materials of Immanuel Kant Baltic Federal University, <sup>4</sup>Amirkhanov Institute of Physics Daghestan Scientific Center – Russian Academy of Sciences, <sup>5</sup>Universidade Federal Fluminense, <sup>6</sup>Universidade de Aveiro, <sup>7</sup>Universidade Estadual de Campinas

### *SESSION K.O3.D3 (14:00 - 16:15) - Room Mariscal Lateral*

- 14:00 Giant Magnetocaloric R<sub>5</sub>(SixGe<sub>1-x</sub>)<sub>4</sub> compounds: from the bulk to the micro and nanoscales** K.O3.D3.1\*  
João Horta Belo<sup>1</sup>, Vivian Andrade<sup>1</sup>, Ana Pires<sup>1</sup>, Isabel Gomes<sup>1</sup>, Armandina Maria Lima Lopes<sup>1</sup>, Andre Pereira<sup>1</sup>, João Pedro Esteves Araujo<sup>1</sup>; <sup>1</sup>Instituto de Física dos Materiais Avançados, Nanotecnologia e Fotónica da Universidade do Porto

- 14:30 Research Centers and Industry can together develop new materials and change the Brazilian Production Chain.** **K.O3.D3.2\***  
Valdirene Sullas Teixeira Peressinotto<sup>1</sup>, Danielle Gomes Passos Silva<sup>1</sup>; <sup>1</sup>Companhia de Desenvolvimento de Minas Gerais
- 15:00 Oscillating caloric effects of quantum materials** **K.O3.D3.3**  
Mario de Souza Reis<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 15:15 Molecular Dynamics Analysis of the Barocaloric Effect in Natural Rubber** **K.O3.D3.4**  
Caio Miranda Miliante<sup>1</sup>, Augusto Mohr Christmann<sup>1</sup>, Erik Oda Usuda<sup>2</sup>, William Imamura<sup>2</sup>, Lucas Paixão<sup>2</sup>, Alexandre Magnus Gomes Carvalho<sup>2</sup>, André R. Muniz<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 15:30 Design of an optimized Tesla-type thermomagnetic motor via entropy generation minimization method** **K.O3.D3.5**  
Eduardo H G Evaristo<sup>1</sup>, Flavio C Colman<sup>1</sup>, Cleber Santiago Alves<sup>1</sup>, Paulo V Trevizoli<sup>2</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Federal de Minas Gerais
- 15:45 Quantum Otto engine for a graphene quantum dot** **K.O3.D3.6**  
Francisco José Peña Recabarren<sup>1</sup>, Oscar Andrés Negrete<sup>1</sup>, Pedro Orellana<sup>1</sup>, David Zambrano<sup>1</sup>, Patricio Fernando Vargas<sup>1</sup>; <sup>1</sup>Universidad Técnica Federico Santa María
- 16:00 Measuring the Aharonov-Bohm effect with a thermometer** **K.O3.D3.7**  
Patricio Fernando Vargas<sup>1,2</sup>, Oscar Andrés Negrete<sup>1,2</sup>, Francisco José Peña Recabarren<sup>1</sup>; <sup>1</sup>Universidad Técnica Federico Santa María, <sup>2</sup>Center for the development of Nanoscience and Nanotechnology

## THURSDAY , SEPTEMBER 26

### Poster presentations

#### *SESSION K.P7 (09:30 - 11:00)*

- 09:30 Giant barocaloric effects in waste tire rubber** **K.P7.1**  
Nicolau Molina Bom<sup>1,2</sup>, ERIK Oda USUDA<sup>3</sup>, Mariana S. Gigliotti<sup>4</sup>, Denilson José Marcolino de Aguiar<sup>5</sup>, William Imamura<sup>4</sup>, Lucas Paixão<sup>4</sup>, Alexandre Magnus Gomes Carvalho<sup>4</sup>; <sup>1</sup>Catalan Institute of Nanoscience and Nanotechnology, <sup>2</sup>The Institute of Photonic Sciences, <sup>3</sup>Laboratorio Nacional de Luz Sincrotron, <sup>4</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>5</sup>Universidade Tecnológica Federal do Paraná
- 09:30 Effect of the particle size reduction on the structural properties of the Ni<sub>50</sub>Mn<sub>35</sub>In<sub>15</sub> Heusler alloy** **K.P7.2**  
Andreza Leite Dias<sup>1</sup>, Jéssica Kamilly Pereira França<sup>1</sup>, Ronaldo Andrade de Araújo<sup>1</sup>, Ian Felipe Sousa Reis<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1</sup>, Luzeli Moreira da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão

- 09:30 Direct and inverse magnetocaloric effect in antiferromagnetic DyNiGe<sub>3</sub> compound** **K.P7.3**  
 Ronaldo Andrade de Araújo<sup>1</sup>, Andreza Leite Dias<sup>1</sup>, Jéssica Kamilly Pereira França<sup>1</sup>, EDILEIDE ALVES DOS SANTOS<sup>1</sup>, José Carlos Botelho Monteiro<sup>2</sup>, Adenilson Oliveira dos Santos<sup>1</sup>, Luzeli Moreira da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Instituto de Física Gleb Wataghin da Universidade Estadual de Campinas
- 09:30 Barocaloric effect evaluation in flexible PVC** **K.P7.4**  
Augusto Dias Siqueira<sup>1</sup>, Erik Oda Usuda<sup>2</sup>, William Imamura<sup>2</sup>, Alexandre Magnus Gomes Carvalho<sup>2</sup>, EDUARDO RADOVANOVIC<sup>1</sup>, Cleber Santiago Alves<sup>1</sup>, Silvia Luciana Favaro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 09:30 Molecular dynamics analysis of the elastocaloric effect in carbon nanotubes** **K.P7.5**  
Augusto Mohr Christmann<sup>1</sup>, André R. Muniz<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 09:30 Obtaining a magnetocaloric composite using Gd microspheres as dispersed phase and PMMA as polymeric binder** **K.P7.6**  
 Rodrigo Nepomuceno<sup>1</sup>, Andressa dos Santos<sup>1</sup>, Danilo Cebrian Scarpelini Kaminski<sup>1</sup>, Cleber Santiago Alves<sup>1</sup>, Silvia Luciana Favaro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 09:30 Barocaloric effect evaluation in cork stoppers** **K.P7.7**  
Silvia Luciana Favaro<sup>1</sup>, Augusto Dias Siqueira<sup>1</sup>, EDUARDO RADOVANOVIC<sup>1</sup>, Cleber Santiago Alves<sup>1</sup>, Alexandre Magnus Gomes Carvalho<sup>2</sup>, Jean Rodrigo Bocca<sup>1</sup>, William Imamura<sup>2</sup>, Fernando Rodrigo Moro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 09:30 Giant barocaloric effect in commercial polyurethane submitted to low pressures.** **K.P7.8**  
EDUARDO RADOVANOVIC<sup>1</sup>, Jean Rodrigo Bocca<sup>1</sup>, Silvia Luciana Fávoro<sup>1</sup>, Cleber Santiago Alves<sup>1</sup>, Alexandre Magnus Gomes Carvalho<sup>2</sup>, Andressa dos Santos<sup>1</sup>, William Imamura<sup>2</sup>, Erik Oda Usuda<sup>3,2</sup>, Flavio C Colman<sup>1</sup>, Wagner André dos Santos Conceição<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Universidade Federal de São Paulo
- 09:30 Magnetocaloric properties of (Gd,Nd)<sub>5</sub>Si<sub>4</sub> compounds** **K.P7.9**  
 Lucas Paixão<sup>1</sup>, Guilherme Rangel<sup>2</sup>, ERIK Oda USUDA<sup>1</sup>, William Imamura<sup>1</sup>, Julio Cesar Guimarães Tedesco<sup>3</sup>, Angelo Marcio Gomes<sup>4</sup>, Cleber Santiago Alves<sup>2</sup>, Alexandre Magnus Gomes Carvalho<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Universidade Estadual de Maringá, <sup>3</sup>Universidade do Estado do Rio de Janeiro, <sup>4</sup>Universidade Federal do Rio de Janeiro
- 09:30 Giant barocaloric effects in vulcanized natural rubber and the influence of the glass transition** **K.P7.10**  
ERIK Oda USUDA<sup>1,2</sup>, William Imamura<sup>2,3</sup>, Nicolau Molina Bom<sup>4,5</sup>, Lucas Paixão<sup>2</sup>, Alexandre Magnus Gomes Carvalho<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Faculdade de Engenharia Mecânica, Unicamp, <sup>4</sup>Catalan Institute of Nanoscience and Nanotechnology, <sup>5</sup>The Institute of Photonic Sciences

- 09:30 Experimental and numerical performance of active magnetic regenerators based on  $\text{La}(\text{Fe},\text{Mn},\text{Si})_{13}\text{Hz}$  spheres and their magnetocaloric properties compared with irregular particles** **K.P7.11**  
Henrique Neves Bez<sup>1</sup>, Vittorio Basso<sup>2</sup>, Michaela Kuepferling<sup>2</sup>, Bernardo Peressoni Vieira<sup>1</sup>, Hugo A. Vieyra<sup>3</sup>, Jaime Andrés Lozano<sup>1</sup>, Jader Riso Barbosa<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Istituto Nazionale di Ricerca Metrologica, <sup>3</sup>Vacuumschmelze GmbH & Co. KG
- 09:30 Table-like magnetocaloric effect in  $\text{GdPtIn}$  compound** **K.P7.12**  
Jéssica Kamilyly Pereira França<sup>1</sup>, Andreza Leite Dias<sup>1</sup>, Ian Felipe Sousa Reis<sup>1</sup>, Ronaldo Andrade de Araújo<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1</sup>, Luzeli Moreira da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 09:30 Metamagnetic phase transition induces magnetocaloric effect in  $\text{EuNiGe}_3$  compound** **K.P7.13**  
Ronaldo Andrade de Araújo<sup>1</sup>, Jéssica Kamilyly Pereira França<sup>1</sup>, Andreza Leite Dias<sup>1</sup>, José Carlos Botelho Monteiro<sup>2</sup>, Ronilson Lima Souza<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1</sup>, Luzeli Moreira da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Instituto de Física Gleb Wataghin da Universidade Estadual de Campinas
- 09:30 Magnetic and magnetocaloric effect investigation of  $\text{PrNi}_5$  compound.** **K.P7.14**  
José Mateus Nobre da Silva<sup>1</sup>, Paula de Oliveira Ribeiro Alho<sup>1</sup>, Bruno de Pinho Alho<sup>1</sup>, Daniel Rocco<sup>2</sup>, Mirela de Castro Santos<sup>2</sup>, Vinicius de Sousa<sup>1</sup>, Eduardo Nóbrega<sup>1</sup>, Pedro Jorge von Ranke<sup>1</sup>; <sup>1</sup>Universidade do Estado do Rio de Janeiro, <sup>2</sup>Universidade Federal Fluminense
- 09:30 Magnetocaloric effect of the q-state Clock Model** **K.P7.15**  
Oscar Andrés Negrete<sup>1,2</sup>, Francisco José Peña Recabarren<sup>1</sup>, Patricio Fernando Vargas<sup>1</sup>; <sup>1</sup>Universidad Técnica Federico Santa María, <sup>2</sup>Center for the development of Nanoscience and Nanotechnology
- 09:30 Green Function Calculations of Properties for the Magnetocaloric Layered Structures Based Upon  $\text{FeMnAsP}$**  **K.P7.16**  
Osvaldo F. Schilling<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Overview of magnetocaloric effect on spinel nanoferrites** **K.P7.17**  
PRABHAKARAN THANDAPANI<sup>1,2</sup>, Ramalinga Viswanathan Mangalaraja<sup>2</sup>, Juliano Casagrande Denardin<sup>3</sup>, Fanny Béron<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>University of Concepcion, Concepcion, <sup>3</sup>Universidad de Santiago de Chile
- 09:30 Theoretical study of the magnetism and refrigerant capacity of amorphous alloys formed by the  $\text{Gd}_{55}\text{Fe}_x\text{Al}_{45-x}$  series.** **K.P7.18**  
Vagner Luiz Oliveira de Freitas<sup>1</sup>, Samir Santos Costa<sup>2</sup>, Bruno de Pinho Alho<sup>1</sup>, Paula de Oliveira Ribeiro Alho<sup>1</sup>, Vinicius de Sousa<sup>1</sup>, Pedro Jorge von Ranke<sup>1</sup>, Eduardo Pilad Nóbrega<sup>1</sup>; <sup>1</sup>Universidade do Estado do Rio de Janeiro, <sup>2</sup>Brazilian Center for Research in Physics
- 09:30 Comparative study of the magnetocaloric effect by calculating the refrigerant capacity of the amorphous alloys containing Gd and/or Fe.** **K.P7.19**  
Nathan Silvano<sup>1</sup>, Samir Santos Costa<sup>2</sup>, Vagner Luiz Oliveira de Freitas<sup>1</sup>, Bruno de Pinho Alho<sup>1</sup>, Paula de Oliveira Ribeiro Alho<sup>1</sup>, Vinicius de Sousa<sup>1</sup>, Pedro Jorge von Ranke<sup>1</sup>, Eduardo Pilad Nóbrega<sup>1</sup>; <sup>1</sup>Universidade do Estado do Rio de Janeiro, <sup>2</sup>Brazilian Center for Research in Physics

# **SYMPOSIUM L - Materials degradation and solutions to increase its lifespan**

## **Symposium organizers:**

Polyana Alves Radi (Universidade Federal de Sao Paulo - UNIFESP)

Lucia Vieira (Universidade do Vale do Paraiba - UNIVAP)

Luis Augusto Sousa Marques da Rocha (Universidade Estadual Paulista Julio de Mesquita Filho - Unesp - Campus de Bauru.)

Marcelo Augusto Gonçalves Bardi (Universidade Sao Francisco)





## WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

### *SESSION L.01.D3 (09:30 - 10:30) - Room Cáspio*

- 09:30 Modeling and validation of material damage in tribological applications** L.O1.D3.1\*  
Roberto Martins Souza<sup>1</sup>; <sup>1</sup>University of São Paulo
- 10:00 Influence of normal load on the coefficient of friction of WC / C coating using experimental and numerical analyses** L.O1.D3.2  
Cassiano Ferreira Bernardes<sup>1</sup>, Newton Kiyoshi Fukumasu<sup>1</sup>, Arnaldo Oliveira Lima<sup>1</sup>, Roberto Martins Souza<sup>1</sup>, Izabel Fernanda Machado<sup>1</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo
- 10:15 Tribomechanical studies on a-C:H multilayer coatings deposited on Ti-6Al-4V** L.O1.D3.3  
Karina Carvalho de Farias Nass<sup>1</sup>, Polyana Alves Radi<sup>2</sup>, Danieli Aparecida Pereira Reis<sup>2</sup>, Evaldo José Corat<sup>1</sup>, Vladimir Jesus Trava-Airoldi<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Universidade Federal de São Paulo

### *SESSION L.02.D3 (11:00 - 12:00) - Room Cáspio*

- 11:00 Influence of Surface finishing on Tribological Characteristics of a DLC Coated Steel during a Lubricated Reciprocating Test** L.O2.D3.1  
Luis Fernando Garcia Ambrosi<sup>1</sup>, Newton Kiyoshi Fukumasu<sup>2</sup>, Vanessa Seriacopi<sup>3</sup>, Roberto Martins Souza<sup>4</sup>, Erika Fernanda Prados<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>4</sup>Escola Politécnica de Universidade de São Paulo
- 11:15 Influence local coefficient of friction promoted by non-aligned intersecting consecutive scratches in gray cast iron** L.O2.D3.2  
Marcionila Neli Lima dos Santos<sup>1</sup>, Newton Kiyoshi Fukumasu<sup>1</sup>, Mohamed El Mansori<sup>2</sup>, Roberto Martins Souza<sup>1</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo, <sup>2</sup>École Nationale Supérieure des Arts et Métiers
- 11:30 Use of non-hydrogenated amorphous carbon coatings to achieve low coefficient of friction under high contact pressure reciprocating ball-on-disc tests** L.O2.D3.3  
Newton Kiyoshi Fukumasu<sup>1</sup>, ANDRÉ PAULO TSCHIPTSCHIN<sup>1</sup>, Izabel Fernanda Machado<sup>1</sup>, Roberto Martins Souza<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 11:45 Failure mechanism analyses of a two-phase steel during scratch tests using the stress triaxiality parameter** L.O2.D3.4  
Vanessa Seriacopi<sup>1,2</sup>, Newton Kiyoshi Fukumasu<sup>2</sup>, Erika Fernanda Prados<sup>3</sup>, Roberto Martins Souza<sup>2</sup>, Izabel Fernanda Machado<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Escola Politécnica de Universidade de São Paulo, <sup>3</sup>Universidade Federal do ABC

### *SESSION L.03.D3 (14:00 - 16:15) - Room Cáspio*

- 14:00 Surface engineering of stainless steels for improving the resistance to wear and to corrosion** L.O3.D3.1\*  
ANDRÉ PAULO TSCHIPTSCHIN<sup>1</sup>; <sup>1</sup>University of São Paulo

- 14:30 Corrosion behaviour of aluminium alloys coated with DLC films on aviation fuel medium, Jet A-1 and AVGAS. L.O3.D3.2**  
 Paulo Fabricio Macario<sup>1</sup>, Angela A. Vieira<sup>1</sup>, Lucas A. Manfroi<sup>1</sup>, Michely Glenda Silva<sup>1</sup>, Priscila Leite<sup>1</sup>, Lucia Vieira<sup>1</sup>; <sup>1</sup>Instituto de Pesquisa e Desenvolvimento - Univap
- 14:45 Low Temperature Nitriding on AISI 316L Stainless Steel and the correlation between its Corrosion, Wetting and Mechanical Properties L.O3.D3.3**  
 Bruno Borges Ramos<sup>1</sup>, Gabriel Araujo de Lima<sup>1</sup>, Francisco Alves Vicente<sup>1</sup>, Cristiano Binder<sup>1</sup>, Sônia Maria Hickel Probst<sup>1</sup>, Aloisio Nelmo Klein<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 15:00 Microestrutural characterization, corrosion resistance study using electrochemical impedance techniques- EIS of microalloyed steels and carbon steel in media containing CO<sub>2</sub> with and without contaminants L.O3.D3.4**  
Janeth Marlene Quispe-Avilés<sup>1</sup>, José Wilmar Calderón Hernández<sup>2</sup>, Helio Goldenstein<sup>1</sup>, Hercílio Gomes de Melo<sup>1</sup>; <sup>1</sup>University of São Paulo, <sup>2</sup>Universidade de São Paulo
- 15:15 Deposition and analysis of the anticorrosive behavior of DLC layers on bronze in order to prevent chloride-induced patina L.O3.D3.5**  
Lázaro Aleixo dos Santos<sup>1</sup>, Silvia Mesquita Tamborim<sup>1</sup>, Vladimir Jesus Trava-Airoldi<sup>2</sup>; <sup>1</sup>Instituto de Química - UFRGS, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais
- 15:30 In situ evaluation of magnetic flux of Nd-Fe-B based bonded magnets during aging cycles L.O3.D3.6**  
Marina Silveira Tagliari Hoffmann<sup>1</sup>, Julia de Moraes Siedschlag<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>, Leonardo Ulian Lopes<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 15:45 Microplastics: environmental impact of photodegraded polymers L.O3.D3.7**  
Ana Carolina Cugler Moreira<sup>1</sup>, Flávio Sampaio de Campos Rodrigues<sup>1</sup>, Sandro Donnini Mancini<sup>2</sup>, Walter Ruggeri Waldman<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>2</sup>Universidade Estadual Paulista
- 16:00 Effect of mixed nanocrystalline rare earth oxide coatings on high temperature oxidation of a ferritic stainless steel AISI 409 L.O3.D3.8**  
Lalgudi Venkataraman Ramanathan<sup>1</sup>, Stela Maria Carvalho Fernandes<sup>1</sup>, Olandir Vercino Correa<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energeticas e Nucleares

## THURSDAY, SEPTEMBER 26

\* Invited Lecture

### *SESSION L.O1.D4 (09:30 - 11:00) - Room Cáspio*

- 09:30 Lifetime improvement of anticorrosive organic-inorganic coatings by addition of self-healing agents L.O1.D4.1\***  
Peter Hammer<sup>1</sup>, Andressa Trentin<sup>1</sup>, Samarah Vargas Harb<sup>1</sup>, Celso Valentim Santilli<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil

- 10:00 Online ToF-SIMS: Degradation of plastic thin films due to the exposure to MeV ion beams** L.O1.D4.2  
Lucas Battú<sup>1</sup>, Igor Alencar<sup>1,2</sup>, Raquel Silva Thomaz<sup>1,3</sup>, Pedro Luis Grande<sup>1</sup>, Johnny Ferraz Dias<sup>1</sup>, Livio Amaral<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade Federal de Santa Catarina, <sup>3</sup>Pontifícia Universidade Católica do Rio Grande do Sul
- 10:15 The temperature effect on a green corrosion inhibitor performance** L.O1.D4.3  
Silvia Rodrigues Rodrigues<sup>1,2</sup>, Viviane - Dalmoro<sup>3</sup>, João Henrique Zimnoch Dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto de Química - UFRGS, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia Sul
- 10:30 Irradiated ionic crystals at high pressures: Mollwo-Ivey relations revisited** L.O1.D4.4  
Igor Alencar<sup>1</sup>, Javier Ruiz-Fuertes<sup>2</sup>, Virginia Monteseuro<sup>3</sup>, Jordi Ibáñez<sup>4</sup>, Claudio Cazorla<sup>5</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidad de Cantabria, <sup>3</sup>Consejo Superior de Investigaciones Científicas, <sup>4</sup>Universitat de València, <sup>5</sup>University of New South Wales

## TUESDAY , SEPTEMBER 24

### Poster presentations

#### *SESSION L.P3 (11:00 - 12:30)*

- 11:00 The study of the use of bacteria in the composition of the concrete for their regeneration after the appearance of fissures in hot climate regions** L.P3.1  
PEDRO HENRIQUE TIAGO LEITE<sup>1</sup>, THIAGO RICHARD SENA RIBEIRO<sup>1</sup>, IVAN DE SÁ DA FONSECA<sup>1</sup>, RAMON RODRIGUES DE MIRANDA<sup>1</sup>, Ricardo Luiz Perez Teixeira<sup>2</sup>, Leonardo Lúcio de Araújo Gouveia<sup>1</sup>; <sup>1</sup>Universidade do Estado de Minas Gerais, <sup>2</sup>Universidade Federal de Itajubá
- 11:00 Hydrogen embrittlement in a titanium tube designed for a coriolis mass flowmeter** L.P3.2  
Ícaro Gabriel Rodrigues Santos<sup>1</sup>, Guilherme Santos Vacchi<sup>1</sup>, Cristie Luis Kugelmeier<sup>1</sup>, Rodrigo Silva<sup>1</sup>, Gabriel Roberto Campesan<sup>1</sup>, Carlos Alberto Della Rovere<sup>1</sup>, Danielle Cristina Camilo Magalhães<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 11:00 Dust and efficiency of Organic Photovoltaics Panels** L.P3.3  
Fabiana de Brito<sup>1</sup>, Anna Gabriella Tempesta<sup>1</sup>, Kaike Rosivan Maia Pacheco<sup>1</sup>, Luiz Carlos Mariano<sup>1</sup>, Talitha Ramos Canabarra dos Santos<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 11:00 Characterizations of polymeric foams used in the automotive pieces protection** L.P3.4  
Weslayne Luzia Rodrigues Miranda<sup>1</sup>, Olacir Alves Araújo<sup>1</sup>; <sup>1</sup>Universidade Estadual de Goiás
- 11:00 Pack aluminizing of AISI 304L stainless steel for high temperature corrosion protection** L.P3.5  
Daniel De Martini Rivera Ferreira<sup>1</sup>, Frederico Augusto Pires Fernandes<sup>1</sup>, Rafael Perez Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

- 11:00 Green film for corrosion protection** **L.P3.6**  
Maiara Schein Trevisol<sup>1</sup>, Silvia Rodrigues Rodrigues<sup>1,2</sup>, Daniela Bianchini<sup>3</sup>,  
 Viviane - Dalmoro<sup>4</sup>, João Henrique Zimnoch Dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal  
 do Rio Grande do Sul, <sup>2</sup>Instituto de Química - UFRGS, <sup>3</sup>Universidade Federal de  
 Pelotas, <sup>4</sup>Instituto Federal de Educação, Ciência e Tecnologia Sul
- 11:00 Effect of mullite aggregate granulometry on the thermal shock resistance of high alumina refractories with 5% zirconia** **L.P3.7**  
 JAN LUCAS SOUZA OLIVEIRIA<sup>1</sup>, Elias Fagury Neto<sup>1</sup>, Adriano Alves Rabelo<sup>1</sup>; <sup>1</sup>UNIVERSIDADE FEDERAL DO SUL E SUDESTE DO PARÁ
- 11:00 Evaluation of the mechanical behavior of ceramics with solid waste and the efflorescence generation** **L.P3.8**  
Adriano Alves Rabelo<sup>1</sup>, Thayane Pereira da Silva<sup>1</sup>, Igor Oliveira Sobrinho<sup>1</sup>, Felipe  
 Silva dos Santos<sup>1</sup>, Elias Fagury Neto<sup>1</sup>; <sup>1</sup>UNIVERSIDADE FEDERAL DO SUL E  
 SUDESTE DO PARÁ
- 11:00 Stellite #6™ coatings by Plasma Transferred Arc (PTA): The substrate effect on the microstructure and mechanical properties** **L.P3.9**  
 Carlos Alberto de Almeida Junior<sup>1</sup>, Matheus Picolli Pellizzer<sup>1</sup>, Carlos Jose de  
 Mesquita Siqueira<sup>1</sup>, Alex Pizzatto<sup>1</sup>, Adriano Scheid<sup>1</sup>; <sup>1</sup>Universidade Federal do  
 Paraná
- 11:00 Tribaloy T400™ coatings by Laser cladding: Microstructure evaluation and mechanical properties** **L.P3.10**  
 Cleyton Castro da Silva<sup>1</sup>, Alex Pizzatto<sup>1</sup>, Moises Felipe Teixeira<sup>2</sup>, Alessandra  
 Jaeger<sup>1</sup>, Leandro Ferres Cassel<sup>1</sup>, Rodrigo Metz Gabriel Paes<sup>1</sup>, Adriano  
 Scheid<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Instituto SENAI de Inovação
- 11:00 Morphological Evaluation of Polymeric Coatings in Metal Packaging for Beverages** **L.P3.12**  
Amanda Gaddi Gasparoni<sup>1</sup>, Juliana Machado Bertoi<sup>1</sup>, Nathiely Pereira Dos  
 Santos<sup>1</sup>, Fernanda Machado Crespo<sup>1</sup>, Luciana Machado Rodrigues<sup>1</sup>; <sup>1</sup>Fundação  
 Universidade Federal do Pampa
- 11:00 Corrosion of Carbon Steel in Natural and Treated Waters** **L.P3.13**  
Amanda Gaddi Gasparoni<sup>1</sup>, Nathiely Pereira Santos<sup>1</sup>, Juliana Machado Bertoi<sup>1</sup>,  
 Luciana Machado Rodrigues<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal do Pampa
- 11:00 Structural changes in aged polydimethylsiloxane investigated by <sup>1</sup>H TD-NMR** **L.P3.14**  
Ana Paula Munaro<sup>1,2</sup>, Giovani Cunha<sup>3</sup>, Jefferson Gonçalves Filgueiras<sup>3</sup>, José  
 Molinari Pinto<sup>4</sup>, Marilda Munaro<sup>1,5</sup>, Eduardo Ribeiro de Azevedo<sup>3</sup>, Leni  
 Akcelrud<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Instituto de Tecnologia para o  
 Desenvolvimento, <sup>3</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São  
 Paulo (USP), <sup>4</sup>Companhia Paranaense de Energia, <sup>5</sup>Universidade da Sociedade  
 Educacional de Santa Catarina
- 11:00 Validation of the ethylene oxide sterilization process in bone grafts of synthetic hydroxyapatite** **L.P3.15**  
Anderson Damasceno Gomes<sup>1,2</sup>, Eduardo Henrique Martins Nunes<sup>1</sup>; <sup>1</sup>Universidade  
 Federal de Minas Gerais, <sup>2</sup>JHS Biomateriais
- 11:00 Characterization of marble waste for application in dielectrics** **L.P3.16**  
ARIEL SOUZA MEDEIROS<sup>1</sup>, THARSIA CRISTIANY DE CARVALHO  
 COSTA<sup>2</sup>, RONALDO DA MACENO LIMA<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação,  
 Ciência e Tecnologia da Bahia, <sup>2</sup>Instituto Federal da Bahia

- 11:00 On the pitting corrosion behavior of thermal aged lean duplex stainless at 475 °C** L.P3.17  
Rodrigo Silva<sup>1</sup>, Anibal Mendes<sup>2</sup>, Guilherme Santos Vacchi<sup>3</sup>, Cristie Luis Kugelmeier<sup>3</sup>, Ícaro Gabriel Rodrigues Santos<sup>3</sup>, Carlos Alberto Della Rovere<sup>3</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Universidade Federal do ABC, <sup>3</sup>Universidade Federal de São Carlos
- 11:00 Influence of temperature and pressure in carbonation cement pastes containing catalytic residue** L.P3.18  
Cleice Lins Machado<sup>1</sup>, Lucas Ribeiro de Sousa<sup>1</sup>, Jefferson Santos da Silva<sup>1</sup>, Jardel Pereira Gonçalves<sup>1</sup>; <sup>1</sup>Universidade Federal da Bahia
- 11:00 Effect of Nb content in localized corrosion resistance of rapid solidified Ni-Nb binary alloys.** L.P3.19  
Katherine Martinez Orozco<sup>1</sup>, Conrado Ramos Moreira Afonso<sup>2</sup>, Carlos Alberto Della Rovere<sup>3</sup>, Claudio S. Kiminami<sup>2</sup>, Rodrigo Silva<sup>3</sup>; <sup>1</sup>Programa de Pós-Graduação em Ciência e Engenharia de Materiais (UFSCar), <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos
- 11:00 Synthesis and characterization of a layered hydroxide salt as a smart nanocontainer of molybdate for potential use in active corrosion protection** L.P3.20  
Débora Abrantes Nunes Leal<sup>1</sup>, Fernando Wypych<sup>1</sup>, Cláudia E. B. Marino<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 11:00 Concretes prepared with recycled aggregate and metakaolin: aspects of mechanical resistance and electrical resistivity** L.P3.21  
Eduardo da Cruz Teixeira<sup>1</sup>, Camila Macedo Medeiros<sup>2</sup>, Marcos Antonio Padilha Júnior<sup>1</sup>, João Adriano Rossignolo<sup>3</sup>, Normando Perazzo Barbosa<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia da Paraíba, <sup>3</sup>Universidade de São Paulo
- 11:00 Analysis of nanohardness in the interface transition zone of concretes prepared with metakaolin** L.P3.22  
Eduardo da Cruz Teixeira<sup>1</sup>, Camila Macedo Medeiros<sup>2</sup>, João Adriano Rossignolo<sup>3</sup>, Normando Perazzo Barbosa<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia da Paraíba, <sup>3</sup>Universidade de São Paulo
- 11:00 Deposition of DLC films inside of a metallic tube with different aspect ratio by using the pulsed-DC PECVD process** L.P3.23  
Elver Juan de Dios Mitma Pillaca<sup>1</sup>, Vladimir Jesus Trava-Airoldi<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 11:00 Addition of particulate material with pozzolanic characteristics in mortars** L.P3.24  
Larissa Faria Ribeiro<sup>1</sup>, Erika Peterson Gonçalves<sup>1</sup>; <sup>1</sup>Universidade do Vale do Paraíba
- 11:00 Tribological evaluation of CoCrMo alloy for biomedical applications** L.P3.25  
Eurico Felix Pieretti<sup>1</sup>, MAURICIO MARTINES DAS NEVES<sup>1</sup>, Olandir Vercino Correa<sup>1</sup>, Renato Altobelli Antunes<sup>2</sup>; <sup>1</sup>Instituto de Pesquisas Energeticas e Nucleares, <sup>2</sup>Universidade Federal do ABC
- 11:00 Evaluation of the tensile strength of PLA composites / taquara-lixia fibers after the soil degradation** L.P3.27  
Felipe Hermenegildo de Souza<sup>1</sup>, Caroline Rodrigues<sup>2</sup>, Lucas Freitas Berti<sup>2</sup>, Elaine Cristina Azevedo<sup>2</sup>, Amanda Leite<sup>2</sup>, Marcela Guiotoku<sup>3</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Federal University of Technology - Curitiba - PR, <sup>3</sup>Embrapa Florestas
- 11:00 Antioxidant capacity of Biodegradable Chitosan Films** L.P3.28  
franciele silva maciel<sup>1</sup>, Paula Paulino Silva<sup>1</sup>, Carmem Torres Guedes<sup>1</sup>, Paula Becker Pertuzatti<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso

- 11:00 Statistical evaluation of photomicrographs of polyurethane composites** **L.P3.29**  
Gabriel Oscar Cremona Parma<sup>1</sup>, Rachel Faverzani Magnago<sup>1</sup>; <sup>1</sup>Universidade do Sul de Santa Catarina
- 11:00 Comparative analysis of mechanical properties and CO<sub>2</sub> permeability of aged poly(ether ether ketone)** **L.P3.30**  
Geilza Alves Porto<sup>1</sup>, Maria de Fátima Vieira Marques<sup>1</sup>, Jonathan Rubio Arias<sup>1</sup>, Luiz Guilherme Abreu de Paula<sup>1</sup>, Erica Gervasoni Chaves<sup>2</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ, <sup>2</sup>Petrobras
- 11:00 Biodiesel and fuel blends affecting the corrosion behavior of AlSi alloys and composites** **L.P3.31**  
Alfredo Luis Pereira Elias<sup>1</sup>, Murilo Shiniti Koizumi<sup>1</sup>, Eder Lopes Ortiz<sup>1</sup>, Ausdinar Danilo Bortolozo<sup>1</sup>, Wislei R R Osorio<sup>1</sup>, Giovana da Silva Padilha<sup>1</sup>; <sup>1</sup>Faculdade de Ciências Aplicadas, Unicamp
- 11:00 Influence of the microstructure on the oxidation behavior of a martensitic stainless steel: at high temperature in the presence of V<sub>2</sub>P<sub>5</sub>** **L.P3.32**  
Giselly Bandeira Gomes<sup>1</sup>, Márcio Roberto Rocha<sup>1</sup>, Elidio Angioletto<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade do Extremo Sul Catarinense
- 11:00 Correlation between surface roughness of the machined part and solidification microstructure of the Al-6wt% Cu alloy solidified under transient heat flow extraction** **L.P3.33**  
Gleidson Silva Figueiredo<sup>1</sup>, Maria Adrina Paixão de Souza da Silva<sup>2</sup>, Tiago Nunes da Costa<sup>2</sup>, Tamires Isabela Botelho<sup>2</sup>, Otávio Fernandes Lima da Rocha<sup>3</sup>, Jacson Malcher Nascimento<sup>2</sup>, Ezayne Sanaely da Silva Frihani Roni<sup>2</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Federal University of Pará, <sup>3</sup>Federal Institute of Education, Science and Technology of Pará
- 11:00 Superhydrophobicity in TiO<sub>2</sub> and PDSM-modified wood** **L.P3.34**  
Gustavo Prado dos Passos<sup>1</sup>, PAULA ZANATTA<sup>2</sup>, Pedro Henrique Sangaletti<sup>1</sup>, Francielen San Martins Rodrigues<sup>1</sup>, Renato de Gouveia Cantoneiro<sup>1</sup>, Cátia Liane Ücker<sup>1</sup>, Alessandro Bayestorff da Cunha<sup>2</sup>, Sergio da Silva Cava<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Fundação Universidade do Estado de Santa Catarina
- 11:00 Degradation of chemically stable materials assisted by metallic oxide nanoparticles and UV radiation** **L.P3.35**  
Higor Rogerio Favarim<sup>1</sup>, Augusto Batagin-Neto<sup>2</sup>, João Marcos de Oliveira Barbosa<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Estadual Paulista
- 11:00 Effect of addition of SEBS in morphological and mechanical PLA properties in packing** **L.P3.36**  
Jéssica Costa Lima<sup>1</sup>, Lyneker Souza Moura<sup>1</sup>, Andrielen Vanzetto<sup>2</sup>, Micaela Ferrari Ferrari<sup>2</sup>, Rosmary Nichele Brandalise<sup>2</sup>, Pankaj Agrawal<sup>3</sup>, Tomás Jeferson Alves Mélo<sup>3</sup>, Yeda Medeiros Bastos de Almeida/Facepe<sup>1</sup>, Glória Maria Vinhas<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Universidade de Caxias do Sul, <sup>3</sup>Universidade Federal de Campina Grande
- 11:00 Effect of addition of SEBS in biologic degradation of PLA in simulated marine environment** **L.P3.37**  
Jéssica Costa Lima<sup>1</sup>, Andrielen Vanzetto<sup>2</sup>, Micaela Dani Ferarri<sup>2</sup>, Rosmary Nichele Brandalise<sup>2</sup>, Akidauana Dandara Brito de Oliveira<sup>3</sup>, Pankaj Agrawal<sup>3</sup>, Tomás Jeferson Alves Mélo<sup>3</sup>, Yeda Medeiros Bastos de Almeida/Facepe<sup>1</sup>, Glória Maria Vinhas<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Universidade de Caxias do Sul, <sup>3</sup>Universidade Federal de Campina Grande

- 11:00 Corrosion inhibition properties of Vanadium Carbide (VC) coating on AISI O1 tool steel** **L.P3.38**  
Jonathas Sousa Reis<sup>1</sup>, Danilo Maciel Barquete<sup>1</sup>, Vera Rosa Capelossi<sup>1</sup>, Rômulo Luís Fernandes Martins<sup>1</sup>, Erik de Souza Lago<sup>1</sup>, José Victor Silva Duarte<sup>1</sup>, Lucas Costa Sena<sup>1</sup>, Rafael Silvestre de Sena<sup>1</sup>; <sup>1</sup>Universidade Estadual de Santa Cruz
- 11:00 Protective System Using Clay For Drug Photostability** **L.P3.39**  
JOSY ANTEVELI OSAJIMA<sup>1</sup>, MONSUETO CARDOSO<sup>1</sup>, THAIS ANDRADE GALDINO<sup>1</sup>, Elton Marks de Araujo Braz<sup>1</sup>, Pollyana Trigueiro<sup>1</sup>, SANTIAGO MEDINA CARRASCO<sup>2</sup>, Maria Gardennia Fonseca<sup>3</sup>, César Viseras Iborra<sup>4</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidad de Sevilla, <sup>3</sup>Universidade Federal da Paraíba, <sup>4</sup>Universidad de Granada
- 11:00 Construction of climatic simulation glass for degradation tests of polymer films and photovoltaic devices** **L.P3.40**  
Kaike Rosivan Maia Pacheco<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 11:00 Effect of self-bias voltage and SiH<sub>4</sub>:CH<sub>4</sub> gas mixture on the corrosion behavior of Si-DLC coatings deposited by rf-PECVD** **L.P3.41**  
Kenny de Almeida Gomes Monteiro<sup>1</sup>, Emanuel Santos Jr.<sup>1</sup>, Sérgio de Souza Camargo Jr.<sup>2</sup>; <sup>1</sup>Centro Universitário de Volta Redonda, <sup>2</sup>Universidade Federal do Rio de Janeiro
- 11:00 Effect of Plasma Immersion Ion Implantation of Nitrogen in the Corrosion Resistance of Stainless Steel Grades** **L.P3.42**  
Leonardo Augusto Luiz<sup>1</sup>, Bruna Corina Emanuely Schibicheski Kurelo<sup>2</sup>, Gelson Biscaia de Souza<sup>2</sup>, Juliano de Andrade<sup>3</sup>, Cláudia E. B. Marino<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Estadual de Ponta Grossa, <sup>3</sup>Institutos LACTEC
- 11:00 Enhancement of Nafion-based composite membranes using protic ionic liquids in fuel cell application** **L.P3.43**  
Letícia Zanchet<sup>1</sup>, Letícia Guerreiro da Trindade<sup>2</sup>, William Bariviera<sup>1</sup>, Katiúscia Nobre Borba<sup>1</sup>, Rafter D.M Santos<sup>3</sup>, Valdecir A. Paganin<sup>3</sup>, Katia Bernardo-Gusmão<sup>1</sup>, Edson A. Ticianelli<sup>3</sup>, Emilse Maria Agostini Martini<sup>1</sup>, Michèle O. de Souza<sup>1</sup>; <sup>1</sup>Instituto de Química - UFRGS, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>3</sup>Instituto de Química de São Carlos-USP
- 11:00 Effect of UV irradiation on ZnO NPs-polystyrene nanocomposites investigated by means of Infrared Spectroscopy** **L.P3.44**  
Lizandra M. Zimmermann<sup>1</sup>, Ana Luiza Einloft Petter da Silva<sup>1</sup>, Francielle Schmitz<sup>1</sup>; <sup>1</sup>Universidade Regional de Blumenau
- 11:00 Changes in the temperature of LiCoO<sub>2</sub> cell phone batteries on running and the effect of room temperature on the battery performance** **L.P3.45**  
Gabriel Gonzaga dos Santos<sup>1</sup>, Lucas Lima Pelais<sup>1</sup>, Jair Scarminio<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 11:00 Corrosion behavior of Cu-Zr-Al metallic glasses** **L.P3.46**  
Marcela Bergamaschi Tercini<sup>1</sup>, Alejandro Zuniga<sup>1</sup>, Renato Altobelli Antunes<sup>1</sup>, Leandro De Oliveira<sup>1</sup>, Carlos Triveño Rios<sup>1</sup>, Denise Criado<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Effect of ultraviolet radiation aging on the biodegradation of poly(butylene adipate co-tereftalate)/thermoplastic starch blend** **L.P3.47**  
Fernanda Andrade Tigre da Costa<sup>1</sup>, Marcelo Augusto Gonçalves Bardi<sup>1</sup>; <sup>1</sup>Universidade São Francisco
- 11:00 A study on fatigue failure analysis of an elastomeric resistance band tube** **L.P3.48**  
Marcio Andreato Mendes<sup>1</sup>, Filippe de Carvalho Bernardino<sup>1</sup>, Fabrício Fernandes Carvalho<sup>1</sup>, Rodrigo Ono<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná

- 11:00 Determination of the wear resistance of the Vitreloy-105 Metallic Glass Alloy using a pin-on-disk tribometer** L.P3.49  
Felipe Raphael Salgado<sup>1</sup>, Marcio Andreato Mendes<sup>1</sup>, Janaína Fracaro Gonçalves<sup>1</sup>, Nelson Delfino de Campos Neto<sup>2</sup>, Marcelo Falcão de Oliveira<sup>2</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade de São Paulo
- 11:00 Tribocorrosion and corrosion in nickel-phosphorus alloys deposited on 6351 aluminum alloy for aerospace applications.** L.P3.50  
Gabriela Santos Nascimento<sup>1,2</sup>, Graziela da Silva Savonov<sup>2</sup>, Lucia Vieira<sup>1</sup>, Polyana Alves Radi<sup>3</sup>, Marco Aurelio Horban<sup>2</sup>; <sup>1</sup>Universidade do Vale do Paraíba, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais, <sup>3</sup>Universidade Federal de São Paulo
- 11:00 Tribocorrosion Behavior of NiP-Al<sub>2</sub>O<sub>3</sub> Post Heat Treated at Different Temperatures** L.P3.51  
Luis Felipe Zanetti<sup>1</sup>, Sabrina Barbosa Rosini<sup>1</sup>, Marcos Eduardo Soares<sup>2</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Campus Ponta Grossa, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 11:00 Susceptibility to the intergranular attack of diffusion-bonded 316L steel** L.P3.52  
Maria Cristina Amaral<sup>1</sup>, Priscila da Costa Gonçalves<sup>1</sup>, Bruno Borges Ramos<sup>1</sup>, André Monteiro<sup>2</sup>, Sônia Maria Hickel Probst<sup>1</sup>, Marcia Barbosa Henriques Mantelli<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Petrobras
- 11:00 Tenacification of PA6 in EVA mixtures** L.P3.53  
Luiza Bedin Rocetto<sup>1</sup>, Thamires Vizioli Damo<sup>1</sup>, Rosmary Nichele Brandalise<sup>1</sup>, Mara Zeni Andrade<sup>1</sup>, Micaela Dani Ferrari<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul
- 11:00 Methodology of Determination of Permeability of Fluids in Hydraulic Hoses of Umbilical Cables** L.P3.54  
Tayhane Fernandes Sá Cavalcante<sup>1</sup>, Michelli Siqueira Monteiro Barros<sup>1</sup>, Paulo Manoel Conceição Santos<sup>1</sup>; <sup>1</sup>Prysmian Group
- 11:00 Metal oxides derived from pyrolysis of mixed metal MOFs** L.P3.55  
BIANKA CRISTINA DA SILVA SIQUEIRA<sup>1</sup>, Bráulio Silva Barros<sup>1</sup>, JOANNA ELZBIETA KULESZA<sup>1</sup>, FABIANA THAYSE DOS SANTOS SILVA<sup>1</sup>, MILENA KOWALCZUK MANOSSO AMORIM<sup>1</sup>, ANTÔNIO MARCOS URBANO DE ARAÚJO<sup>2</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Universidade Federal do Rio Grande do Norte
- 11:00 On the influence of the concentration of aqueous extracts of *Ilex paraguariensis* as corrosion inhibitor for Al2024-T3 aluminum alloy** L.P3.56  
Murilo Da Silva Del Vecchio<sup>1</sup>, Emily Menegon Gatto<sup>1</sup>, Tiago Falcade<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto de Química - UFRGS
- 11:00 Analysis of the carbonation interference in the concrete resistance with the use of ultrasound** L.P3.57  
Myrela Vieira Araújo<sup>1</sup>, Luciano Carneiro Reis<sup>1</sup>, Antônio Silva Oliveira<sup>2</sup>, Raimundo Araújo Netto<sup>3</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Tac Construções Eireli, <sup>3</sup>Prefeitura Municipal de Tasso Fragoso
- 11:00 Characterization of mechanical and surface finishing properties of metallic coating obtained by electric arc thermal spray** L.P3.58  
Pamella Kessler de Campos<sup>1</sup>, Marília Garcia Diniz<sup>1</sup>, Ananda Velloso Lara Guapyassu<sup>1</sup>, André Rocha Pimenta<sup>2</sup>, Bruno Reis Cardoso<sup>3</sup>, Heloísa Cunha Furtado<sup>3</sup>; <sup>1</sup>Universidade do Estado do Rio de Janeiro, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio de Janeiro, <sup>3</sup>Centro de Pesquisas de Energia Elétrica



- 11:00 Morphological analysis, surface hydrophobicity and swelling of Chitosan Films** **L.P3.59**  
Paula Paulino Silva<sup>1</sup>, franciele silva maciel<sup>1</sup>, Paula Becker Pertuzatti<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso
- 11:00 Increase in mechanical strength of electrodeposited coatings of CuNi by reinforcement with Al<sub>2</sub>O<sub>3</sub> hard particles.** **L.P3.60**  
Paulo Cezar Tulio<sup>1</sup>, Raphael de Souza<sup>2</sup>, Fallconny Rodrigues Sensato de Oliveira<sup>1</sup>; <sup>1</sup>Federal University of Technology - Cornélio Procópio, <sup>2</sup>Etec Pedro D´Arcádia Neto
- 11:00 Processing and characterization of olive lump for exfoliating purposes applied to cosmetic products** **L.P3.61**  
 Lucas Ferreira Lyra<sup>1</sup>, Rademaks Bento de Oliveira<sup>2,3</sup>, Beatriz Botossi de Oliveira<sup>1</sup>, Marina Luisa Rodrigues Oliveira<sup>1</sup>, Rodrigo Nascimento Ferreira Alves<sup>1</sup>, Valdirene Aparecida da Silva<sup>1</sup>; <sup>1</sup>Universidade do Vale do Paraíba, <sup>2</sup>ETEC Cônego José Bento, <sup>3</sup>Instituto de Pesquisa e Desenvolvimento - Univap
- 11:00 Syntheses and application of CuO nanoparticles for heterogeneous photocatalysis.** **L.P3.62**  
Rafael Fabri Chimidt<sup>1</sup>, Higor Rogerio Favarim<sup>1</sup>; <sup>1</sup>São Paulo State University
- 11:00 Surface integrity analysis of Nd-Fe-B magnets cut by diamond wire sawing technology** **L.P3.63**  
 Ricardo Knoblauch<sup>1</sup>, Rafael Yosikatsu Odo<sup>1</sup>, Erick Cardoso Costa<sup>1</sup>, Ricardo Delgado<sup>1</sup>, Fabio Antonio Xavier<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Abrasiveness influence of iron ore slurry in the slurry pump impeller wear** **L.P3.64**  
Renato Chaves Silva<sup>1</sup>, Adilson Rodrigues Costa<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto
- 11:00 Effect of thiol adsorption on the electrical resistivity of copper ultrathin films** **L.P3.65**  
Ricardo Henriquez<sup>1</sup>, Gabriel Gray<sup>1</sup>, Francisca Marin<sup>1</sup>, Valeria Del Campo<sup>1</sup>, Claudio A. González-Fuentes<sup>1</sup>, Patricio Häberle<sup>1</sup>; <sup>1</sup>Universidad Técnica Federico Santa María
- 11:00 Anticorrosive performance of superhydrophobic/hydrophobic AA2024-T3 alloy surface** **L.P3.66**  
Suelen Weimer Cendron<sup>1</sup>, Daniel Eduardo Weibel<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 11:00 Synthesis of calcium phosphate by calcination of the tilapia scale** **L.P3.67**  
TALITA ARAÚJO VARJÃO<sup>1</sup>, THARSIA CRISTIANY DE CARVALHO COSTA<sup>1</sup>, RONALDO DA MACENO LIMA<sup>1</sup>, SINTIA DA SILVA FREIRE<sup>1</sup>; <sup>1</sup>Instituto Federal da Bahia
- 11:00 Silica Nanoparticles Synthetized by the Stöber Method Applied to Improve Portland Cement Compounds Properties.** **L.P3.68**  
 David Vinicios Dos Santos Baldon<sup>1</sup>, Vanessa Maruyama<sup>2</sup>, Anderson Rodrigo Fornelli<sup>2</sup>, Talita Fogaça de Oliveira<sup>1,2</sup>, Tiago Dutra Galvão<sup>1,2</sup>, Rodrigo Nagata<sup>2</sup>; <sup>1</sup>Universidade Estadual de Londrina, <sup>2</sup>Universidade Pitágoras Unopar
- 11:00 Tribological and corrosive behavior of DLC films deposited in the Ti<sub>6</sub>Al<sub>4</sub>V alloy with and without TiO<sub>2</sub> nanoparticles** **L.P3.69**  
Thalita Sani Taiariol<sup>1,2</sup>, Rebeca Falcão Correia<sup>1,2</sup>, Elver Juan de Dios Mitma Pillaca<sup>2</sup>, Gislene Valdete Martins<sup>2</sup>, Carlos Alberto de Oliveira Nunes<sup>2</sup>, Jesús Manuel Gutierrez Bernal<sup>3</sup>, Vladimir Jesus Trava-Airoldi<sup>1,2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais, <sup>3</sup>Universidad Nacional de Colombia

**11:00 Electrochemical evaluation of corrosion on reinforced concrete structure with L.P3.70 titanium dioxide**

VITOR CEZAR BROETTO PEGORETTI<sup>1</sup>, Luiz Felipe Castello Del Caro<sup>2</sup>, Luis Guilherme Lyra<sup>2</sup>, ADILSON RIBEIRO PRADO<sup>2</sup>, VANESSA RAFAELA DE SOUZA<sup>3</sup>, Rafael Furtado Seeberger<sup>3</sup>; <sup>1</sup>Instituto Federal Fluminense, <sup>2</sup>Instituto Federal do Espírito Santo, <sup>3</sup>EDP

# **SYMPOSIUM M - Magnetic and Superconducting Materials**

**Symposium organizers:**

Felipe Bohn (UFRN)  
Lucio Strazzabosco Dorneles (UFSM)  
Marcio Assolin Correa (UFRN)



# MONDAY , SEPTEMBER 23

\* Invited Lecture

## *SESSION M.O1.D1 (09:30 - 10:30) - Room Zimbros*

- 09:30 Functional Magneto-Luminescent Nanomaterials for Bioimaging**(Marcelo Knobel<sup>1</sup>, Latif U. Khan<sup>2</sup>, Diego Muraca<sup>1</sup>, Luelc Souza da Costa<sup>1,2</sup>, Diego Stéfani T. Martinez<sup>2</sup>) **M.O1.D1.1\***  
Marcelo Knobel<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 10:15 Probing magnetism and superconductivity with soft X-rays at Sirius** **M.O1.D1.2**  
Thiago J. A. Mori<sup>1</sup>, Pedro Schio<sup>1</sup>, Wendell Simões Silva<sup>1</sup>, Júlio C. Cezar<sup>1</sup>, Túlio C. R. Rocha<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais

## *SESSION M.O2.D1 (11:00 - 12:00) - Room Zimbros*

- 11:00 Heating efficiency of magnetic hyperthermia at clinically relevant conditions decreases the higher the fraction of blocked nanoparticles** **M.O2.D1.1**  
Victor RR Aquino<sup>1</sup>, Marcus Vinicius-Araujo<sup>1</sup>, Marcelo Henrique Sousa<sup>2</sup>, José Antônio Huamaní Coaquira<sup>2</sup>, Andris Figueiroa Bakuzis<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Universidade de Brasília
- 11:30 Thermal behavior in the non-adiabatic regime of superparamagnetic nanoparticles in an alternating magnetic field** **M.O2.D1.2**  
Carlos Augusto Moraes Iglesias<sup>1</sup>, João Carlos Rocha Araújo<sup>2</sup>, Jayson Xavier<sup>1</sup>, Thiago Tibúrcio Vicente<sup>1</sup>, Rodolfo Silva Silva<sup>1</sup>, Marco A. Morales<sup>1</sup>, Marcio Assolin Correa<sup>1</sup>, Susana Nobrega Medeiros<sup>1</sup>, Felipe Bohn<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Federal da Paraíba
- 11:45 Energy loss prediction in grain oriented electrical steel under sinusoidal and distorted supply conditions** **M.O2.D1.3**  
Mateus Botani de Souza Dias<sup>1</sup>, Fernando José Gomes Landgraf<sup>2</sup>, Carlos Stefano Ragusa<sup>3</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Escola Politécnica de Universidade de São Paulo, <sup>3</sup>Politecnico di Torino

## *SESSION M.O3.D1 (14:00 - 16:15) - Room Zimbros*

- 14:00 Flux avalanches imprints in the ferromagnetic layer of Nb/Al<sub>2</sub>O<sub>3</sub> /Co thin film heterostructures** **M.O3.D1.1\***  
Rovan Fernandes Lopes<sup>1</sup>, Danusa do Carmo<sup>2</sup>, Fabiano Colauto<sup>2</sup>, Wilson Aires Ortiz<sup>2</sup>, Antônio Helgueira de Andrade<sup>1</sup>, Tim Johansen<sup>3</sup>, Paulo Pureur<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>University of Oslo / Universitetet i Oslo
- 14:30 Magnetic and superconductors thin films growth at Sirius** **M.O3.D1.2**  
Pedro Schio<sup>1</sup>, Thiago J. A. Mori<sup>1</sup>, Júlio C. Cezar<sup>1,2</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Laboratório Nacional de Luz Síncrotron

- 14:45 Room-temperature chiral magnetic skyrmions in ultrathin magnetic nanostructures.** **M.O3.D1.3**  
Dayane de Souza Chaves<sup>1</sup>, Júlio C. Cezar<sup>1</sup>, Olivier Boulle<sup>2</sup>, Romeo Juge<sup>2</sup>, Stefania Pizzini<sup>3</sup>, Jan Vogel<sup>3</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>SPINSPINtronic et TEchnologie des Composants, <sup>3</sup>Centre National de la Recherche Scientifique
- 15:00 Evolution of zero field ferrimagnetic domains walls and skyrmions in exchange coupled Pt/CoGd/Pt confined nanostructures** **M.O3.D1.4**  
JEOVANI BRANDAO<sup>1</sup>; <sup>1</sup>Laboratorio Nacional de Luz Sincroton
- 15:15 Ab-initio and spin-dynamics investigation of magnetism at the nanoscale: skyrmions** **M.O3.D1.5**  
Ivan de Paula Miranda<sup>1</sup>, Angela Burlamaqui Klautau<sup>2</sup>, Helena Maria Petrilli<sup>1</sup>, Anders Bergman<sup>3</sup>; <sup>1</sup>Instituto de Física - Universidade de São Paulo, <sup>2</sup>Universidade Federal do Pará, <sup>3</sup>Uppsala University / Uppsala Universitet
- 15:30 Imaging room-temperature skyrmions and magnetic domains patterns at zero magnetic field in symmetric Pt/Co/Pt heterostructures** **M.O3.D1.6**  
DANIAN Alexandre DUGATO<sup>1,2</sup>, Jeovani Brandão<sup>2</sup>, Samuel Flewett<sup>3</sup>, Fanny Béron<sup>4</sup>, Júlio C. Cezar<sup>2</sup>, Lucio Strazzabosco Dorneles<sup>1</sup>, Thiago J. A. Mori<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Maria, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Pontificia Universidad Católica de Valparaíso, <sup>4</sup>Universidade Estadual de Campinas
- 15:45 Tuning the formation of magnetic domain walls and skyrmions at zero magnetic field and room temperature in symmetric Pd/Co/Pd multilayers** **M.O3.D1.7**  
JEOVANI BRANDAO<sup>1</sup>; <sup>1</sup>Laboratorio Nacional de Luz Sincroton
- 16:00 Perpendicular magnetization switching induced by spin-orbit torques in Pt/[Co/Ni] multilayers** **M.O3.D1.8**  
Nicholas Figueiredo Prestes<sup>1,2</sup>, Sophie Collin<sup>3,2,4</sup>, Juliana Zarpellon<sup>5</sup>, Laurent Vila<sup>6,7</sup>, Nicolas Reyren<sup>3,2,4</sup>, Dante Homero Mosca<sup>1</sup>, Jean-Marie George<sup>3,2,4</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Unité Mixte de Physique CNRS/Thales, <sup>3</sup>Paris Sud, <sup>4</sup>Université Paris-Saclay, <sup>5</sup>Laboratório de Nanoestruturas para Sensores, <sup>6</sup>Université Grenoble Alpes, <sup>7</sup>Commissariat à l'énergie atomique et aux énergies alternatives

## TUESDAY , SEPTEMBER 24

\* Invited Lecture

### *SESSION M.O1.D2 (09:30 - 10:30) - Room Zimbros*

- 09:30 Experimental Observation of Spin-Wave Fractals** **M.O1.D2.1\***  
Mingzhong Wu<sup>1</sup>; <sup>1</sup>Colorado State University
- 10:00 Integrating ferrimagnetic insulator in a stripline system for high frequency applications** **M.O1.D2.2**  
João Gustavo Silva Santos<sup>1</sup>, Felipe Bohn<sup>1</sup>, Edmilson Felix Silva<sup>1</sup>, Marcio Assolin Correa<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte

- 10:15 Microwave absorption and magnetic properties of electroplated CoNiFe thin films deposited directly on Si (100) substrates** M.O1.D2.3  
Bruno Gomes Silva<sup>1</sup>, Diego Ernesto González-Chávez<sup>1</sup>, José Gomes Filho<sup>1</sup>, Rubem Luis Sommer<sup>1</sup>; <sup>1</sup>Brazilian Center for Research in Physics

**SESSION M.O2.D2 (11:00 - 12:00) - Room Zimbros**

- 11:00 Magnetotransport properties of Pd/Co pseudo-spin valves with different metallic separators and deposited on nanostructured alumina membranes.** M.O2.D2.1  
Juliano Casagrande Denardin<sup>1</sup>, Simon Oyarzun<sup>1</sup>, Diego Saldanha<sup>2</sup>, Denilson Toneto da Silva Toneto<sup>2</sup>, Lucio Strazzabosco Dorneles<sup>2</sup>; <sup>1</sup>Universidad de Santiago de Chile, <sup>2</sup>Universidade Federal de Santa Maria
- 11:30 Very small gilbert damping of Co<sub>2</sub>FeAl thin films for applications in spintronics** M.O2.D2.2  
Syed Adnan Raza<sup>1</sup>, Bruno Gomes Silva<sup>1</sup>, Cilene Labre<sup>1</sup>, Diego Ernesto González-Chávez<sup>1</sup>, Marcio Assolin Correa<sup>2</sup>, Rubem Luis Sommer<sup>1</sup>; <sup>1</sup>Brazilian Center for Research in Physics, <sup>2</sup>Universidade Federal do Rio Grande do Norte
- 11:45 Ultrafast magnetization dynamics in [Co<sub>60</sub>Fe<sub>40</sub>/Pt]<sub>5</sub> multilayers excited by femtosecond laser pulses** M.O2.D2.3  
Mariana Andrade Boense Tavares<sup>1</sup>, Leandro H. F. Andrade<sup>1</sup>, Maximiliano Delany Martins<sup>1</sup>, Gustavo Fóscolo de Moura Gomes<sup>2</sup>, Luis Eugenio Fernandez-Outon<sup>3</sup>, Franklin Massami Matinaga<sup>3</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Estadual de Montes Claros, <sup>3</sup>Universidade Federal de Minas Gerais

**SESSION M.O3.D2 (14:00 - 16:15) - Room Zimbros**

- 14:00 Vortex dynamics in superconducting films and hybrids** M.O3.D2.1\*  
Wilson Aires Ortiz<sup>1</sup>, Fabiano Colauto<sup>1</sup>, Maycon Motta<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos
- 14:30 Induced magnetization at interfacial Cu atoms in epitaxial Fe/Co/Cu<sub>3</sub>Au(001)** M.O3.D2.2  
Sofia Oliveira Parreiras<sup>1</sup>, Alexandre Alberto Chaves Cotta<sup>2</sup>, Pedro Schio<sup>3,4</sup>, Júlio C. Cezar<sup>3,4</sup>, Pedro Lana Gastelois<sup>1</sup>, Waldemar Augusto de Almeida Macedo<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Lavras, <sup>3</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>4</sup>Laboratorio Nacional de Luz Sincrotron
- 14:45 Thermal stabilization of martensite in near-stoichiometric Ni<sub>2</sub>MnGa thin films under thermal annealing** M.O3.D2.3  
Aluizio Jose Salvador<sup>1</sup>, Itamar Tomio Neckel<sup>2</sup>, Ismael Leandro Graff<sup>1</sup>, Dante Homero Mosca<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Laboratorio Nacional de Luz Sincrotron
- 15:00 Structural and magnetic characterization of MnGe/GaAs thin films as a function of stoichiometry and substrate orientation.** M.O3.D2.4  
Ronei C. Oliveira<sup>1</sup>, Massimiliano Marangolo<sup>2</sup>, Dante Homero Mosca<sup>1</sup>, José Varalda<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Pierre and Marie Curie University - Paris 6

- 15:15 Magnetolectrical Transport Improvements of Postgrowth Annealed Iron–Cobalt Nanocomposites: A Route for Future Room-Temperature Spintronics** **M.O3.D2.5**  
Marcos Vinicius Puydinger dos Santos<sup>1</sup>, Sven Barth<sup>2</sup>, Fanny Béron<sup>1</sup>, Kleber Roberto Pirola<sup>1</sup>, José Alexandre Diniz<sup>1</sup>, Stanislav Moshkalev<sup>1</sup>, Ivo Utke<sup>3</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Technische Universität Wien, <sup>3</sup>Swiss Federal Laboratories for Materials Science and Technology
- 15:30 Local probing Ca<sub>2</sub>MnO<sub>4</sub> structural phase transitions** **M.O3.D2.6**  
Pedro Miguel da Rocha Rodrigues<sup>1</sup>, Samuel S. M. Santos<sup>1</sup>, Tiago Leal<sup>1</sup>, Gonçalo Nuno Pinho Oliveira<sup>1</sup>, Ivan Paula Miranda<sup>2</sup>, Ricardo Moreira<sup>1</sup>, Lucy V. Credidio Assali<sup>2</sup>, Helena Maria Petrilli<sup>2</sup>, João Pedro Esteves Araujo<sup>1</sup>, Armandina Maria Lima Lopes<sup>1</sup>; <sup>1</sup>Instituto de Física dos Materiais Avançados, Nanotecnologia e Fotônica da Universidade do Porto, <sup>2</sup>Instituto de Física - Universidade de São Paulo
- 15:45 Synthesis of Bi<sub>0.85</sub>La<sub>0.15</sub>FeO<sub>3</sub> ceramics under extreme conditions** **M.O3.D2.7**  
Roger Carvalho Oliveira<sup>1</sup>, José Antônio Eiras<sup>2</sup>, Ducinei Garcia<sup>2</sup>, Ivair Aparecido Santos<sup>1</sup>, Eduardo Azzolini Volnistem<sup>1</sup>, Luiz Fernando Cótica<sup>1</sup>, Gustavo Sanguino Dias<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Federal de São Carlos
- 16:00 Soft X-ray Ptychography of Magnetic Domains – Promises and Limitations** **M.O3.D2.8**  
 Samuel Flewett<sup>1</sup>, Thiago J. A. Mori<sup>2</sup>, David Shapiro<sup>3</sup>, Young-Sang Yu<sup>3</sup>, Juliano Casagrande Denardin<sup>4</sup>; <sup>1</sup>Pontificia Universidad Católica de Valparaíso, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Lawrence Berkeley National Laboratory, <sup>4</sup>Universidad de Santiago de Chile

## WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

### *SESSION M.O1.D3 (09:30 - 10:30) - Room Zimbros*

- 09:30 Blocking, remanence and exchange coupling properties of weakly and highly interactive cobalt ferrite based nanoparticles** **M.O1.D3.1**  
 Clauber Alex Melo Vieira<sup>1</sup>, Rodolpho Leite<sup>2</sup>, Rafael Cabreira Gomes<sup>1</sup>, Franciscarlos Gomes da Silva<sup>1</sup>, Renata Aquino<sup>1</sup>, Alex Fabiano Cortez Campos<sup>1</sup>, Régine Perzynski<sup>3</sup>, Jerome Depeyrot<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Piauí, <sup>3</sup>Pierre and Marie Curie University - Paris 6
- 09:45 Iron Nitride nanoparticles synthesized by laser irradiation at different laser wavelengths** **M.O1.D3.2**  
Greici Gubert<sup>1</sup>, Dante Homero Mosca<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 10:00 Structural, spectroscopic and magnetic properties of BiFeO<sub>3</sub> nanoparticles obtained by high-energy ball cryo-milling** **M.O1.D3.3**  
Lívia Macková<sup>1</sup>, Eduardo Azzolini Volnistem<sup>1</sup>, Ivair Aparecido Santos<sup>1</sup>, Gustavo Sanguino Dias<sup>1</sup>, Luiz Fernando Cótica<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 10:15 Synthesis and Properties of Magnetic Fluids Based on Cobalt Ferrite Nanoparticles (CoFe<sub>2</sub>O<sub>4</sub>@ $\gamma$ -Fe<sub>2</sub>O<sub>3</sub>)** **M.O1.D3.4**  
Ruth Pinheiro Muniz<sup>1</sup>, Gustavo Garcia da Silva<sup>1</sup>, Cynara Caroline Kern Barreto<sup>1</sup>; <sup>1</sup>Universidade de Brasília



### **SESSION M.O2.D3 (11:00 - 12:00) - Room Zimbros**

- 11:00 Production and characterization of antiferromagnetic Mn<sub>5</sub>Si<sub>3</sub> nanowires for future spintronics applications** **M.O2.D3.1**  
Alexsandro dos Santos Evangelista da Cruz<sup>1</sup>, Marcos Vinicius Puydinger dos Santos<sup>1</sup>, Raul Back Campanelli<sup>1</sup>, Jefferson Bettini<sup>2</sup>, Pascoal José Giglio Pagliuso<sup>1</sup>, Kleber Roberto Pirola<sup>1</sup>, Fanny Béron<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 11:15 Strategies to Improve Magnetic Performance of Sm-Fe-N Powders** **M.O2.D3.2**  
Melissa Röhrig Martins da Silva<sup>1</sup>, Luis Torres Quispe<sup>1</sup>, Maciel Santos Luz<sup>2</sup>, Cristiano da Silva Teixeira<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Instituto de Pesquisas Tecnológicas
- 11:30 Ultrasound one pot synthesis of highly stable iron oxide/alginate nanocomposite** **M.O2.D3.3**  
Aldebarã Fausto Ferreira<sup>1</sup>, Sérgio de Lemos Campello<sup>1</sup>, Ana Cláudia Vaz de Araújo<sup>2</sup>, Alexandre Ricalde Rodrigues<sup>1</sup>, Giovannia A L Pereira<sup>1</sup>, Walter Mendes de Azevedo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Universidade Federal Rural de Pernambuco
- 11:45 Aspects of Cold Isostatic Pressing on Nd-Fe-B anisotropic magnets processing** **M.O2.D3.4**  
Jonas Luiz Monteiro<sup>1</sup>, Valmir Rodrigo da Silva<sup>1</sup>, Eduardo Szpoganicz da Silva<sup>1</sup>, Giulia Danielle Giovanni D'Avila<sup>1</sup>, Leonardo Ulian Lopes<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

## **Poster presentations**

### **SESSION M.P6 (18:00 - 19:30)**

- 18:00 AB INITIO study of metallic multilayered systems** **M.P6.1**  
Pamela Costa Carvalho<sup>1</sup>, Ivan de Paula Miranda<sup>1</sup>, Angela Burlamaqui Klautau<sup>2</sup>, Helena Maria Petrilli<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade Federal do Pará
- 18:00 Production and Characterization of Magnetic Nanoparticles Coated by Responsive Polymers** **M.P6.2**  
Frederico Vieira Gutierrez<sup>1</sup>, Ana Maria Percebom<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro
- 18:00 Investigation by impedance spectroscopy of the dielectric properties of hexaferrite type and Ba<sub>2</sub>Zn<sub>2</sub>Fe<sub>12</sub>O<sub>22</sub>** **M.P6.3**  
José Felisberto da Costa Neto<sup>1</sup>, Natália Katarina Brito de Matos<sup>1</sup>, Flavio Moura e Silva Junior<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão - Campus Imperatriz, <sup>2</sup>Federal Institute of Maranhão
- 18:00 Vortex dynamics in granular superconducting tapes in the framework of time-dependent Ginzburg-Landau theory** **M.P6.4**  
Adriana Guirao Presotto<sup>1</sup>, Elwis Carlos Sartorelli Duarte<sup>1</sup>, Edson Sardella<sup>2</sup>, Rafael Zadorosny<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia de Ilha Solteira - UNESP, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru
- 18:00 Synthesis of cobalt ferrite nanoparticles coated with hydroxyapatite functionalized with bioactive molecule for photodynamic therapy** **M.P6.5**  
Alejandra Hortencia González González<sup>1</sup>, Daniely Ferreira Queiróz<sup>1</sup>, Emerson Camargo<sup>2</sup>; <sup>1</sup>Universidade Anhanguera de São Paulo, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos

- 18:00 Investigation of the structural properties of cobalt ferrite by X-ray diffraction** **M.P6.6**  
Alex Braga Silva<sup>1</sup>, Ana Angélica Mathias Macêdo<sup>1</sup>, Fernando Mendes<sup>2,3</sup>,  
 Adenilson Oliveira dos Santos<sup>4</sup>, Rafael Mendonça Almeida<sup>1</sup>; <sup>1</sup>Instituto Federal de  
 Educação, Ciência e Tecnologia do Maranhão, <sup>2</sup>Instituto Politécnico de  
 Coimbra, <sup>3</sup>Universidade de Coimbra, <sup>4</sup>Universidade Federal do Maranhão
- 18:00 Growth of multilayers using shadowing effect: Changing the NiFe and Co magnetization directions** **M.P6.7**  
ALISSON CARLOS KROHLING<sup>1</sup>, CARLOS HENRIQUE SANTOS  
 VERBENO<sup>1</sup>, ANDERSON SANTOS PASCHOA<sup>1</sup>, Thiago Eduardo Bueno<sup>1</sup>,  
 Valberto Pedruzzi Nascimento<sup>1</sup>, CARLOS LARICA<sup>1</sup>, Klaus Krambrock<sup>2</sup>, Fred J.  
 Litterst<sup>3</sup>, EDSON PASSAMANI CAETANO<sup>1</sup>; <sup>1</sup>Universidade Federal do Espírito  
 Santo, <sup>2</sup>Universidade Federal de Minas Gerais, <sup>3</sup>Technische Universität  
 Braunschweig
- 18:00 Magnetic Properties of a Polyfluorene Derivative Containing Complexed Neodymium Ions** **M.P6.8**  
Alisson de Jesus Santana<sup>1</sup>, Denis Augusto Turchetti<sup>1</sup>, Cristiano Zanlorenzi<sup>1</sup>, Edson  
 Laureto<sup>2</sup>, José Carlos Santos<sup>3</sup>, Adilson J A de Oliveira<sup>3</sup>, Leni  
 Akcelrud<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Estadual de  
 Londrina, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos
- 18:00 Synthesis, Spectroscopic Characterization and Stability Analysis of an Organic Nanofilled Ferrofluid Based on Amazon Oil** **M.P6.9**  
Amanda Carolina Candido Silva<sup>1</sup>, Mel Naomí da Silva Borges<sup>1</sup>, Flavio Souza da  
 Silva<sup>2</sup>, Laffert G. Silva<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de  
 Rondônia, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Amazonas
- 18:00 Morphology and magnetic properties in multiferroic MnWO<sub>4</sub>** **M.P6.10**  
Ana Cristina Mora<sup>1</sup>, Marcelo de Assis de Assis<sup>1</sup>, Juan Andrés<sup>2</sup>, Elson  
 Longo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universitat Jaume I
- 18:00 Coercive Field Model for Description of Mono and Multi-Domain Magnetic Granular Systems** **M.P6.11**  
 Benjamim Zucolotto<sup>1</sup>, Cristiani Campos Plá Cid<sup>2</sup>, Fabrício Luiz Faima<sup>3</sup>, Walter  
 Sydney Dutra Folly<sup>4</sup>, André Avelino Pasa<sup>2</sup>; <sup>1</sup>Universidade Regional do Noroeste  
 do Estado do Rio Grande do Sul, <sup>2</sup>Universidade Federal de Santa  
 Catarina, <sup>3</sup>Universidade Federal do Rio Grande do Sul, <sup>4</sup>Universidade Federal de  
 Sergipe
- 18:00 Dielectric properties at room temperature of the electric magnetic hexaferrite Ba<sub>2</sub>Mg<sub>2</sub>Fe<sub>12</sub>O<sub>22</sub> investigated by impedance spectroscopy** **M.P6.12**  
Andressa Sousa da Silva<sup>1</sup>, Flavio Moura e Silva Junior<sup>1</sup>, Manoel Carvalho Castro  
 Junior<sup>2</sup>; <sup>1</sup>Federal Institute of Maranhão, <sup>2</sup>Federal University of Maranhão
- 18:00 Exploring Al<sub>2</sub>O<sub>3</sub> flexible sheet as flexible substrate for non-magnetostrictive alloys** **M.P6.13**  
Arthur Lanne Ricardo de Souza<sup>1</sup>, Micheline dos Reis Araújo<sup>1</sup>, Wilson Acchar<sup>1</sup>,  
 Rafael Domingues Della Pace<sup>1</sup>, Acacio Silveira de Melo<sup>1</sup>, Felipe Bohn<sup>1</sup>, Marcio  
 Assolin Correa<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 18:00 Study of nanocomposites with magnetic properties formed from magnetite nanoparticles on thermally reduced graphene oxide at different temperatures in a polypropylene matrix** **M.P6.14**  
Benjamin Ignacio Constant Mandiola<sup>1</sup>, Raul Quijada<sup>1</sup>; <sup>1</sup>Universidad de Chile
- 18:00 Size dependence of La<sub>0.75</sub>Sr<sub>0.25</sub>MnO<sub>3</sub> on Magnetic Hyperthermia properties.** **M.P6.15**  
Bruno Martins Pimentel<sup>1</sup>, Mylla Coffaro Ferreira<sup>1</sup>, Mario Reis<sup>1</sup>; <sup>1</sup>Universidade  
 Federal Fluminense

- 18:00 Defect induces effect on LaCoO<sub>3</sub>: from diamagnetism to ferrimagnetism due to vacancy into the bulk lattice** **M.P6.16**  
Bruno Martins Pimentel<sup>1</sup>, Mario Reis<sup>1</sup>, Daniel Rocco<sup>1</sup>, Richard Caraballo<sup>2</sup>, Noemi Raquel Checca Huaman<sup>2</sup>; <sup>1</sup>Universidade Federal Fluminense, <sup>2</sup>Brazilian Center for Research in Physics
- 18:00 Nanoparticle Transition and Stabilization Study (hcp-fcc) by Thermal Decomposition Method.** **M.P6.17**  
 Renata Viana Santos<sup>1</sup>, Carlos Daniel Pantoja da Conceição<sup>1</sup>, Suzilene Vasconcelos Santos<sup>1</sup>, Alex da Cunha Campos<sup>1</sup>, Pedro Paulo Rodrigues Pinheiro<sup>1</sup>, Bruno Santos Corrêa<sup>2</sup>, Larissa Otubo<sup>2</sup>, Artur Wilson Carbonari<sup>2</sup>, Cleidilane Sena Costa<sup>1</sup>, Gabriel Cabrera Pasca<sup>1,2</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Instituto de Pesquisas Energeticas e Nucleares
- 18:00 Synthesis of magnetic molecular imprinted polymer with cholesterol: characterization and evaluation on adsorption** **M.P6.18**  
 Luciane Effting<sup>1</sup>, CAROLINE SANTANA SANTOS<sup>1</sup>, Eduardo Lins<sup>1</sup>, Alesandro Bail<sup>2</sup>, César Ricardo Teixeira Tarley<sup>1,3</sup>; <sup>1</sup>Universidade Estadual de Londrina, <sup>2</sup>Universidade Tecnológica Federal do Paraná - Campus Apucarana, <sup>3</sup>Instituto Nacional de Ciência e Tecnologia
- 18:00 Designing a portable radio frequency source for magnetic hyperthermia applications** **M.P6.19**  
Christian Alexander Calvache Maya<sup>1</sup>, Jenny Alejandra Mera Córdoba<sup>1</sup>, John Barco Jiménez<sup>1</sup>, Diego Fernando Coral<sup>1</sup>; <sup>1</sup>Institución Universitaria Centro de Estudios Superiores María Goretti
- 18:00 Tailoring magnetic textures in asymmetric Pd/Co/W/Pd multilayers with perpendicular magnetic anisotropy and Dzyaloshinskii-Moriya interaction** **M.P6.20**  
DANIAN Alexandre DUGATO<sup>1,2</sup>, Jeovani Brandão<sup>2</sup>, Rafael Lopes Seeger<sup>1</sup>, Fanny Béron<sup>3</sup>, Júlio C. Cezar<sup>2</sup>, Lucio Strazzabosco Dorneles<sup>1</sup>, Thiago J. A. Mori<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Maria, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Universidade Estadual de Campinas
- 18:00 Grain Growth Kinetics on Nd-Fe-B Sintered Magnets** **M.P6.21**  
Daniele Smanhotto Malvessi<sup>1</sup>, Leonardo Ulian Lopes<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Interplay between spin-waves and magnetic vortex within a domain-wall** **M.P6.22**  
Danilo Froes Batista<sup>1</sup>, João Paulo Sinnecker<sup>1</sup>; <sup>1</sup>Brazilian Center for Research in Physics
- 18:00 1,2,4-Triazole Carboxylic Ligand as a Building Block for Coordination Compounds of Copper(II) and Cobalt(II)** **M.P6.23**  
Dayenny Louise D'Amato Leite<sup>1</sup>, Catiúcia Rodrigues Marcelino Oliveira Matos<sup>1</sup>, Filipe Barra de Almeida<sup>1</sup>, Sérgio Pinheiro<sup>1</sup>, Flávio Garcia<sup>2</sup>, Henrique Castro Silva Junior<sup>1</sup>, Gláucio Braga Ferreira<sup>1</sup>, Odivaldo Cambraia Alves<sup>1</sup>, Guilherme Pereira Guedes<sup>1</sup>, Célia Machado Ronconi<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense, <sup>2</sup>Brazilian Center for Research in Physics
- 18:00 Influence of sol-gel viscosity on physical properties of LSMO nanotubes** **M.P6.24**  
Diego Anísio Modesto<sup>1</sup>, Márcia Tsuyama Escote<sup>1</sup>, Alexandre José de Castro Lanfredi<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Synthesis of graphite/ PMMA hybrid structure doped with perovskite LTO.** **M.P6.25**  
Douglas Washington da Silva<sup>1</sup>, John A. GOMEZ SANCHES<sup>1</sup>, Marilena Valadares Folgueras<sup>1</sup>, Pedro Bertemes Filho<sup>1</sup>, Letícia Trezecik Silvano<sup>1</sup>; <sup>1</sup>Fundação Universidade do Estado de Santa Catarina

- 18:00 Critical aspects of Sm<sub>2</sub>Fe<sub>17</sub>-based alloys homogenization** **M.P6.26**  
Eduardo de Souza Cardoso<sup>1</sup>, Melissa Röhrig Martins da Silva<sup>1</sup>, Luis Torres Quispe<sup>1</sup>, Cristiano da Silva Teixeira<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Spin Seebeck effect and Anomalous Nernst effect in CFA/W bilayer with uniaxial and cubic magnetocrystalline anisotropies** **M.P6.27**  
 Marcus Vinícius Pinheiro Lopes<sup>1</sup>, Edycleyson Carlos de Souza<sup>1</sup>, João Gustavo da Silva Santos<sup>1</sup>, Felipe Bohn<sup>1</sup>, Marcio Assolin Correa<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 18:00 Effect of the calcination in the synthesis of nanomagnetic hexaferrite Co<sub>2</sub>Z obtained by combustion reaction** **M.P6.28**  
Elvia Leal<sup>1</sup>, Ana Carla Camoos do Nascimento<sup>1</sup>, Sabrina Kelly Trajano Basílio<sup>1</sup>, Geraldo de Andrade Pacheco Filho<sup>2</sup>, Ana Paula Arcanjo<sup>2</sup>, Ana Cristina Figueiredo de Melo Costa<sup>1</sup>; <sup>1</sup>Universidade Federal de Campina Grande, <sup>2</sup>Universidade Federal de Pernambuco
- 18:00 Achievement of high crystalline and magnetic qualities in the fabrication of Yttrium Iron Garnet thin films** **M.P6.29**  
Eric Hermann<sup>1</sup>, Bruno Gomes Silva<sup>1</sup>, Diego Ernesto González-Chávez<sup>1</sup>, Rubem Luis Sommer<sup>1</sup>; <sup>1</sup>Brazilian Center for Research in Physics
- 18:00 Magnetodielectric and Magnetoelectric Coupling in PZT/CFO Nanostructured Composites Fabricated by RF-Sputtering** **M.P6.30**  
Fabio Luis Zabotto<sup>1</sup>, Ricardo Pereira Bonini<sup>1</sup>, André Marino Gonçalves<sup>1</sup>, Alexandre José Gualdi<sup>1</sup>, José Antônio Eiras<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 18:00  $\alpha$ -Fe Content Monitoring and Microstructural Evolution of LaFe<sub>13-x</sub>Si<sub>x</sub> based Alloys during Homogenizing Annealing** **M.P6.31**  
Marcelo Augusto Rosa<sup>1</sup>, Felipe Michels<sup>1</sup>, Deise Schafer<sup>1</sup>, Cristiano da Silva Teixeira<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>, André Avelino Pasa<sup>1</sup>, Cristiane Campos Plá Cid<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Microstructural and Magnetic Characterization of Maraging-300 Steel Solubilized and Aged at various temperatures** **M.P6.32**  
Francisco José dos Santos Oliveira<sup>1,2</sup>, Hamilton Ferreira Gomes de Abreu<sup>2</sup>, Camila Alves de Lavor<sup>1</sup>, João Batista de Mendonça Júnior<sup>1</sup>, Rodrigo Tavares de Oliveira<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Ceará, <sup>2</sup>Universidade Federal do Ceará
- 18:00 Shape evolution of  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> nanocubes and their influence on magnetic properties.** **M.P6.33**  
Gabriel Dornela Alves da Rocha<sup>1</sup>, Marcelo Antonio Donizetti Martinho<sup>2</sup>, Raphael Garcia Moraes da Fonseca<sup>1</sup>, Adilson J A de Oliveira<sup>3</sup>, Edson Roberto Leite<sup>4</sup>, Marco Aurélio Liuthevicene Cordeiro<sup>5</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Departamento de Química da UFSCar - São Carlos, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>4</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>5</sup>Departamento de Engenharia de Materiais - UFSCar (São Carlos)
- 18:00 Nanolithographed arrays deposited by sputtering using nanoparticles compressed targets** **M.P6.34**  
Geronimo Perez<sup>1</sup>, Elisa Baggio Saitovitch<sup>2</sup>, Guillermo Solórzano-Naranjo<sup>3</sup>; <sup>1</sup>National Institute of Metrology, Standardization and Industrial Quality, <sup>2</sup>Brazilian Center for Research in Physics, <sup>3</sup>Pontifícia Universidade Católica do Rio de Janeiro

- 18:00 Synthesis and characterizations of magnetic iron oxides coated with glycerol functionalized with miristic acid** **M.P6.35**  
Giovanni Bonatti Bevilacqua<sup>1</sup>, Olacir Alves Araújo<sup>1</sup>; <sup>1</sup>Universidade Estadual de Goiás
- 18:00 Structural, Morphological, Magnetic and Optical Properties of CoFe<sub>2</sub>O<sub>4</sub> Nanoparticles Synthesized by Sol-Gel Method.** **M.P6.36**  
 Nathália Maria Costa Guari<sup>1</sup>, Rafaella Casado Silva<sup>1</sup>, Giovanni Fiori Tini<sup>1</sup>, Victor Yuudi Suzuki<sup>1</sup>, WALMIR ENO POTTKER<sup>1</sup>, Felipe de Almeida La Porta<sup>1</sup>, Miguel Angel Cobos Fernandez<sup>2</sup>, Gyorgy Jozsef Jaics<sup>3</sup>, Alane Stephanye Andrade Batista<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidad Complutense de Madrid, <sup>3</sup>Department of Applied and Environmental Chemistry, University of Szeged, Szeged, Hungary
- 18:00 Synthesis and study of structural and morphologic properties of MgFe<sub>2</sub>O<sub>4</sub> nanoparticles** **M.P6.37**  
Giovanni Fiori Tini<sup>1</sup>, WALMIR ENO POTTKER<sup>1</sup>, Rafaella Casado Silva<sup>1</sup>, Nathália Maria Costa Guari<sup>1</sup>, Victor Yuudi Suzuki<sup>1</sup>, Miguel Angel Cobos Fernandez<sup>2</sup>, György József Jaics<sup>3</sup>, Felipe de Almeida La Porta<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidad Complutense de Madrid, <sup>3</sup>University of Szeged
- 18:00 Feasibility Study of Reduction-Diffusion Process to Recycle Nd-Fe-B Magnet Machining Sludge** **M.P6.38**  
Giulia Danielle Giovanni D'Avila<sup>1</sup>, Karen Bolis<sup>1</sup>, Rafael Yosikatsu Odo<sup>1</sup>, Leonardo Ulian Lopes<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Core-shell nanocomposites of MnFe<sub>2</sub>O<sub>4</sub> with poly(4-vinylpyridine) and poly(2-vinylpyridine): synthesis and characterization** **M.P6.39**  
Giuliana Valentini<sup>1</sup>, Natália Bruzamarello Caon<sup>1</sup>, Alexandre Luis Parize<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Erythrosine adsorption study in grafene oxide with incorporation of Fe<sub>3</sub>O<sub>4</sub>** **M.P6.40**  
 Anna Flávia Almeida<sup>1</sup>, Giulia Sayuri Fukase dos Santos<sup>1</sup>, Reinaldo Aparecido Bariccatti<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 18:00 Synthesis of Fe<sub>3</sub>O<sub>4</sub> incorporated into the coal for application in adsorption studies.** **M.P6.41**  
Giulia Sayuri Fukase dos Santos<sup>1</sup>, Reinaldo Aparecido Bariccatti<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 18:00 Synthesis by Hydrogen Reduction and Characterization of Nanoparticles of the Ternary CuNiCo Alloy System** **M.P6.42**  
 Eliana Paola Marín Castaño<sup>1</sup>, Eduardo Albuquerque Brocchi<sup>1</sup>, Guillermo Solórzano-Naranjo<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro

## THURSDAY , SEPTEMBER 26

### Poster presentations

**SESSION M.P7 (09:30 - 11:00)**

- 09:30 Multi-criticality and topology in the phase diagram of a multi-band and spin-orbit coupled electronic chain** **M.P7.1**  
Mariana Malard Andrade<sup>1</sup>, David Sousa Brandão<sup>1</sup>, Henrik Johannesson<sup>2</sup>, Paulo Eduardo Brito<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>University of Gothenburg / Göteborgs universitet
- 09:30 Synthesis studies of V-doped ZnSiN<sub>2</sub> produced by Magnetron Sputtering** **M.P7.2**  
Horácio Coelho Júnior<sup>1</sup>, Bruno Gomes Silva<sup>1</sup>, Cilene Labre<sup>1</sup>, Rubem Luis Sommer<sup>1</sup>; <sup>1</sup>Brazilian Center for Research in Physics
- 09:30 ZrO<sub>2</sub> tape incorporated with magnetic particles produced by microwave assisted combustion techniques and tape casting.** **M.P7.3**  
Hugo Plínio de Andrade Alves<sup>1</sup>, Antonio Carlos Silva da Costa<sup>1</sup>, Marcio Assolin Correa<sup>1</sup>, Felipe Bohn<sup>1</sup>, Rafael Domingues Della Pace<sup>1</sup>, Wilson Acchar<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 09:30 Fe<sub>3</sub>O<sub>4</sub> nanoparticles obtained by conventional decomposition and microwave-assisted solvothermal methods** **M.P7.4**  
Renilma de Souza Pinheiro Fonseca<sup>1</sup>, Inocêncio Santos Santos Neto<sup>1</sup>, Fernando Carvalho Silva<sup>1</sup>, Alan Silva de Menezes<sup>2</sup>, Francisco S. M. Sinfrônio<sup>1</sup>; <sup>1</sup>Federal University of Maranhão, <sup>2</sup>Universidade Federal do Maranhão
- 09:30 Ferromagnetic resonance study of NiFe/Gd/NiFe trilayers** **M.P7.5**  
Isabel Liz Castro Merino<sup>1</sup>, Ana Rita Pereira<sup>2</sup>, Leandro C. Figueiredo<sup>3</sup>, Fernando Pelegrini<sup>2</sup>, Elisa Baggio Saitovitch<sup>1</sup>; <sup>1</sup>Brazilian Center for Research in Physics, <sup>2</sup>Universidade Federal de Goiás, <sup>3</sup>Universidade de Brasília
- 09:30 Synthesis, structural and magnetic characterization of nanocomposites CoFe<sub>2</sub>O<sub>4</sub>@BiFeO<sub>3</sub> with core@shell structure** **M.P7.6**  
Jayson Xavier<sup>1</sup>, Carlos Augusto Moraes Iglesias<sup>1</sup>, Thiago Tibúrcio Vicente<sup>1</sup>, Rodolfo Silva Silva<sup>1</sup>, Marcio Assolin Correa<sup>1</sup>, Susana Nobrega Medeiros<sup>1</sup>, João Maria Soares<sup>2</sup>, Felipe Bohn<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade do Estado do Rio Grande do Norte
- 09:30 Loss mechanisms energy in magnetic nanoparticles submitted to an alternating magnetic field for application in hyperthermia** **M.P7.7**  
João Carlos Rocha De Araújo<sup>1</sup>, Carlos Augusto Moraes Iglesias<sup>2</sup>, Rodolfo Silva Silva<sup>2</sup>, Thiago Tibúrcio Vicente<sup>2</sup>, Susana Nobrega Medeiros<sup>2</sup>, Felipe Bohn<sup>2</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Universidade Federal do Rio Grande do Norte
- 09:30 Tailoring anomalous Nernst effect in stressed magnetostrictive film grown onto flexible substrate** **M.P7.8**  
Acacio Silveira de Melo<sup>1</sup>, Rafael Domingues Della Pace<sup>1</sup>, João Gustavo Silva Santos<sup>1</sup>, Felipe Bohn<sup>1</sup>, Marcio Assolin Correa<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 09:30 Synthesis of BaFe<sub>2</sub>O<sub>4</sub> nanomagnetic catalyst by combustion reaction for biodiesel production of residual oil** **M.P7.9**  
Joelda Dantas<sup>1</sup>, Elvia Leal<sup>2</sup>, Vitória Marçal<sup>2</sup>, Julyanne Rodrigues de Medeiros Pontes<sup>2</sup>, Ana Cristina Figueiredo de Melo Costa<sup>2</sup>, Marta Célia Dantas da Silva<sup>1</sup>, Pollyana Caetano Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Universidade Federal de Campina Grande
- 09:30 Synthesis and characterization of the structural and magnetic properties of the perovskite La<sub>2</sub>FeCoO<sub>6</sub>** **M.P7.10**  
Johny Andres Jaramillo<sup>1</sup>, David Arsenio Landinez<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Maria, <sup>2</sup>Universidad Nacional de Colombia

- 09:30 Route for obtaining nanocrystalline thin films** **M.P7.11**  
Juciane Maria Alves<sup>1</sup>, Bruno Gomes Silva<sup>1</sup>, Rubem Luis Sommer<sup>1</sup>; <sup>1</sup>Brazilian Center for Research in Physics
- 09:30 Pilot scale synthesis of the Co-Ba ferritic nanocomposite by combustion reaction** **M.P7.12**  
Julyanne Rodrigues de Medeiros Pontes<sup>1</sup>, Elvia Leal<sup>1</sup>, Joelda Dantas<sup>2</sup>, Vitória Marçal<sup>1</sup>, Ana Paula Arcanjo<sup>3</sup>, José Geraldo Andrade Pacheco<sup>3</sup>, Ana Cristina Figueiredo de Melo Costa<sup>1</sup>; <sup>1</sup>Universidade Federal de Campina Grande, <sup>2</sup>Universidade Federal da Paraíba, <sup>3</sup>Universidade Federal de Pernambuco
- 09:30 Morphological and stoichiometric effects of surface treatment on SrTiO<sub>3</sub>(001) substrates and growth of Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8-x</sub> and La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub> thin films** **M.P7.13**  
Karine S. Alcântara<sup>1</sup>, Pedro Schio<sup>1</sup>, Thiago J. A. Mori<sup>1</sup>, Túlio C. R. Rocha<sup>1</sup>, Júlio C. Cezar<sup>1,2</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Laboratório Nacional de Luz Síncrotron
- 09:30 Stability of superconducting  $\beta$ -FeSe phase prepared by mechanochemistry** **M.P7.14**  
Kelli de Fátima Ulbrich<sup>1</sup>, Carlos Eduardo M. Campos<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Hybrid Nanocomposite from  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> Nanoparticles Functionalized in Polymer from Amazon Natural Oil** **M.P7.15**  
Laffert G. Silva<sup>1</sup>, Amanda Carolina Candido Silva<sup>1</sup>, Luciene Batista Silveira<sup>2</sup>, Judes Gonçalves Santos<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de Rondônia, <sup>2</sup>Fundação Universidade Federal de Rondônia
- 09:30 Interlayer coupling and damping constant of NiFe/WTi multilayers** **M.P7.16**  
LEANDRO CARLOS FIGUEIREDO<sup>1</sup>, Fernando Pelegrini<sup>2</sup>, Márcio Solino Pessoa<sup>3</sup>, Armando Biondo<sup>3</sup>, Valberto Pedruzzi Nascimento<sup>3</sup>, Elisa Baggio Saitovitch<sup>4</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Federal de Goiás, <sup>3</sup>Universidade Federal do Espírito Santo, <sup>4</sup>Brazilian Center for Research in Physics
- 09:30 Magnetism and structure of Co<sub>x</sub>Fe<sub>(1-x)</sub>Al Heusler alloys synthesized from multilayers of Co and FeAl** **M.P7.17**  
Leandro H. F. Andrade<sup>1</sup>, José Domingos Ardisson<sup>1</sup>, Luis Eugenio Fernandez-Outon<sup>2</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 09:30 Structural and magnetic properties of epitaxial thin films of the double perovskite La<sub>1-x</sub>Ca<sub>x</sub>CoMnO<sub>6</sub>** **M.P7.18**  
Leandro Tolentino Coutrim<sup>1</sup>, Leandro Felix Bufaiçal<sup>2</sup>, Flávia Estrada<sup>1</sup>, Ricardo Reis<sup>1</sup>, Pedro Schio<sup>1</sup>, Thiago J. A. Mori<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Universidade Federal de Goiás
- 09:30 Stem Cell therapy using photoactive and nanomagnetic drugs mediated by visible light and heat activation: an in vitro study** **M.P7.19**  
Leonardo Barcelos de Paula<sup>1</sup>, Antonio Claudio Tedesco<sup>1</sup>; <sup>1</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto
- 09:30 Structural and magnetic properties of KNN/NixCo<sub>1-x</sub>Fe<sub>2</sub>O<sub>4</sub>, lead-free multiferroic composites.** **M.P7.20**  
Leonardo José Dalla Costa<sup>1</sup>, Leonardo Luis Lemes<sup>1</sup>, Fabio Luis Zabotto<sup>1</sup>, Ruth H. G. A. Kiminami<sup>1</sup>, Marcio Roberto de Freitas<sup>2</sup>, Adilson J A de Oliveira<sup>3</sup>, Alexandre José Gualdi<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal de Itajubá, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos

- 09:30 Structural, electronic, and magnetic characterizations of  $(Pr,Nd)_2CoFeO_6$  as new disordered double perovskite compounds** **M.P7.21**  
Leonardo Soares de Oliveira<sup>1</sup>, José Antônio Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 09:30 Structural, spectroscopic and magnetic properties of BiFeO<sub>3</sub> nanoparticles obtained by high-energy ball cryo-milling** **M.P7.22**  
Lívia Macková<sup>1</sup>, Eduardo Azzolini Volnistem<sup>1</sup>, Ivair Aparecido Santos<sup>1</sup>, Gustavo Sanguino Dias<sup>1</sup>, Luiz Fernando Cótica<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 09:30 Maghemite nanoparticles stabilization by fluoride segregation at interfaces** **M.P7.23**  
Lorena Batista Caliman<sup>1</sup>, Thomas Roulin<sup>2</sup>, Douglas Gouvea<sup>1</sup>; <sup>1</sup>University of São Paulo, <sup>2</sup>ÉCOLE EUROPÉENNE D'INGÉNIEURS EN GÉNIE DES MATÉRIAUX
- 09:30 Sol-gel agglomeration of metallic NdFeB alloy nanoparticles in the microsphere shape as a chemical stabilization strategy** **M.P7.24**  
Luciana Sampaio Ribeiro<sup>1</sup>, Anna Flávia de Freitas Valiante Peluso<sup>1</sup>, Edilaine Ferreira da Silva<sup>1</sup>, Nathália Silva de Medeiros<sup>1</sup>, Carla de Albuquerque Dias<sup>1</sup>, Beatriz Palhano de Oliveira<sup>1</sup>, João Batista Santos Barbosa<sup>1</sup>, Luis Eugenio Fernandez-Outon<sup>2</sup>, José Domingos Ardisson<sup>1</sup>, Armindo Santos<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 09:30 Vibrational and magnetic properties of yttrium iron garnet nanoparticles doped with copper obtained by sol gel method** **M.P7.25**  
Luiz Filho Rodrigues leal<sup>1</sup>, Luiz Carlos Duarte Cavalcante<sup>2</sup>, Eduardo Padrón Hernández<sup>3</sup>, Ramón Raudel Peña Garcia<sup>3</sup>, Bartolomeu Cruz Viana<sup>2</sup>, Francisco Eroni Paz dos Santos<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Piauí, <sup>2</sup>Universidade Federal do Piauí, <sup>3</sup>Universidade Federal de Pernambuco
- 09:30 Structural and Magnetic Characterization of Hexaferrite BaM Calcined at Low Temperature** **M.P7.26**  
Marco Aurélio Pereira Buzinaro<sup>1,2</sup>, Arthur Franklin Souza de Oliveira<sup>1</sup>, Paulo Henrique Lazari Buzinaro<sup>3</sup>, Nilson dos Santos Ferreira<sup>2</sup>; <sup>1</sup>Federal Institute of Education, Science and Technology of Sergipe, <sup>2</sup>Federal University of Sergipe, <sup>3</sup>Faculty of Industrial Engineering of São Bernardo do Campo
- 09:30 Crystallographic and Magnetic Analysis of Hexaferrite Sr<sub>1-x</sub>Sm<sub>x</sub>Fe<sub>12</sub>O<sub>19</sub> (0.0 ≤ x ≤ 0.15) Produced by Sol-Gel Proteic Synthesis Route** **M.P7.27**  
Marco Aurélio Pereira Buzinaro<sup>1,2</sup>, Paulo Henrique Lazari Buzinaro<sup>3</sup>, Nilson dos Santos Ferreira<sup>2</sup>; <sup>1</sup>Federal Institute of Education, Science and Technology of Sergipe, <sup>2</sup>Federal University of Sergipe, <sup>3</sup>Faculty of Industrial Engineering of São Bernardo do Campo
- 09:30 MFM and micromagnetic simulation investigation of [Co<sub>60</sub>Fe<sub>40</sub>/Pt]<sub>5</sub> multilayers** **M.P7.28**  
Mariana Andrade Boense Tavares<sup>1</sup>, Wesller Schmidt<sup>1</sup>, Luis Eugenio Fernandez-Outon<sup>2</sup>, Maximiliano Delany Martins<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 09:30 Effect of calcination temperature on structural and magnetic properties of cobalt ferrite synthesized by sol gel method** **M.P7.29**  
Mariana Lumi Ichihara Sado<sup>1</sup>, Alysson Martins Almeida Silva<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 09:30 Development of an optimized route of polymer coating for rare earth based metallic powder concerning bonded magnets production** **M.P7.30**  
Marina Silveira Tagliari Hoffmann<sup>1</sup>, Julia de Moraes Siedschlag<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina



- 09:30 Phase quantification on Sm-Fe alloys by Vibrating Sample Magnetometry** **M.P7.31**  
Luis Torres Quispe<sup>1</sup>, Melissa Röhrig Martins da Silva<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>, André Avelino Pasa<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Production and characterization of CIP and CPP magnetoresistive microstructures** **M.P7.32**  
Muhammad Asmat Pervez<sup>1</sup>, Bruno Gomes Silva<sup>1</sup>, Diego Ernesto González-Chávez<sup>1</sup>, Rubem Luis Sommer<sup>1</sup>; <sup>1</sup>Brazilian Center for Research in Physics
- 09:30 Tuning perpendicular magnetization on ferromagnetic hybrid structures composed of Co/Pt-multilayers and transparent-CeO<sub>2</sub> films** **M.P7.33**  
Nicholas Figueiredo Prestes<sup>1</sup>, Ronei C. Oliveira<sup>1</sup>, Mariana Andrade Boense Tavares<sup>2</sup>, Daniel Souza Costa<sup>1</sup>, Irineu Mazzaro<sup>1</sup>, Hugo Feitosa Jurca<sup>3</sup>, Juliana Zarpellon<sup>4</sup>, Maximiliano Delany Martins<sup>2</sup>, Cyrile Deranlot<sup>5</sup>, Dante Homero Mosca<sup>1</sup>, Jean-Marie George<sup>5</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Paraná, <sup>4</sup>Laboratório de Nanoestruturas para Sensores, <sup>5</sup>Unité Mixte de Physique CNRS/Thales
- 09:30 Influence of the CeO<sub>2</sub> buffer layer on the morphological and structural properties of epitaxial YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub> thin films** **M.P7.34**  
Pedro Caetano Sabino Santos<sup>1</sup>, Júlio C. Cezar<sup>2</sup>, Pedro Schio<sup>2</sup>, Túlio C. R. Rocha<sup>2</sup>, Thiago J. A. Mori<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 09:30 Structural characterization and magnetic studies of a Cu(II) complex based on a carboxylic derivative of a phenolic oxime** **M.P7.35**  
Pedro Martins Santucci<sup>1</sup>, Marcos Antonio Ribeiro<sup>2</sup>, Carlos Eduardo Bruzeguini<sup>2</sup>, Carlos Basílio Pinheiro<sup>3</sup>, Wdeson Pereira Barros<sup>4</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal do Espírito Santo, <sup>3</sup>Universidade Federal de Minas Gerais, <sup>4</sup>INSTITUTE OF CHEMISTRY/UNICAMP
- 09:30 Local probing CaMnO<sub>3</sub> structural phase transitions** **M.P7.36**  
Pedro Miguel da Rocha Rodrigues<sup>1</sup>, Gonçalo Nuno Pinho Oliveira<sup>1</sup>, Tiago Leal<sup>1</sup>, Ricardo Moreira<sup>1</sup>, João Guilherme Correia<sup>2</sup>, Armandina Lima Lopes<sup>1</sup>, João Pedro Esteves Araujo<sup>1</sup>; <sup>1</sup>Instituto de Física dos Materiais Avançados, Nanotecnologia e Fotônica da Universidade do Porto, <sup>2</sup>Centro de Física Nuclear da Universidade de Lisboa
- 09:30 Longitudinal Spin Seebeck Effect in CoFeB / Heavy-Metal nanostructured** **M.P7.37**  
Rafael Domingues Della Pace<sup>1</sup>, Edmilson Felix Silva<sup>1</sup>, João Gustavo da Silva Santos<sup>1</sup>, Acacio Silveira de Melo<sup>1</sup>, Arthur Lanne Ricardo Souza<sup>1</sup>, Matheus Gamino Gomes<sup>2</sup>, Felipe Bohn<sup>1</sup>, Marcio Assolin Correa<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Federal de Pernambuco
- 09:30 Magnetic properties study in Iron Based Mullite System Bi<sub>2</sub>(Fe<sub>x</sub>M<sub>1-x</sub>)<sub>4</sub>O<sub>9</sub> (M = Ga, Al)** **M.P7.38**  
Rafael Trautwein Santiago<sup>1</sup>, Klebson Luceildo da Silva<sup>1</sup>, Martin Fabian<sup>2,3</sup>, Luiz Fernando Cótica<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Slovak Academy of Sciences, <sup>3</sup>Institute of Geotechnics, Slovak Academy of Sciences
- 09:30 Production of complex ceramics by solution blow spinning: production rate of sub-micrometric ceramic wires and control of the morphology** **M.P7.39**  
Maycon Rotta<sup>1</sup>, Maycon Motta<sup>2</sup>, Alexsander Lourenço Pessoa<sup>3</sup>, Claudio Luiz Carvalho<sup>3</sup>, Wilson Aires Ortiz<sup>2</sup>, Rafael Zadorosny<sup>4</sup>; <sup>1</sup>Instituto Federal de Mato Grosso do Sul, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>São Paulo State University

- 09:30 Structural and magnetic properties of ferrites of the type  $\text{Ni}_{0.1}\text{Co}_{0.4}\text{Zn}_{0.5}\text{Sm}_x\text{Nd}_y\text{Fe}_{2-(x+y)}\text{O}_4$  for application in microwave devices.** **M.P7.40**  
Regina Ferreira Ribeiro<sup>1</sup>, Tayanne Cristina Marques<sup>1</sup>, Allan Kardec D. B. Filho<sup>1</sup>, Fernando Carvalho Silva<sup>1</sup>, Francisco S. M. Sinfrônio<sup>1</sup>, Inocência Santos Santos Neto<sup>1</sup>; <sup>1</sup>Federal University of Maranhão
- 09:30 Synthesis and characterization of  $\text{Pb}(\text{Fe},\text{Nb})\text{-PbTiO}_3$  multiferroic ceramics** **M.P7.41**  
Rieyssa Maria Almeida Corrêa<sup>1</sup>, Manuel Henrique Lente<sup>1</sup>, José Antônio Eiras<sup>2</sup>, Fabio Luis Zabotto<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal de São Carlos
- 09:30 Growth and characterization of  $\text{BaTi}_{1/2}\text{Mn}_{1/2}\text{O}_3$  thin films** **M.P7.42**  
Robert Prudêncio Amaral<sup>1</sup>, Raimundo Lora Serrano<sup>1</sup>, Pedro Schio<sup>2</sup>; <sup>1</sup>Federal University of Uberlândia, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 09:30 Synthesis, characterization and investigation of magnetic coupling in  $\text{CoFe}/\text{Mn}_2\text{Au}$  bilayers** **M.P7.43**  
Rodrigo de Vasconcellos Lourenço<sup>1</sup>, Luis Eugenio Fernandez-Outon<sup>2</sup>, Waldemar Augusto de Almeida Macedo<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 09:30 The effect of carbon content on the aging of GOBT steels produced by the low temperature slab reheating technology** **M.P7.44**  
Rodrigo Silva Braga<sup>1,2</sup>, Adriano Alex Almeida<sup>3</sup>, Tessie Gouvea Cruz<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Rio de Janeiro, <sup>2</sup>SOLARMATERIAIS Soluções em Engenharia, <sup>3</sup>Aperam South America
- 09:30 Ferroic properties of  $\text{Bi}_{0.85}\text{La}_{0.15}\text{FeO}_3$  ceramics synthesized under extreme conditions** **M.P7.45**  
Roger Carvalho Oliveira<sup>1</sup>, José Antônio Eiras<sup>2</sup>, Ducinei Garcia<sup>2</sup>, Ivair Aparecido Santos<sup>1</sup>, Eduardo Azzolini Volnistem<sup>1</sup>, Luiz Fernando Cótica<sup>1</sup>, Gustavo Sanguino Dias<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Federal de São Carlos
- 09:30 Synthesis and Properties of Magnetic Fluids Based on Cobalt Ferrite Nanoparticles ( $\text{CoFe}_2\text{O}_4@ \gamma\text{-Fe}_2\text{O}_3$ )** **M.P7.46**  
Ruth Pinheiro Muniz<sup>1</sup>, Gustavo Garcia da Silva<sup>1</sup>, Cynara Caroline Kern Barreto<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 09:30 Ba, Sr-hexaferrites: Structural, optical and magnetic properties** **M.P7.47**  
Suelen Alves Silva Lucena de Medeiros<sup>1</sup>, Glaucio Soares Braga<sup>1</sup>, Charlie Salvador Gonçalves<sup>1</sup>, Carlos Chesman de Araújo Feitosa<sup>2</sup>, Luiz edmundo bastos soledade<sup>1</sup>, Iêda Maria Garcia dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Universidade Federal do Rio Grande do Norte
- 09:30 Study of the structural and magnetic properties of the titanate nanotubes decorated by microwave hydrothermal method and ion exchanged by iron ions** **M.P7.48**  
Suziete Batista Soares Gusmão<sup>1</sup>, Thalles Moura Fe Marques<sup>2</sup>, Gustavo Oliveira de Meira Gusmão<sup>3</sup>, Luiz Carlos Duarte Cavalcante<sup>1</sup>, Ramón Raudel Peña Garcia<sup>4</sup>, Francisco Eroni Paz dos Santos<sup>1</sup>, Anderson Oliveira Lobo<sup>1</sup>, Bartolomeu Cruz Viana<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Piauí, <sup>3</sup>Universidade Estadual do Piauí, <sup>4</sup>Universidade Federal de Pernambuco
- 09:30 Synthesis of  $\text{ZnFe}_2\text{O}_4$  and  $\text{CoFe}_2\text{O}_4$  nanoparticles for hyperthermia applications** **M.P7.49**  
Thiago Tibúrcio Vicente<sup>1</sup>, Rodolfo Silva Silva<sup>1</sup>, Carlos Augusto Moraes Iglesias<sup>1</sup>, João Carlos Rocha Araújo<sup>2</sup>, Jayson Xavier<sup>1</sup>, Marcio Assolin Correa<sup>1</sup>, Marco A. Morales<sup>1</sup>, Susana Nobrega Medeiros<sup>1</sup>, Felipe Bohn<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Federal da Paraíba

- 09:30 Composite magnetic nanoparticles and polymer optical/conductor porous for sorption/detection H<sub>2</sub>S and desorption magnetic induction** **M.P7.50**  
Thuanny Moraes de Almeida<sup>1</sup>, Maria Julia Farroco<sup>2</sup>, Ketly Pontes Soares<sup>1</sup>, Fernando Gomes de Souza Junior<sup>1</sup>, Bluma Guenther Soares<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Faculdade de Engenharia Souza Marques
- 09:30 Simulation of the magnetic hysteresis loops of Ni<sub>2</sub>MnGa nanomembranes: a phenomenological approach** **M.P7.51**  
Vagner Zeizer Carvalho Paes<sup>1</sup>, Itamar Tomio Neckel<sup>2</sup>, Christian Müller<sup>3</sup>, Dante Homero Mosca<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Laboratorio Nacional de Luz Sincrotron, <sup>3</sup>IHK Chemnitz
- 09:30 Technological research on the use of soft magnetic composites** **M.P7.52**  
Millena de Cassia Sousa e Silva<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 09:30 Technological and scientific mapping on the production of superconducting tapes** **M.P7.53**  
Laura Almeida Pereira Almeida<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 09:30 Properties improvement of Nd-Fe-B permanent magnets through heat treatment modifications** **M.P7.54**  
Valmir Rodrigo da Silva<sup>1</sup>, Jonas Luiz Monteiro<sup>1</sup>, Giulia Danielle Giovanni D'Avila<sup>1</sup>, Andreia Borre<sup>1</sup>, Leonardo Ulian Lopes<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Synthesis of Ni nanoparticles using synthetic oil, analyzing the phase transition (fcc / hcp) and characterizing the samples** **M.P7.55**  
Victor Cruz Mendes<sup>1</sup>, Pedro Paulo Rodrigues Pinheiro<sup>1</sup>, Bruno Santos Corrêa<sup>2</sup>, Renata Viana Santos<sup>1</sup>, Alex da Cunha Campos<sup>1</sup>, Larissa Otubo<sup>2</sup>, Rafael de Sá Freitas<sup>3</sup>, Artur Wilson Carbonari<sup>2</sup>, Cleidilane Sena Costa<sup>1</sup>, Gabriel Adolfo Pasca<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Instituto de Pesquisas Energeticas e Nucleares, <sup>3</sup>Instituto de Física - Universidade de São Paulo
- 09:30 Magnetic, thermal, structural, and electrical transport properties of Ni<sub>50-x</sub>Cu<sub>x</sub>Mn<sub>35</sub>Ti<sub>15</sub> Heusler compounds** **M.P7.56**  
Vinicius Gomes de Paula<sup>1</sup>, Carlos Triveño Rios<sup>1</sup>, José Antônio Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 09:30 Production of chemically ordered Fe-Ni alloys** **M.P7.57**  
William Renan Basso Bassoli<sup>1</sup>, Victor Schumachtemberg<sup>1</sup>, Valderes Drago<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Synthesis and characterization of Fe<sub>3</sub>O<sub>4</sub> nanoparticles coated with organic surfactants: oleic acid and essential oil** **M.P7.58**  
Yessica Acosta Urian<sup>1</sup>, Jason Jerry Atoche Medrano<sup>1</sup>, José Antônio Huamaní Coaquira<sup>1</sup>, Aderbal Carlos Oliveira<sup>1</sup>, Vijayendra Kumar Garg<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 09:30 A Mn(II) and pirydylvinylbenzoate based MOF: structural characterization and magnetic and gas adsorption studies** **M.P7.59**  
Yuri Dezotti<sup>1</sup>, Wdeson Pereira Barros<sup>1</sup>, Marcos Antonio Ribeiro<sup>2</sup>; <sup>1</sup>INSTITUTE OF CHEMISTRY/UNICAMP, <sup>2</sup>Universidade Federal do Espírito Santo



# **SYMPOSIUM N - Molecular Sieves: synthesis and applications**

**Symposium organizers:**

Sibele B. C. Pergher (UFRN)  
Katia Bernardo Gusmão (UFRGS)  
Vincius Patrício da Silva Caldeira (UERN)



# MONDAY , SEPTEMBER 23

\* Invited Lecture

## *SESSION N.O1.D1 (09:30 - 10:30) - Room Java*

- 09:30 Base Catalysis by Molecular Sieves** **N.O1.D1.1\***  
Dilson Cardoso<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 10:00 Thermal synthesis of Celsian LTA employing Kaolin mining residues from Amazon** **N.O1.D1.2**  
Amanda Kesley Cardozo Cancio<sup>1</sup>, Bruno Apolo Miranda Figueira<sup>1</sup>, Renata Sousa Nascimento<sup>1</sup>, Amanda Neres de Carvalho<sup>1</sup>, José Manuel Rivas Mercury<sup>2,1</sup>; <sup>1</sup>Universidade Federal do Oeste do Pará, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão
- 10:15 Preparation and characterization of superparamagnetic iron oxide nanoparticles/SBA-15 composites** **N.O1.D1.3**  
Danilo Waismann Losito<sup>1</sup>, Tereza da Silva Martins<sup>1</sup>, Paula Silvia Haddad<sup>1</sup>, Fabio Furlan Ferreira<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal do ABC

## *SESSION N.O2.D1 (11:00 - 12:00) - Room Java*

- 11:00 Phosphorous containing structure directing agents for synthesis of new zeolites** **N.O2.D1.1\***  
Fernando Rey<sup>1</sup>, Jorge Simancas<sup>1</sup>, Raquel Simancas<sup>1</sup>, Manuel Hernandez-Rodriguez<sup>1</sup>; <sup>1</sup>Instituto de Tecnologia Quimica
- 11:30 Synthesis of silica SBA-15 assisted by microwave irradiation: study of textural, structural and chemical properties** **N.O2.D1.2**  
Marília Rafaele Oliveira<sup>1</sup>, Monique Deon<sup>2</sup>, Edilson Valmir Benvenuti<sup>2</sup>, Elton Franceschi<sup>1</sup>, Silvia Maria Egues<sup>1</sup>, Juliana De Conto De Conto<sup>1</sup>; <sup>1</sup>Universidade Tiradentes, <sup>2</sup>Instituto de Química - UFRGS
- 11:45 In situ nucleation and growth studies of FAU zeolite by SAXS.** **N.O2.D1.3**  
Paloma Vinaches Melguizo<sup>1</sup>, Sibebe Berenice Castellã Pergher<sup>2</sup>, Florian Meneau<sup>1</sup>; <sup>1</sup>Laboratorio Nacional de Luz Sincroton, <sup>2</sup>Universidade Federal do Rio Grande do Norte

## *SESSION N.O3.D1 (14:00 - 16:15) - Room Java*

- 14:00 Metal-Organic Frameworks For Gas Storage and Separation, and Nanotechnology Applications** **N.O3.D1.1\***  
Adam Duong<sup>1</sup>; <sup>1</sup>Université du Québec à Trois-Rivières
- 14:30 Hydrothermal and assisted microwaved syntheses of Stanno and Yttrium metallosilicates as heterogeneous catalyst for biodiesel production and environmental remediation.** **N.O3.D1.2**  
Jose Geraldo Nery<sup>1</sup>, Davi Rubinho Ratero<sup>1</sup>, Danilo Antonio da Silva<sup>1</sup>, Julio T Marumo<sup>2</sup>, Leandro Goulart de Araujo<sup>2</sup>, Vinicius Litrenta Medeiros<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus São José do Rio Preto, <sup>2</sup>Instituto de Pesquisas Energeticas e Nucleares, <sup>3</sup>São Paulo State University

- 14:45 Use of Chabazite zeolite for CO<sub>2</sub> removal in controlled system** **N.O3.D1.3**  
Conceição Regina Fernandes Alves<sup>1</sup>, Armando Diego Lima Freitas<sup>1</sup>, José Demontier Vieira de Souza-Filho<sup>1</sup>, Thaizy de Gois Martins<sup>1</sup>, Adonay Rodrigues Loiola<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará
- 15:00 Carbon precursor effect on mesoporous CMK-3 synthesis using SBA-15 nanocasting pathway** **N.O3.D1.4**  
Santiago J.A. Figueroa<sup>1</sup>, João Pedro Penna Guilherme<sup>1</sup>, Ana Paula de Melo Monteiro Modesto<sup>2</sup>, Matheus da Silva Barbosa<sup>2</sup>, Mateus Borba Cardoso<sup>3</sup>, Karim Bouchmella<sup>4</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>INSTITUTE OF CHEMISTRY/UNICAMP, <sup>3</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>4</sup>Centre National de la Recherche Scientifique
- 15:15 Preparation of porous ceramic membranes using agro-industrial waste as pore-forming agents** **N.O3.D1.5**  
RENATA DE CARVALHO TELES BERTOTTO<sup>1</sup>, Flávia Assumpção Heine<sup>1</sup>, Liliane Damaris Pollo<sup>1</sup>, Nilson Romeu Marcilio<sup>1</sup>, Isabel Cristina Tessaro<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 15:30 Preparation of porous clay heterostructures (PCHs) from montmorillonite clay Cloisite Na<sup>+</sup>** **N.O3.D1.6**  
Bruna Pes Nicola<sup>1</sup>, Anderson Joel Schwanke<sup>1</sup>, Katia Bernardo-Gusmão<sup>1</sup>; <sup>1</sup>Instituto de Química - UFRGS
- 15:45 Pillaring of a natural clay from Paraíba with commercial Keggin Ion** **N.O3.D1.7**  
Janaína Arlete Prasniski<sup>1</sup>, Anderson Parodia<sup>1</sup>, Sibebe Berenice Castellã Pergher<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 16:00 Synthesis and adsorption property of hollow particles of sodium-potassium niobate by spray-pyrolysis method** **N.O3.D1.8**  
Fabiano Rafael Praxedes<sup>1</sup>, Marcos Augusto Lima Nobre<sup>1</sup>, Silvania Lanfredi<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente

## WEDNESDAY, SEPTEMBER 25

### Poster presentations

#### *SESSION N.P5 (11:00 - 12:30)*

- 11:00 Amine modified SBA-15 mesoporous silica: synthesis, characterization and adsorption of phenol assisted by ultrasound** **N.P5.1**  
Marília Rafaela Oliveira<sup>1</sup>, Matheus Moura Oliveira<sup>1</sup>, Yasmin Teles Barboza<sup>1</sup>, Juliana De Conto De Conto<sup>1</sup>, Elton Franceschi<sup>1</sup>, Silvia Maria Egues<sup>1</sup>; <sup>1</sup>Universidade Tiradentes
- 11:00 Pillaring of clay minerals: study of preparation parameters** **N.P5.2**  
Janaína Arlete Prasniski<sup>1</sup>, Anderson Parodia<sup>1</sup>, Sibebe Berenice Castellã Pergher<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 11:00 Synthesis and characterization of alumina supports for application in ceramic membranes** **N.P5.3**  
Priscila Cristh Fonseca Alves<sup>1</sup>, Daniela Cordeiro Leite Vasconcelos<sup>1</sup>, Wander Luiz Vasconcelos<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais



- 11:00 Synthesis, characterization and adsorption potential of nanostructured zeolites obtained by microwave synthesis.** **N.P5.4**  
Anderson Maida Siqueira Oliveira<sup>1</sup>, Tania Regina Giraldi<sup>1</sup>, Ariadne Missono Brondi<sup>2</sup>, Rodrigo Leandro Bonifácio<sup>2</sup>, Elaine Cristina Paris<sup>3</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Comissão Nacional de Energia Nuclear, <sup>3</sup>Embrapa Instrumentação
- 11:00 Pillared clays impregnated with TiO<sub>2</sub>: Efficient photocatalyst for wastes degradation** **N.P5.5**  
 José Claudiano Dantas Neto<sup>1</sup>, Anderson Parodia<sup>1</sup>, Eduardo Rigoti<sup>1</sup>, Sibebe Berenice Castellã Pergher<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 11:00 Synthesis and physicochemical characterization of organophilic clay.** **N.P5.6**  
 Otávio Vilaça Mesquita<sup>1</sup>, André Luiz Gilioli<sup>1</sup>, Delia do Carmo Vieira<sup>1</sup>, Alessandra Stevanato<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Londrina
- 11:00 Removal of red 97 from aqueous solutions with the potential adsorbent *Cedrela fissilis* husk** **N.P5.7**  
Andressa Cristiana Fröhlich<sup>1</sup>, Jordana Georgin<sup>2</sup>, Dison Stracke Pfingsten Franco<sup>2</sup>, Daniel Gustavo Allasia<sup>2</sup>, Guilherme Luiz Dotto<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal de Santa Maria
- 11:00 Fabrication of RTV silicone based coatings and silica particles applied to glass substrates and evaluation of hydrophobicity.** **N.P5.8**  
Ariadne Gonçalves de Leão<sup>1</sup>, Arthur de Castro Ribeiro<sup>1,2</sup>, Bluma Guenther Soares<sup>1,3</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Centro de Pesquisas de Energia Elétrica, <sup>3</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ
- 11:00 Transformation of zeolite FAU to CHA using coal fly ash for synthesis of zeolites** **N.P5.9**  
Armando Diego Lima Freitas<sup>1</sup>, Thaizy de Gois Martins<sup>1</sup>, Adonay Rodrigues Loiola<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará
- 11:00 Preparation of porous ceramics from CLAY/ADDITIVE mixtures** **N.P5.10**  
 Sileide Oliveira Ramos<sup>1</sup>, GERBESON CARLOS BATISTA DANTAS<sup>1</sup>, Hélio Lucena Lira<sup>2</sup>, PATRICIA M PIMENTEL<sup>1</sup>, Auristela Carla De Miranda<sup>3</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido, <sup>2</sup>Universidade Federal de Campina Grande, <sup>3</sup>Programa de Pós-graduação em Ciência e Engenharia de Materiais, Universidade Federal da Paraíba
- 11:00 Study of the Zeólite-A synthesis from alternative sources of silica** **N.P5.11**  
Clenildo de Longe<sup>1</sup>, Lindiane Bieseki<sup>1</sup>, Sibebe Berenice Castellã Pergher<sup>1</sup>, Jose Alberto Batista da Silva<sup>1</sup>, Luciene Santos de Carvalho<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 11:00 Impregnation of Chitosan in Mesoporous Silica for CO<sub>2</sub> Capture** **N.P5.12**  
Dayanne Evelyn Firmo de Oliveira<sup>1</sup>, Ana Lúcia Lima<sup>1</sup>, Claudio J. A. Mota<sup>1,2</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto Nacional de Ciência e Tecnologia
- 11:00 Effect of the organic addition on the pore structure of tetragonal/monoclinic zirconia synthesized via sol-gel metal-chelate route** **N.P5.13**  
Déborá Guimarães da Silva<sup>1</sup>, Jéssica de Oliveira Notório Ribeiro<sup>1</sup>, Daniela Cordeiro Leite Vasconcelos<sup>1</sup>, Wander Luiz Vasconcelos<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 11:00 Scale up and granulation of nanometric NaA zeolite by isothermal method** **N.P5.14**  
 Edilene Deise Silva Ferracine<sup>1</sup>, Juliana Amorim Coelho<sup>1</sup>, Darley Carrijo de Melo<sup>2</sup>, Wilson Grava<sup>2</sup>, Dilson Cardoso<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Petrobras

- 11:00 Acidic zeolites with MFI structure applied to catalytic esterification** **N.P5.15**  
 Maria Eduarda Ribeiro<sup>1</sup>, Karen Niede Franke<sup>1</sup>, Patricia Moreira Lima<sup>1</sup>, Dilson Cardoso<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 11:00 Rough hybrid silicas applied to catalytic transesterification** **N.P5.16**  
 Iago W. Zapelini<sup>1</sup>, Dilson Cardoso<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 11:00 Synthesis of Spherical Mesoporous Silicas - A Study on the Influence of Shake Speed and Synthesis Gel Temperature** **N.P5.17**  
Francisco Emanuel Da Silva<sup>1</sup>, Eduardo Rigoti<sup>1</sup>, Sibebe Berenice Castellã Pergher<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 11:00 A study about the formation of template-free ZSM-5 films by secondary hydrothermal treatment** **N.P5.18**  
Helena Schneider<sup>1</sup>, Lucas B. Gomes<sup>1</sup>, Isabel Cristina Tessaro<sup>1</sup>, Nilson Romeu Marcilio<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 11:00 Development of functionalized mesoporous silica with enhanced water adsorption capacity in the low humidity range** **N.P5.20**  
Jéssica de Oliveira Notório Ribeiro<sup>1</sup>, Débora Guimarães da Silva<sup>1</sup>, Daniela Cordeiro Leite Vasconcelos<sup>1</sup>, Wander Luiz Vasconcelos<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 11:00 Study of embryonic zeolites as acid catalysts in the esterification of acetic acid** **N.P5.21**  
João Guilherme Pereira Vicente<sup>1</sup>, Caio Henrique Gomes<sup>1</sup>, Sandra Bizarria Lopes Villanueva<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia de Sorocaba
- 11:00 Study of the adsorption of rhodamine B on ordered mesoporous materials of silica and carbon** **N.P5.22**  
Juliana Barros Silva<sup>1</sup>, Eduardo Rigoti<sup>1</sup>, Sibebe Berenice Castellã Pergher<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 11:00 Reduction of structure direction agent in the synthesis of (P)MCM-22** **N.P5.23**  
 Fátima Nogueira Frota<sup>1</sup>, Juliana Barros Silva<sup>1</sup>, Mariele de Mello<sup>1</sup>, Edisson Morgado Jr<sup>2</sup>, Sibebe Berenice Castellã Pergher<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Petrobras
- 11:00 Eco-friendly synthesis of Zeolite A by reusing mother liquor** **N.P5.24**  
Lamara Maciel dos Santos<sup>1</sup>, Mariele de Mello<sup>1</sup>, Sibebe Berenice Castellã Pergher<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 11:00 Synthesis and characterization of MFI zeolite films for CO<sub>2</sub> separation** **N.P5.25**  
Leilayne Pascoal Pedro<sup>1</sup>, Daniela Cordeiro Leite Vasconcelos<sup>1</sup>, Wander Luiz Vasconcelos<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 11:00 Proton exchange membranes based on sulfonated poly (ether ether ketone) modified with ionic liquid encapsulated in metal-organic framework** **N.P5.26**  
Letícia Guerreiro da Trindade<sup>1</sup>, Katiúscia Nobre Borba<sup>2</sup>, Letícia Zanchet<sup>2</sup>, Demétrius William Lima<sup>3</sup>, Aline Barrios Trench<sup>4</sup>, Fernando Rey<sup>5</sup>, Urbano Díaz<sup>6</sup>, Elson Longo<sup>4</sup>, Katia Bernardo-Gusmão<sup>2</sup>, Emilse Maria Agostini Martini<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>2</sup>Instituto de Química - UFRGS, <sup>3</sup>Universidade Federal do Rio Grande do Sul, <sup>4</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>5</sup>Instituto de Tecnologia Química, <sup>6</sup>Universitat Politècnica de València-Consejo Superior de Investigaciones Científicas

- 11:00 Effect of solvent in the sol-gel synthesis of layered double hydroxides as catalysts for the ethanol steam reforming reaction** **N.P5.27**  
Lídia Cristina D Agostino<sup>1</sup>, Rosembergue Gabriel Lima Gonçalves<sup>2</sup>, Celso Valentim Santilli<sup>3,2</sup>, Sandra Helena Pulcinelli<sup>2</sup>; <sup>1</sup>Instituto de Química - Universidade Estadual Paulista, <sup>2</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil, <sup>3</sup>São Paulo State University
- 11:00 Metals ions adsorption using synthesized 4A zeolite: effect of coal fly ash as silica and aluminum source** **N.P5.28**  
Luiz Thiago Vasconcelos da Silva<sup>1</sup>, Breno Aragão Dos Santos<sup>1</sup>, Carla Bastos Vidal<sup>1</sup>, Armando Diego Lima Freitas<sup>1</sup>, Mayza Morais Franca<sup>1</sup>, Adonay Rodrigues Loiola<sup>1</sup>, Ronaldo Ferreira Do Nascimento<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará
- 11:00 Optimization of the synthesis of molecular sieves type Si-MCM-41** **N.P5.29**  
Bárbara Bullhões Cazula<sup>1</sup>, Marcos Antonio Polinarski<sup>2</sup>, Geovanny Broetto Besinella<sup>2</sup>, Helton José Alves<sup>3,2</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Estadual do Oeste do Paraná, <sup>3</sup>Universidade Federal do Paraná
- 11:00 Synthetic geopolymer as adsorbent** **N.P5.30**  
Mariana Arruda Pereira<sup>1,2</sup>, Wander Luiz Vasconcelos<sup>1</sup>, Daniela Cordeiro Leite Vasconcelos<sup>1</sup>, Jéssica de Oliveira Notório Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Universidade Federal de São João Del Rei
- 11:00 Design of Low Cost Membranes using Coal Fly Ash** **N.P5.31**  
Melissa Rodrigues de la Rocha<sup>1</sup>, Liliane Damaris Pollo<sup>1</sup>, Isabel Cristina Tessaro<sup>1</sup>, Nilson Romeu Marcilio<sup>1</sup>, Mirella Virginie<sup>2</sup>, Andrei Khodakov<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Université de Lille
- 11:00 Influence of heat treatment condition on crystallization of mordenite zeolite** **N.P5.32**  
Renata Bigal Werdesheim<sup>1</sup>, Rafael Chaves Lima<sup>1</sup>, Lindiane Bieseki<sup>1</sup>, Sibebe Berenice Castellã Pergher<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 11:00 Zeolite modified with zirconium oxide for adsorption of carminic acid (AC) to development stable pigments.** **N.P5.33**  
Rodrigo Prado Feitosa<sup>1</sup>, Alexandro de Sousa Sá<sup>1</sup>, Pollyana Trigueiro<sup>1</sup>, Josy Antevelli Osajima<sup>1</sup>, Edson Cavalcanti da Silva Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 11:00 Study of pillarization of a synthetic clay** **N.P5.34**  
Joyce Gomes Santos<sup>1</sup>, Anderson Parodia<sup>1</sup>, Sibebe Berenice Castellã Pergher<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 11:00 Study of mixed matrix membranes comprising poly(ether imide) and clinoptilolite zeolite for gas separation** **N.P5.35**  
Thaís Martins Neves<sup>1</sup>, Nilson Romeu Marcilio<sup>1</sup>, Liliane Damaris Pollo<sup>1</sup>, Isabel Cristina Tessaro<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 11:00 Synthesis of zeolite analcime from rice husk ash for removal of methylene blue dye** **N.P5.36**  
Thaís Schmitz<sup>1</sup>, Isabel Cristina Tessaro<sup>1</sup>, Nilson Romeu Marcilio<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 11:00 Synthesis of magnetic zeolite X using fly ash** **N.P5.37**  
Thaízy de Gois Martins<sup>1</sup>, Armando Diego Lima Freitas<sup>1</sup>, Adonay Rodrigues Loiola<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará
- 11:00 CoFe<sub>2</sub>O<sub>4</sub>-MCM-41 catalyst for the oxidative dehydrogenation of ethylbenzene** **N.P5.38**  
Moisés Costa Borges<sup>1</sup>, Felipe Fernandes Barbosa<sup>1</sup>, Sibebe Berenice Castellã Pergher<sup>1</sup>, Nadine Essayem<sup>2</sup>, Tiago Pinheiro Braga<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Institut de Recherches sur la Catalyse et L'environnement

- 11:00 A study of the modification of natural zeolite-clinoptilolites for its application in capture and storage of gases N.P5.39**  
vanessa castro de souza<sup>1</sup>, Jhonny Villarroel-Rocha<sup>2</sup>, Maria Gomes Araújo<sup>1</sup>, Karim Sapag<sup>2</sup>, Sibebe Berenice Castellã Pergher<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidad Nacional de San Luis
- 11:00 Magnetic properties evaluation of Cobalt Ferrite supported on the SBA-15 molecular sieve. N.P5.40**  
Francisco Gustavo Hayala Silveira Pinto<sup>1</sup>, Luiz Di Souza<sup>2</sup>, João Maria Soares<sup>2</sup>, Vinicius P. S. Caldeira<sup>2</sup>, Anne Gabriella Dias Santos<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade do Estado do Rio Grande do Norte
- 11:00 NiFe<sub>2</sub>O<sub>4</sub>/activated carbon magnetic composite as potential adsorbent material for the removal of pharmaceuticals from aqueous media N.P5.41**  
Andressa Cristiana Fröhlich<sup>1</sup>, Guilherme Luiz Dotto<sup>2</sup>, Edson Luiz Foletto<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal de Santa Maria

# **SYMPOSIUM 0 - Advanced laser materials processing and control of materials properties**

## **Symposium organizers:**

Luís Gonzaga Trabasso (SENAI Innovation Institute in Manufacturing Systems and Laser Processing)  
Alexandre Cunha (SENAI Innovation Institute in Manufacturing Systems and Laser Processing)  
Paulo Wendhausen (Federal University of Santa Catarina (UFSC))  
Milton Sérgio Fernandes Lima (Institute of Advanced Studies (IEAV))



# WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

## *SESSION O.01.D3 (14:00 - 16:15) - Room Atlântico*

- 14:00 Mechanical and Electrochemical Characterization of Ti35Nb4Sn alloy Processed by Laser Remelting** **O.O1.D3.1**  
Juliane Ribeiro da Cruz<sup>1</sup>, Milton Sergio Fernandes de Lima<sup>2</sup>, Rodnei Bertazzoli<sup>3</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Institute for Advanced Studies, <sup>3</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)
- 14:15 Exploring the effects of nanosecond laser processing on the characteristics of dimple textures produced on 304 steel surfaces** **O.O1.D3.2**  
Thiago Pereira<sup>1</sup>, Marcelo Taveira Veiga<sup>1</sup>, Alexandre Cunha<sup>1</sup>, Luís Gonzaga Trabasso<sup>1</sup>; <sup>1</sup>Instituto SENAI de Inovação em Processamento a Laser
- 14:30 Nanostructured carbonate preparation by laser ablation in liquids (PLAL)** **O.O1.D3.3**  
Aldebarã Fausto Ferreira<sup>1</sup>, Walter Mendes de Azevedo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 14:45 Influence of powder characteristics on the processability and mechanical behavior of stainless steel parts manufactured by selective laser melting** **O.O1.D3.4**  
Victor Lira Chastinet<sup>1</sup>, Henrique Rodrigues Oliveira<sup>2,1</sup>, Luis Henrique Fontanella<sup>2,1</sup>, Isadora Busch<sup>2,1</sup>, Renato Forni<sup>3</sup>, Cristhian Silva Carvalho<sup>3</sup>, Alexandre Cunha<sup>1</sup>, Luís Gonzaga Trabasso<sup>1</sup>; <sup>1</sup>Instituto SENAI de Inovação em Processamento a Laser, <sup>2</sup>Universidade Federal de Santa Catarina, <sup>3</sup>Petrobras
- 15:00 Development and optimization of SLM parameters using Al-Si-10Mg alloy by focusing in the insertion of manufacturing constraints in the topology optimization method** **O.O1.D3.5**  
Luis Henrique Fontanella<sup>1,2</sup>, Henrique Rodrigues Oliveira<sup>1,2</sup>, Victor Lira Chastinet<sup>3</sup>, Isadora Busch<sup>1,2</sup>, Alexandre Cunha<sup>2</sup>, Luís Gonzaga Trabasso<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Instituto SENAI de Inovação em Processamento a Laser, <sup>3</sup>Faculdade de Tecnologia Senai Joinville
- 15:15 Laser beam welding between niobium and titanium** **O.O1.D3.6**  
Rafael Humberto Mota de Siqueira<sup>1</sup>, Sheila Medeiros de Carvalho<sup>2</sup>, Milton Sergio Fernandes de Lima<sup>1</sup>; <sup>1</sup>Institute for Advanced Studies, <sup>2</sup>Instituto de Estudos Avançados
- 15:30 Study of the mechanical and microstructural properties of advanced high temperature laser processed steels** **O.O1.D3.7**  
Raquel Alvim Figueiredo Mansur<sup>1</sup>, Vágner Braga<sup>2</sup>, Vinicius Machado Mansur<sup>2</sup>, Daolun Chen<sup>3</sup>, Milton Sergio Fernandes de Lima<sup>1</sup>; <sup>1</sup>Institute for Advanced Studies, <sup>2</sup>Instituto Tecnológico de Aeronáutica, <sup>3</sup>Ryerson University
- 15:45 Laser Welding of High Strength Dissimilar Steels: DP600 and 300M** **O.O1.D3.8**  
Evandro Guilherme de Souza Zanni<sup>1,2</sup>, Caroline Cristine de Andrade Ferreira<sup>3</sup>, Ana Teresa Harada<sup>1,2</sup>, Antonio Jorge Abdalla<sup>2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Estudos Avançados, <sup>3</sup>Institute for Advanced Studies

- 16:00 A study of the interstitial-free steel weldability for reducing residual deformation** **O.O1.D3.9**  
 Vinícius Pereira Guimarães<sup>1</sup>, Rafael Humberto Mota de Siqueira<sup>2</sup>, Caroline Cristine de Andrade Ferreira<sup>2</sup>, Sheila Medeiros de Carvalho<sup>3</sup>, Milton Sergio Fernandes de Lima<sup>2</sup>; <sup>1</sup>University of Taubaté, <sup>2</sup>Institute for Advanced Studies, <sup>3</sup>Instituto de Estudos Avançados

## THURSDAY , SEPTEMBER 26

### Poster presentations

#### *SESSION O.P7 (09:30 - 11:00)*

- 09:30 High-entropy alloys (HEA) coating produced by laser cladding** **O.P7.1**  
Ariana Freire Andrade<sup>1</sup>, Eloá Lopes Maia<sup>1</sup>, João Batista Fogagnolo<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Mecânica, Unicamp
- 09:30 Microstructural evaluation and wear resistance of ultrafine eutectic coatings produced by laser cladding from FeNbB powder** **O.P7.2**  
Chaiane Messa Caneda<sup>1,2</sup>, Rudimar Riva<sup>3</sup>, Claudio S. Kiminami<sup>1,2</sup>, Piter Gargarella<sup>1,2</sup>, Conrado Ramos Moreira Afonso<sup>1,2</sup>; <sup>1</sup>Departamento de Engenharia de Materiais - UFSCar (São Carlos), <sup>2</sup>Federal University of São Carlos, <sup>3</sup>Instituto de Estudos Avançados
- 09:30 Effect of laser carburizing process on the microstructure and hardness properties of AISI 8620 steel** **O.P7.3**  
Eduarda Santos Lima<sup>1,2,3</sup>, Antonio Jorge Abdalla<sup>2</sup>, Rafael Humberto Mota de Siqueira<sup>4</sup>, Rene Martins Volu<sup>4</sup>, Luis Rogerio de Oliveira Hein<sup>3</sup>, Getúlio De Vasconcelos<sup>2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Estudos Avançados, <sup>3</sup>São Paulo State University, <sup>4</sup>Institute for Advanced Studies
- 09:30 Properties analysis of hardness and wear of AISI 8620 steel carbonized by laser** **O.P7.4**  
Eduarda Santos Lima<sup>1,2,3</sup>, Antonio Jorge Abdalla<sup>2</sup>, Rafael Humberto Mota de Siqueira<sup>4</sup>, Humberto Lopes Rodrigues<sup>3</sup>, Rene Martins Volu<sup>4</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Estudos Avançados, <sup>3</sup>Universidade Estadual de São Paulo - Campus Guaratinguetá, <sup>4</sup>Institute for Advanced Studies
- 09:30 Magnetic Susceptibility of a Laser Treated Biomaterial** **O.P7.5**  
Eurico Felix Pieretti<sup>1</sup>, MAURICIO MARTINES DAS NEVES<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energeticas e Nucleares
- 09:30 Response Surface for Geometric Dilution Optimization of Fe and a Sn Alloy Processed by Directed Energy Deposition (DED)** **O.P7.6**  
Gustavo Henrique Truppel<sup>1</sup>, Lucas Pauli de Souza<sup>1</sup>, Milton Pereira<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Influence of the laser heating on the synthesis of Ti/(SnO<sub>2</sub>)<sub>0.84</sub>(Sb<sub>2</sub>O<sub>5</sub>)<sub>0.16-x</sub>(La<sub>2</sub>O<sub>3</sub>)<sub>x</sub> anodes** **O.P7.7**  
 Mariane Martins Silva Pelegrinelli<sup>1</sup>, Laura Renata Aragão Silva<sup>2,1</sup>, Géssica de Oliveira Santiago Santos<sup>2,1</sup>, Aline Resende Dória<sup>2,1</sup>, Giancarlo Richard Salazar Banda<sup>2,1</sup>, KATLIN IVON BARRIOS EGUILUZ<sup>2,1</sup>; <sup>1</sup>Instituto de Tecnologia e Pesquisa, <sup>2</sup>Universidade Tiradentes



- 09:30 Femtosecond laser induced forward transfer of luminescent silk fibroin microstructures** **O.P7.8**  
 Molíria Vieira dos Santos<sup>1</sup>, Kelly Tasso de Paula<sup>1</sup>, Sabrina Nicoleti Carvalho dos Santos<sup>2</sup>, Marcelo Barbosa de Andrade<sup>1</sup>, Lippy Faria Marques<sup>3</sup>, Sidney J.L. Ribeiro<sup>4</sup>, Cleber R. Mendonça<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>Universidade do Estado do Rio de Janeiro, <sup>4</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil
- 09:30 Effect of Laser Cladding Parameters on the Microstructure and Properties of Al-Cu-Fe Alloy Coating on ASTM 304 Substrate** **O.P7.9**  
Maria Eduarda Tedesco Farina<sup>1</sup>, Pedro Bell Santos<sup>1</sup>, Moises Felipe Teixeira<sup>2</sup>, Alexandre Cunha<sup>2</sup>, Berenice Dedavid<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio Grande do Sul, <sup>2</sup>Instituto SENAI de Inovação em Processamento a Laser
- 09:30 Laser Cladding of Fe-Nb alloy: Towards microstructural characterization and assessment of tribological performance and corrosion resistance** **O.P7.10**  
Moises Felipe Teixeira<sup>1,2</sup>, Vitor Hugo Meura<sup>3,2</sup>, Marcelo Taveira Veiga<sup>4,2</sup>, Alexandre Cunha<sup>2</sup>, Luís Gonzaga Trabasso<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Instituto SENAI de Inovação em Processamento a Laser, <sup>3</sup>Universidade da Região de Joinville, <sup>4</sup>Fundação Universidade do Estado de Santa Catarina
- 09:30 Assessing the performance and feasibility of laser cladded Vecalloy 800 (1040) coatings for grinding elements** **O.P7.11**  
Moises Felipe Teixeira<sup>1,2</sup>, Carlos Enrique Niño<sup>1</sup>, Edson Santos<sup>1,3</sup>, Thiago K Oenning<sup>4</sup>, Alexandre Cunha<sup>2</sup>, Luís Gonzaga Trabasso<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Instituto SENAI de Inovação em Processamento a Laser, <sup>3</sup>Zeiss, <sup>4</sup>Granaço Fundição
- 09:30 Lasers made of organic thin films for chemical sensing applications** **O.P7.12**  
Pedro Ramon Almeida Oiticica<sup>1</sup>, Osvaldo Novais de Oliveira Jr<sup>2,1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP, <sup>2</sup>Universidade de São Paulo
- 09:30 Formability index of laser welded twinning-induced plasticity steel** **O.P7.13**  
 Vágner Braga<sup>1</sup>, Sheila Medeiros de Carvalho<sup>2</sup>, Raquel Alvim Figueiredo Mansur<sup>1</sup>, Rafael Humberto Mota de Siqueira<sup>3</sup>, Milton Sergio Fernandes de Lima<sup>3</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Estudos Avançados, <sup>3</sup>Institute for Advanced Studies
- 09:30 Fatigue performance of titanium plates processed by laser surface melting** **O.P7.14**  
Sérgio dos Anjos Silva<sup>1</sup>, João Batista Fogagnolo<sup>1</sup>, Rodrigo Blödorn<sup>2</sup>; <sup>1</sup>Faculdade de Engenharia Mecânica, Unicamp, <sup>2</sup>Centro Universitário de Brusque
- 09:30 Synthesis and characterization of Bi and In nanostructures on NaBiO<sub>3</sub>/InP composite by femtosecond laser irradiation** **O.P7.15**  
Thales Rafael Machado<sup>1</sup>, Vinícius Teodoro<sup>2</sup>, Nadia Macedo<sup>1</sup>, Marcelo de Assis de Assis<sup>2</sup>, Verónica Puerto-Belda<sup>3</sup>, Gladys Mínguez-Vega<sup>3</sup>, Héctor Beltrán Mir<sup>3</sup>, Juan Andrés<sup>3</sup>, Eloisa Cordoncillo<sup>3</sup>, Elson Longo<sup>2</sup>; <sup>1</sup>Departamento de Química da UFSCar - São Carlos, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universitat Jaume I
- 09:30 Application of silicon carbide in WC-Co tools by laser methods** **O.P7.16**  
 Rene Martins Volu<sup>1</sup>, Vágner Braga<sup>1</sup>, Claudio Luis Santos<sup>2</sup>, Silvelene Alessandra Dyer<sup>3</sup>, Romário Araújo Pinheiro<sup>4</sup>, Djoille Denner Damm<sup>5</sup>, Getúlio Vasconcelos<sup>6,7</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>3</sup>Institute for Advanced Studies, <sup>4</sup>Instituto Nacional de Pesquisas Espaciais, <sup>5</sup>Universidade Federal de São Paulo, <sup>6</sup>Instituto de Aeronáutica e Espaço, <sup>7</sup>Instituto de Estudos Avançados

**09:30 Aluminium powder deposited on Ti-6Al-4V by selective laser melting**  
Vinicius de Oliveira Castro Silva<sup>1</sup>, Laura Ardila Rodriguez<sup>1</sup>, Aline Capella de  
Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo

**O.P7.17**

# **SYMPOSIUM P - Materials and Fabrication Processes for Aeronautic and Space Applications**

## **Symposium organizers:**

Gilberto Carvalho Coelho (USP)  
Carlos Angelo Nunes (EEL-USP)  
Catherine J. Parrish (Boeing)  
Fernando Ferreira Fernandez (Embraer)  
José Daniel Diniz Melo (UFRN)  
Milton Sergio Fernandes de Lima (IEAv/DCTA)



# TUESDAY , SEPTEMBER 24

\* Invited Lecture

## *SESSION P.01.D2 (09:30 - 10:30) - Room Java*

- 09:30 Challenges and Technology Trends for Aeronautical Materials** P.O1.D2.1\*  
Fabio Santos da Silva<sup>1</sup>; <sup>1</sup>Empresa Brasileira de Aeronáutica SA.
- 10:00 Synthesis of carbon nanotubes on carbon fibers with residual content of sodium as catalyst** P.O1.D2.2  
Erica Freire Antunes<sup>1</sup>, Camila Alves Escanio<sup>1</sup>, Evaldo José Corat<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 10:15 Mechanical characterization of the interface between 2024-T3 aluminum and epoxy resin of the fiber metal laminate processed by hot compression molding** P.O1.D2.3  
EDUARDO PIRES BONHIN<sup>1</sup>, Sarah David-Müzel<sup>1</sup>, Alberto Lima Santos<sup>2</sup>, Edson Cocchieri Botelho<sup>1</sup>, Marcos Valério Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá, <sup>2</sup>SENAI Mario Amato, Instituto Senai de Inovação em Materiais Avançados e Nanocompósitos

## *SESSION P.02.D2 (11:00 - 12:00) - Room Java*

- 11:00 Evaluation of structural performance of epoxy resin reinforced with carbon nanotubes and graphene for aerospace application.** P.O2.D2.1  
Silvio Luiz Francisco Osório<sup>1</sup>; <sup>1</sup>OSORIO Engenharia
- 11:15 Drilling study of furfuryl alcohol resin/ CNT/carbon fiber composite** P.O2.D2.2  
Sarah David-Müzel<sup>1</sup>, EDUARDO PIRES BONHIN<sup>1</sup>, Marcos Valério Ribeiro<sup>1</sup>, Edson Cocchieri Botelho<sup>1</sup>, Manoel Cléber Sampaio Alvez<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá
- 11:30 Aerospace thermoplastic/carbon fiber composite surface modification with atmospheric DBD plasma** P.O2.D2.3  
Mauro Henrique Lapena<sup>1</sup>, Cristina Moniz Araujo Lopes<sup>1</sup>; <sup>1</sup>Departamento de Ciência e Tecnologia Aeroespacial
- 11:45 Debates on the current conventional materials and the need to new materials to improve performance in aerospace vehicles and to avoid from unexpected failure** P.O2.D2.4\*  
AHMET HIKMET UCISIK<sup>1</sup>; <sup>1</sup>Atilim University

## *SESSION P.03.D2 (14:00 - 16:15) - Room Java*

- 14:00 Microstructural effect on the fatigue crack propagation of the Aeronautic AA7050-T7451 and AA2050-T84 Al alloys in air and saline environments** P.O3.D2.1  
Thiago Roberto Felisardo Cavalcante<sup>1</sup>, Evandro Menassi Siqueira<sup>1</sup>, Cassius Olivio Figueiredo Terra Ruchert<sup>2</sup>, François Brisset<sup>3</sup>, Waldek Wladimir Bose Filho<sup>1</sup>, Sinésio Domingues Franco<sup>4</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Escola de Engenharia de Lorena - USP, <sup>3</sup>Paris-Sud University, <sup>4</sup>Faculty of Mechanical Engineering/UFU

- 14:30 Microstructure and mechanical behavior of a tube-to-plate laser weld titanium for 1U cubesat-type frame** **P.O3.D2.2**  
Milton Sergio Fernandes de Lima<sup>1</sup>, Sheila Medeiros de Carvalho<sup>2</sup>, Rafael Humberto Mota de Siqueira<sup>1</sup>; <sup>1</sup>Institute for Advanced Studies, <sup>2</sup>Instituto de Estudos Avançados
- 14:45 Mechanical characterization of laser welded 6013 aeronautical aluminum alloy after heat treatment** **P.O3.D2.3**  
Luis Felipe Baptista dos Reis Silva<sup>1</sup>, Renato Galvão da Silveira Mussi<sup>2</sup>, Davi Neves<sup>3</sup>; <sup>1</sup>Faculdade de Tecnologia de São José dos Campos, <sup>2</sup>Departamento de Ciência e Tecnologia Aeroespacial, <sup>3</sup>Instituto de Estudos Avançados
- 15:00 Fracture characterization of a Zr-based BMG bend tested** **P.O3.D2.4**  
Camila Aguiar Teixeira<sup>1</sup>, Marcelo Falcão de Oliveira<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP)
- 15:15 On the Effect of Ce-base Mischmetal Addition on the Microstructure and Mechanical Properties of Hot-Rolled ZK60 Alloy** **P.O3.D2.5**  
Erenilton Pereira Silva<sup>1,2</sup>, Felipe Marques<sup>3</sup>, Ricardo Henrique Buzolin<sup>4,5</sup>, Flavio Soldera<sup>6</sup>, PEDRO RENATO TAVARES AVILA<sup>2</sup>, Haroldo Cavalcanti Pinto<sup>5</sup>; <sup>1</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri, <sup>2</sup>Escola de Engenharia de São Carlos, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>4</sup>Technische Universität Graz, <sup>5</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>6</sup>Universität des Saarlandes
- 15:30 Microstructure characterization of NbMoTi Al<sub>0.5</sub>Cr<sub>0.5</sub> High entropy alloy** **P.O3.D2.6**  
Luiz Gonzaga Martins<sup>1</sup>, Marcelo Falcão Oliveira<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP)
- 15:45 Study of microstructural evolution of the AA1050/AA7050 Al hybrid sheets processed by asymmetric accumulative roll bonding** **P.O3.D2.7**  
Danielle Cristina Camilo Magalhães<sup>1</sup>, Osvaldo Mitsuyuki Cintho<sup>2</sup>, Marcio Ferreira Hupalo<sup>2</sup>, Vitor Luiz Sordi<sup>1</sup>, Andrea Madeira Kliauga<sup>1</sup>; <sup>1</sup>Departamento de Engenharia de Materiais - UFSCar (São Carlos), <sup>2</sup>Universidade Estadual de Ponta Grossa
- 16:00 Spray forming of Cu-11Al-3Ni-3Mn-0,5Zr Shape Memory Alloy and the Application in Mechanical Couplings** **P.O3.D2.8**  
Régis Daniel Cava<sup>1</sup>, Eric Mazzer<sup>2</sup>, Claudio S. Kiminami<sup>3</sup>, Claudemiro Bolfarini<sup>3</sup>, Vinicius Martins Pedrosa<sup>3</sup>; <sup>1</sup>Universidade da Região de Joinville, <sup>2</sup>Universidade Federal de Minas Gerais, <sup>3</sup>Universidade Federal de São Carlos

## WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

### *SESSION P.O1.D3 (09:30 - 10:30) - Room Java*

- 09:30 Materials selection for the Thermal Protection System of a Mars Lander – a pedagogical case study** **P.O1.D3.1\***  
Mauricio Dwek<sup>1</sup>; <sup>1</sup>Ansys-Granta

- 10:00 Potential of the Al<sub>2</sub>-xGa<sub>x</sub>W<sub>3</sub>O<sub>12</sub> system for thermal shock resistance** **P.O1.D3.2**  
Isabella Loureiro Muller Costa<sup>1</sup>, Bojan A. Marinkovic<sup>1</sup>, Waldeci Paraguassu<sup>2</sup>,  
 Victoria Blair<sup>3</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Federal  
 University of Pará, <sup>3</sup>Army research laboratory
- 10:15 Sintering of powder metallurgy processed titanium aluminides** **P.O1.D3.3**  
Juliano Soyama<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

**SESSION P.O2.D3 (11:00 - 12:00) - Room Java**

- 11:00 Thermo-optical performance of black anodized aluminum coatings for space applications** **P.O2.D3.1**  
Marco Aurelio Horban<sup>1</sup>, Carina Barros Mello<sup>1</sup>, Graziela da Silva Savonov<sup>1</sup>, Jose  
 Eduardo May<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 11:15 Analysis of the behavior of niobium silicide coatings at high temperatures** **P.O2.D3.2**  
Beatriz Aparecida Pinto<sup>1</sup>, Cintia Queiroz<sup>1</sup>, Ana Sofia Clímaco Monteiro  
 D'Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 11:30 Solar thermal absorber: performance and morphology relationship** **P.O2.D3.3**  
Franciele Carlesso<sup>1</sup>, Erica Freire Antunes<sup>1</sup>, Luis Eduardo Antunes Vieira<sup>1</sup>, Evaldo  
 José Corat<sup>1</sup>, Graziela da Silva Savonov<sup>1</sup>, Luiz Angelo Berni<sup>1</sup>, Edson  
 Miranda<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 11:45 Phase Distribution on Titanium Oxide Rough Thin Films Obtained by Anodization Process** **P.O2.D3.4**  
AHMET HIKMET UCISIK<sup>1</sup>; <sup>1</sup>Atilim University

**MONDAY , SEPTEMBER 23**

**Poster presentations**

**SESSION P.P1 (11:00 - 12:30)**

- 11:00 Effect of equal-channel angular pressing on the coarse second-phase particles in a Cu-Cr-Zr alloy** **P.P1.1**  
Filipe Caldato Dalan<sup>1</sup>, Kátia Regina Cardoso<sup>1</sup>, Gisele Ferreira Lima<sup>1</sup>, Dilermando  
 Nagle Travessa<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 11:00 Microencapsulation of ammonium perchlorate particles by wurst spray method in SPOUT-FLUID bed** **P.P1.2**  
Lucas Barros de Oliveira<sup>1</sup>, Márcio Yuji Nagamachi<sup>2</sup>, Luiz Fernando de Araujo  
 Ferrão<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Aeronáutica e Espaço
- 11:00 Comparative study on mechanical properties of honeycomb and Divinycell® applied in sandwich composites** **P.P1.3**  
Mayla Alencar Medeiros<sup>1</sup>, Kalyude Diógenes de Sousa<sup>1</sup>, Ramsés Otto Cunha  
 Lima<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido
- 11:00 Shear strength of carbon fiber/phenolic resin composites by the Iosipescu method** **P.P1.4**  
Mariana Martins Duque<sup>1</sup>, Luiz Claudio Pardini<sup>1</sup>, Christian Frederico de Avila Von  
 Dollinger<sup>2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Aeronáutica e  
 Espaço

- 11:00 Materials selection and structural tests applied in the structural efficiency of a P.P1.5 radio controlled aircraft**  
Mayla Alencar Medeiros<sup>1</sup>, Kalyude Diógenes de Sousa<sup>1</sup>, Ramsés Otto Cunha Lima<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido
- 11:00 Characterization of intermetallic phases on AA7075 aluminum alloy after cold P.P1.6 rolling process**  
Ágata Pontes<sup>1</sup>, Gilbert Silva<sup>1</sup>, Marcela Lamoglia<sup>1</sup>, Leandro Serrano<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 11:00 Sustainable activated biochar for radar absorbing material: an eco-friendly P.P1.7 way to reduce reflectivity**  
Alan Fernando Ney Boss<sup>1</sup>, Flavia Lega Braghiroli<sup>2</sup>, Gisele Aparecida Amaral-Labat<sup>3</sup>, Ariane Aparecida Teixeira Souza<sup>4</sup>, Mauricio Ribeiro Baldan<sup>4</sup>, Hassine Bouafif<sup>5</sup>, Ahmed Koubaa<sup>2</sup>, Guilherme Frederico Bernardo Lenz e Silva<sup>1</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo, <sup>2</sup>Université du Quebec Abitibi-Témiscamingue, <sup>3</sup>University of São Paulo, <sup>4</sup>Instituto Nacional de Pesquisas Espaciais, <sup>5</sup>College of Abitibi-Témiscamingue
- 11:00 Study of the addition of carbon nanotubes in the chemical and mechanical P.P1.8 properties of prepregs of epoxy resin / carbon fiber**  
Alan Silva Santos<sup>1</sup>, Luciana de Simone Cividanes<sup>1</sup>, Elizabete Yoshie Kawachi<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica
- 11:00 Investigation of the evolution and influence of hardening phases on the P.P1.9 corrosive behavior of AA2198**  
Aline Fátima Santos Bugarin<sup>1</sup>, Maysa Terada<sup>1</sup>, Rodolfo Politano<sup>1</sup>, Isolda Costa<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energeticas e Nucleares
- 11:00 Epoxy-silane sol-gel adhesives for aluminum: influence of adhesive P.P1.10 composition and time to deposition**  
Amanda Alvarenga Coutinho Silva<sup>1</sup>, Luciana de Simone Cividanes<sup>1</sup>, Elizabete Yoshie Kawachi<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica
- 11:00 Multilayer radar absorbing material processing by using carbonyl iron with P.P1.11 different particle size**  
Ana Paula Silva Oliveira<sup>1</sup>, Ariane Aparecida Teixeira Souza<sup>1</sup>, Thayna Cantos Pizol<sup>1</sup>, Alan Fernando Ney Boss<sup>2</sup>, Miguel Angelo do Amaral Junior<sup>1</sup>, Guilherme Frederico Bernardo Lenz e Silva<sup>2</sup>, Maurício Ribeiro Baldan<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Escola Politécnica de Universidade de São Paulo
- 11:00 Effect of Heat Treatment in Fatigue Life of 300M Steel subjected a Laser P.P1.12 Carburizing**  
Antonio Jorge Abdalla<sup>1</sup>, Getúlio Vasconcelos<sup>2,1</sup>, Douglas Santos<sup>2</sup>; <sup>1</sup>Instituto de Estudos Avançados, <sup>2</sup>Instituto de Aeronáutica e Espaço
- 11:00 Effect of interfacial heat transfer coefficient on dendritic growth in an P.P1.13 horizontally solidified Al-5wt.%Si alloy**  
Antonio Luciano Seabra Moreira<sup>1</sup>, Gueber Santos Júnior<sup>1</sup>, Fabrícia Sousa Gonzaga<sup>1</sup>, Ariana de Freitas Azevedo<sup>1</sup>, José Augusto França Rodrigues<sup>1</sup>, Marlo Costa Oliveira<sup>2</sup>, André dos Santos Barros<sup>3</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Federal University of Pará, <sup>3</sup>Universidade Estadual de Campinas
- 11:00 Horizontally solidified Al-11wt.%Si alloy: thermal parameters, P.P1.14 microstructure and microindentation hardness**  
Antonio Luciano Seabra Moreira<sup>1</sup>, Gueber Santos Júnior<sup>1</sup>, Fabrícia Sousa Gonzaga<sup>1</sup>, Ariana de Freitas Azevedo<sup>1</sup>, José Augusto França Rodrigues<sup>1</sup>, Marlo Costa Oliveira<sup>2</sup>, André dos Santos Barros<sup>3</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Federal University of Pará, <sup>3</sup>Universidade Estadual de Campinas



- 11:00 Aluminum 6061 alloy: Time and temperature influence on aging time in the hardness.** P.P1.17  
Augusto Dias Melo<sup>1</sup>, Juliana Pereira da Silva<sup>1</sup>, Bruna Bandeira do Nascimento<sup>1</sup>, Francisco José da Cruz Neto<sup>1</sup>, Jose Anglada Rivera<sup>2</sup>, Yurimiler Leyet Ruiz<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Amazonas
- 11:00 Powder metallurgy viability to produce a refractory MoNbTiW multiprincipal component alloy.** P.P1.18  
 Adriely Tura Carvalho<sup>1</sup>, João Felipe Queiroz Rodrigues<sup>1</sup>, Giovana da Silva Padilha<sup>1</sup>, Wislei R R Osorio<sup>1</sup>, Ausdinir Danilo Bortolozo<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 11:00 The corrosion resistance between AA2050-T84 and AA7050-T7451 welded by friction stir weld.** P.P1.19  
Bárbara Victoria Gonçalves de Viveiros<sup>1</sup>, Larissa Oliveira Berbel<sup>1</sup>, Aline Fátima Santos Bugarin<sup>1</sup>, Uyime Donatus<sup>1</sup>, Isolda Costa<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energeticas e Nucleares
- 11:00 Corrosion behavior of hybrid sol-gel coating based on silane TMSPM and their applications onto AA 2024-T3 aluminum alloy** P.P1.20  
Brenda Diane Pereira Martins<sup>1</sup>, Luciana de Simone Cividanes<sup>1</sup>, Elizabete Yoshie Kawachi<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica
- 11:00 Determination of fatigue crack growth in Al-Li aerospace alloy in criogenic conditions** P.P1.21  
Carla Isabel dos Santos Maciel<sup>1</sup>, José Francisco Leonelli Júnior<sup>1</sup>, Waldek Wladimir Bose Filho<sup>1</sup>, Cassius Olivo Figueiredo Terra Ruchert<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Escola de Engenharia de Lorena - Universidade de São Paulo
- 11:00 Study of cooling rate evaluation of eutectic AlSi alloy in different mold materials** P.P1.22  
César Augusto Antônio<sup>1</sup>, Raphael Oliveira da Silva<sup>1</sup>, Henrique Solowej Medeiros Lopes<sup>1</sup>, Miguel Borodiak<sup>2</sup>; <sup>1</sup>FACULDADE DE TECNOLOGIA DE SOROCABA, <sup>2</sup>Companhia Brasileira de Alumínio
- 11:00 Microstructural characterization and hardness of an Al-Si-Mg<sub>2</sub>Si alloy solidified in unsteady state conditions** P.P1.23  
 Cássio Augusto Pinto Silva<sup>1</sup>, Danieli Aparecida Pereira Reis<sup>2</sup>, Noé Cheng<sup>1</sup>, Amauri Garcia<sup>1</sup>, Crystopher Cardoso Brito<sup>3</sup>; <sup>1</sup>Faculdade de Engenharia Mecânica, Unicamp, <sup>2</sup>Universidade Federal de São Paulo, <sup>3</sup>São Paulo State University
- 11:00 Analysis of the surface roughness of duplex stainless steel machined in a CNC lathe** P.P1.24  
Daniel Alves Bezerra<sup>1</sup>, Francisco Evaristo Uchoa Reis<sup>1</sup>, Lucas de Almada Torres<sup>1</sup>, Manoel Quirino Silva Júnior<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido
- 11:00 Use of Eddy current at high temperatures for control of heat treatment age hardening in Al 2024 alloy** P.P1.25  
Daniel Diehl<sup>1</sup>, Eduardo Luis Schneider<sup>1</sup>, Thomas Gabriel Rosauero Clarke<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 11:00 The binary Cu-Zr system: investigation in the Cu-rich region and mechanical properties** P.P1.26  
Daniel Walter da Silva Dalmagro<sup>1</sup>, Camila Aparecida Rosiak<sup>1</sup>, Vanessa Motta Chad<sup>1</sup>, Marcia Moreira Medeiros<sup>1</sup>, Júlio César Pereira<sup>2</sup>, Gilberto Carvalho Coelho<sup>2</sup>, Carlos Angelo Nunes<sup>2</sup>; <sup>1</sup>Universidade Federal de Mato Grosso, <sup>2</sup>Escola de Engenharia de Lorena - USP

- 11:00 Copper and zinc contents as reinforce to constitute Al matrix alloy by powder metallurgy** P.P1.27  
 Beatriz Tavoni Longhim<sup>1</sup>, Eder Lopes Ortiz<sup>1</sup>, Renata Favoretto<sup>1</sup>, Samuel Fernando Moraes<sup>1</sup>, Ausdinir Danilo Bortolozo<sup>1</sup>, Wislei R R Osorio<sup>1</sup>, Giovana da Silva Padilha<sup>1</sup>; <sup>1</sup>Faculdade de Ciências Aplicadas, Unicamp
- 11:00 Size particles effect on the mechanical properties of an Al6Cu5Zn alloy by powder metallurgy** P.P1.28  
Eder Lopes Ortiz<sup>1</sup>, Renata Favoretto<sup>2</sup>, Beatriz Tavoni Longhim<sup>1</sup>, Samuel Fernando Moraes<sup>1</sup>, Ausdinir Danilo Bortolozo<sup>1</sup>, Wislei R R Osorio<sup>1</sup>, Giovana da Silva Padilha<sup>1</sup>; <sup>1</sup>Faculdade de Ciências Aplicadas, Unicamp, <sup>2</sup>Universidade Estadual de Campinas
- 11:00 Flexural wave band gaps in carbon/epoxy phononic crystal thick plates** P.P1.29  
Edson Jansen Pedrosa de Miranda Jr.<sup>1</sup>, José Maria Campos Dos Santos<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>2</sup>Universidade Estadual de Campinas
- 11:00 Enhancement of fatigue performance by nitriding and carburizing treatments applied to 300M steel** P.P1.30  
Evandro Guilherme de Souza Zanni<sup>1,2</sup>, Antonio Jorge Abdalla<sup>2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Estudos Avançados
- 11:00 Study of behavior of aluminium chips processed by ECAP and thermally treated** P.P1.31  
Fernando Mendonça Vieira<sup>1</sup>, Allan Döring<sup>1</sup>, Márcio Roberto Rocha<sup>1</sup>, Angela Beatriz Coelho Arnt<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade do Extremo Sul Catarinense
- 11:00 EDS evaluation of textured machining tool with micro grooves in lubrication condition** P.P1.32  
fernando sabino fonteque ribeiro<sup>1,2</sup>, José Claudio Lopes<sup>1</sup>, Luiz Eduardo Angelo Sanchez<sup>1</sup>, Eduardo Carlos Bianchi<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Instituto Federal do Paraná
- 11:00 Experimental determination of the transient interfacial heat transfer coefficient during the upward solidification of the Al12.6Si eutectic alloy** P.P1.33  
Fernando Sousa da Rocha<sup>1</sup>, Thiago Galvão da Costa<sup>1</sup>, Angela de Jesus Vasconcelos<sup>1</sup>, Otávio Fernandes Lima Rocha<sup>1</sup>, Ivaldo Leão Ferreira<sup>2</sup>, Thiago Antônio Paixão de Sousa Costa<sup>1</sup>; <sup>1</sup>Federal Institute of Education, Science and Technology of Pará, <sup>2</sup>Federal University of Pará
- 11:00 The microstructural evolution and the mechanical and electrical properties of the Cu-0,81Cr-0,07Zr alloy subject to ECAP** P.P1.34  
Filipe Caldato Dalan<sup>1</sup>, Kátia Regina Cardoso<sup>1</sup>, Gisele Ferreira Lima<sup>1</sup>, Dilermando Nagle Travessa<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 11:00 Obtaining BaTiO<sub>3</sub> by the Coprecipitation Method and it is Application in Microstrip Patch Antennas** P.P1.35  
Gabriel Sá de Sena<sup>1</sup>, Fernando Mendes<sup>2,3</sup>, Filipe Amaral<sup>2</sup>, Ana Angélica Mathias Macêdo<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>2</sup>Instituto Politécnico de Coimbra, <sup>3</sup>Universidade de Coimbra
- 11:00 Effect of copper content in a refractory multicomponent alloy MoNbTiW.** P.P1.36  
George André Jacob Nogueira<sup>1</sup>, João Felipe Queiroz Rodrigues<sup>1</sup>, Giovana da Silva Padilha<sup>1</sup>, Wislei R R Osorio<sup>1</sup>, Ausdinir Danilo Bortolozo<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

- 11:00 Analysis of Toll Wear During the Necking process of an Al-6wt%Cu solidified in a Horizontal Directional Device** P.P1.37  
George Silva de Oliveira<sup>1</sup>, Maria Adrina Paixão de Souza da Silva<sup>1</sup>, Tiago Nunes da Costa<sup>1</sup>, Nádia Silva Cosmo<sup>1</sup>, LARA ABDALLAH ZAHALAN<sup>1</sup>, Ezayne Sanaely da Silva Frihani Roni<sup>1</sup>, Syrleire Lopes de Paula Silva<sup>1</sup>; <sup>1</sup>Federal University of Pará
- 11:00 The effect of intermetallic phase Al<sub>2</sub>Cu on mechanical properties of a non-commercial Al-Cu-Zn alloy** P.P1.38  
Renata Favoretto<sup>1</sup>, Eder Lopes Ortiz<sup>1</sup>, Beatriz Tavoni Longhim<sup>1</sup>, Samuel Fernando Moraes<sup>1</sup>, Wislei R R Osorio<sup>1</sup>, Ausdinir Danilo Bortolozo<sup>1</sup>, Giovana da Silva Padilha<sup>1</sup>; <sup>1</sup>Faculdade de Ciências Aplicadas, Unicamp
- 11:00 Analysis of the hardness of the 6351-T6 alloy artificially aged in different time** P.P1.39  
Girley Ferreira Rodrigues<sup>1,2,3</sup>, Geovane Alves Mendonça<sup>1</sup>; <sup>1</sup>Universidade do Estado de Minas Gerais, <sup>2</sup>Universidade de Mogi das Cruzes, <sup>3</sup>Universidade Virtual do Estado de São Paulo
- 11:00 Macrostructural and Microstructural Analysis of a Al-TiO<sub>2</sub>-CaCO<sub>3</sub>-CaO satellite coating using Olympus Analysis 5.1 software** P.P1.40  
Mylena Samantha Ferreira Mendes<sup>1</sup>, Gleidson Silva Figueiredo<sup>1</sup>, Kamila da Silva Pompeu<sup>2</sup>, Jullyane Milena Silva Figueiredo<sup>1</sup>, Thais Scarllety de Almeida Almada<sup>1</sup>, Rene Francisco Boschi Gonçalves<sup>3</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Federal University of Pará, <sup>3</sup>Instituto Tecnológico de Aeronáutica
- 11:00 Thermo-Mechanical Analysis of a Satellite Coating composed of Al-TiO<sub>2</sub>-CaCO<sub>3</sub>-CaO using Finite Element Analysis.** P.P1.41  
Mylena Samantha Ferreira Mendes<sup>1</sup>, Kamila da Silva Pompeu<sup>2</sup>, Gleidson Silva Figueiredo<sup>1</sup>, Jullyane Milena Silva Figueiredo<sup>1</sup>, Marcelo Lucas Souza Silva<sup>1</sup>, Thais Scarllety de Almeida Almada<sup>1</sup>, Rene Francisco Boschi Gonçalves<sup>3</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Federal University of Pará, <sup>3</sup>Instituto Tecnológico de Aeronáutica
- 11:00 Anodic coatings for aluminum heat pipes for space application** P.P1.42  
Graziela da Silva Savonov<sup>1</sup>, Valeri Vlassov Vladimirovich<sup>1</sup>, Herly Brazilin<sup>1</sup>, Gabriela Santos Nascimento<sup>2,1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Universidade do Vale do Paraíba
- 11:00 Scanning Kelvin probe force microscopy and polarization curves techniques for WE43 Mg alloy corrosion characterization** P.P1.43  
Gualter Silva Pereira<sup>1</sup>, Joseane Moreira Giarola<sup>2</sup>, Guilherme Santos Vacchi<sup>3</sup>, Carlos Alberto Della Rovere<sup>4</sup>, Marcos Hideki Miyazaki<sup>5</sup>, Fernando Ferreira Fernandez<sup>5</sup>, Waldek Wladimir Bose Filho<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Universidade Federal de São Carlos, <sup>4</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>5</sup>Empresa Brasileira de Aeronáutica SA.
- 11:00 Morphological and structural properties of GaN films grown by reactive magnetron sputtering using different substrates, RF power and working pressure** P.P1.44  
Hebert Amorim Folli<sup>1</sup>, Regiane Santana Oliveira<sup>1</sup>, Cristiane Stegemann<sup>1</sup>, M. Massi<sup>2</sup>, Argemiro Soares da Silva Sobrinho<sup>1</sup>, Douglas Marcel Gonçalves Leite<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Universidade Presbiteriana Mackenzie
- 11:00 Microencapsulation of rocket solid propellant oxidizer** P.P1.46  
Jessica de Oliveira Silva<sup>1</sup>, Josiane Ribeiro Silva Silva<sup>1</sup>, Kamila Pereira Cardoso<sup>1</sup>, Márcio Yuji Nagamachi<sup>2</sup>, Luiz Fernando de Araujo Ferrão<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Aeronáutica e Espaço

- 11:00 Improved mechanical properties of paraffin fuel grains for hybrid rocket motor** **P.P1.47**  
Jessica Santos Gomes<sup>1</sup>, Kamila Pereira Cardoso<sup>1</sup>, Luiz Fernando de Araujo Ferrão<sup>1</sup>, Márcio Yuji Nagamachi<sup>2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Aeronáutica e Espaço
- 11:00 Properties evaluation of a NiTi shape memory alloy** **P.P1.48**  
João Gabriel Benedito Duarte<sup>1</sup>, Mayara Auxiliadora Castilho Benites<sup>1</sup>, Victor Leone Rabito Chaves<sup>1</sup>, Vanessa Motta Chad<sup>1</sup>, Edson Godoy<sup>1</sup>, Marcia Moreira Medeiros<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso
- 11:00 Processing of multiwalled carbon nanotube buckypapers and its application to PEI/carbon fiber composites** **P.P1.49**  
João Paula Santos Pires<sup>1</sup>, Luis Felipe de Paula Santos<sup>2</sup>, Bruno Ribeiro<sup>3</sup>, Edson Cocchieri Botelho<sup>2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Universidade Estadual de São Paulo, <sup>3</sup>Universidade Federal de São Paulo
- 11:00 Characterization by X-Ray Diffraction of PbNb<sub>2</sub>O<sub>6</sub> and Solid Solutions (1-x) PbNb<sub>2</sub>O<sub>6</sub> – (x)CaTiO<sub>3</sub>** **P.P1.50**  
João Pedro Lemos Morais<sup>1</sup>, Beatriz da Silva Batista<sup>2</sup>, Rafael Mendonça Almeida<sup>1</sup>, Adenilson Oliveira dos Santos<sup>2</sup>, Fernando Mendes<sup>3,4,5</sup>, Ana Angélica Mathias Macêdo<sup>1</sup>; <sup>1</sup>Federal Institute of Maranhão, <sup>2</sup>Federal University of Maranhão, <sup>3</sup>Polytechnic Institute of Coimbra, <sup>4</sup>University of Coimbra, <sup>5</sup>Institute for Clinical and Biomedical Research
- 11:00 Electromagnetic microwave absorption performance of Graphite/MnZnFerrite hybrid composites on frequency of X-band (8.2-12.4 GHz)** **P.P1.51**  
Barbara Pinheiro<sup>1,2</sup>, Gabriela Taiane Moraes Silva<sup>3</sup>, Braulio Haruo Kondo Lopes<sup>2</sup>, Miguel Angelo do Amaral Junior<sup>2</sup>, Sandro Fonseca Quirino<sup>2</sup>, Jorge Tadao Matsushima<sup>4</sup>, Mauricio Ribeiro Baldan<sup>2</sup>; <sup>1</sup>Universidade do Vale do Paraíba, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>4</sup>Faculdade de Tecnologia de São José dos Campos
- 11:00 Crystallization in emulsion: a route to efficiently reach kinetic equilibrium and morphology control** **P.P1.52**  
Josiane Ribeiro Silva Silva<sup>1</sup>, Jessica de Oliveira Silva<sup>1</sup>, Kamila Pereira Cardoso<sup>1</sup>, Márcio Yuji Nagamachi<sup>2</sup>, Luiz Fernando de Araujo Ferrão<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Aeronáutica e Espaço
- 11:00 Study of the application of Topological Structural Optimization in the design of an AeroDesign prototype** **P.P1.53**  
Kalyude Diógenes de Sousa<sup>1</sup>, Mayla Alencar Medeiros<sup>1</sup>, Ramsés Otto Cunha Lima<sup>1</sup>, Alison Caio Dantas Pereira<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido
- 11:00 Assessment of the liner plasticizer concentration effect at the interface between the grain propellant and liner in solid rocket motors** **P.P1.54**  
Lia Junqueira Pimont<sup>1</sup>, Paula Cristina Gomes Fernandes<sup>2</sup>, Denise Villela Barcza Stockler Pinto<sup>1</sup>, Kamila Pereira Cardoso<sup>2</sup>, Elizabeth Yoshie Kawachi<sup>2</sup>, Luiz Fernando de Araujo Ferrão<sup>2</sup>, Márcio Yuji Nagamachi<sup>1</sup>; <sup>1</sup>Instituto de Aeronáutica e Espaço, <sup>2</sup>Instituto Tecnológico de Aeronáutica
- 11:00 Effect of Mo substitution by Nb on the high temperature oxidation behavior of Beta 21S titanium alloy** **P.P1.55**  
Lucas Moreira Ferreira<sup>1</sup>, Saimon Domenegheti<sup>1</sup>, Nabil Chaia<sup>1</sup>, Gilberto Carvalho Coelho<sup>1</sup>, Carlos Angelo Nunes<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena - Universidade de São Paulo

- 11:00 Semisolid condition with the variation of the percentage of strontium in A332 alloy** P.P1.56  
Luciano Augusto Lourençato<sup>1</sup>, Oscar Regis Junior<sup>1</sup>, Sandra Mara Kaminski Tramontin<sup>1</sup>, João Paulo Gabre<sup>1</sup>, Michael Douglas Fernandes Pela<sup>1</sup>, Douglas Rafael Costa Barduco<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 11:00 Substitution of Ta by Nb and its effect on the oxidation behavior of MAR-246 superalloy.** P.P1.57  
Luciano Braga Alkmin<sup>1,2</sup>, Nabil Chaia<sup>3</sup>, Gilberto Carvalho Coelho<sup>2,3</sup>, Carlos Angelo Nunes<sup>3</sup>, Jonathan Cormier<sup>4</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, <sup>2</sup>Escola de Engenharia de Lorena - USP, <sup>3</sup>Escola de Engenharia de Lorena - Universidade de São Paulo, <sup>4</sup>École Nationale Supérieure de Mécanique et d'Aerotechnique
- 11:00 Development of catalytic materials based on spinels for the decomposition of hydrogen peroxide in propulsive systems** P.P1.58  
Luís Gustavo Ferroni Pereira<sup>1</sup>, Leonardo Henrique Gouvêa<sup>1</sup>, Leandro José Maschio<sup>2</sup>, Ricardo Vieira<sup>2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais
- 11:00 Characterization by X-ray diffraction of titanium niobate and nickel oxide doped nickel oxide ii (NiO) iron for application in electronics** P.P1.59  
Luis Madeira<sup>1</sup>, Adenilson Oliveira dos Santos<sup>2</sup>, Fernando Mendes<sup>3,4,5</sup>, Rafael Mendonça Almeida<sup>1</sup>, Ana Angélica Mathias Macêdo<sup>1</sup>; <sup>1</sup>Federal Institute of Maranhão, <sup>2</sup>Federal University of Maranhão, <sup>3</sup>Polytechnic Institute of Coimbra, Coimbra Health School., <sup>4</sup>University of Coimbra, <sup>5</sup>Institute for Clinical and Biomedical Research
- 11:00 Analysis of delamination growth rate in mode I of carbon fiber composites manufactured with different techniques** P.P1.60  
Marcos Yutaka Shiino<sup>1</sup>, Maria Odila Hilário Cioffi<sup>2</sup>, Mauricio Vicente Donadon<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista - Instituto de Ciência e Tecnologia - Campus de São José dos Campos, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá, <sup>3</sup>Instituto Tecnológico de Aeronáutica
- 11:00 Study of hydrogen embrittlement of 18% Ni ferrous alloy and austenite characterization techniques** P.P1.61  
Gabriel Fracalossi Feijó<sup>1</sup>, Andréia Souza M. Cardoso<sup>2</sup>, Maria Margareth da Silva<sup>3</sup>, Susana Zepka<sup>3</sup>, Danieli Aparecida Pereira Reis<sup>2</sup>; <sup>1</sup>Universidade Federal Fluminense, <sup>2</sup>Universidade Federal de São Paulo, <sup>3</sup>Instituto Tecnológico de Aeronáutica
- 11:00 Microstructural Characterization of the ferrous alloy 18Ni class 300 after Heat Treatments** P.P1.62  
Moises Martins de Oliveira<sup>1</sup>, Maria Margareth da Silva<sup>1</sup>, Andréia Souza M. Cardoso<sup>1</sup>, Wellington Alves dos Santos<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica
- 11:00 Characterization of a Cu-Al-Ni-Mn shape memory alloy with ultra-large grains obtained by hot rolling and cyclic heat treatment** P.P1.63  
Matheus Damasceno Salgueiro Andrade<sup>1</sup>, Gustavo Henrique Sousa<sup>1</sup>, Eric Marchezini Mazzer<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 11:00 Electromagnetic characterization of multilayer absorbers applied in the frequency band of 12.4-18 Ghz** P.P1.64  
Ariane Aparecida Teixeira Souza<sup>1</sup>, Ana Paula Silva Oliveira<sup>1</sup>, Miguel Angelo do Amaral Junior<sup>1</sup>, Guilherme Frederico Bernardo Lenz e Silva<sup>2</sup>, Alan Fernando Ney Boss<sup>2</sup>, Maurício Ribeiro Baldan<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Escola Politécnica de Universidade de São Paulo

- 11:00 Simulation in centrifuge of suborbital rocket flight VSB-30 for radar absorbing material** **P.P1.65**  
Maurício Ribeiro Baldan<sup>1</sup>, Ana Paula Silva Oliveira<sup>1</sup>, Rafael Cardoso Toledo<sup>1</sup>, Plinio Ivo Gama Tenorio<sup>1</sup>, Miguel Angelo do Amaral Junior<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 11:00 Effect of Ce on the corrosion resistance of anodized AA2024-T3 FSWed** **P.P1.66**  
 Deize Basilio dos Santos Aguiar<sup>1</sup>, Fernanda Martins Queiroz<sup>2</sup>, Nathália C Verissimo<sup>3</sup>, Victor Hugo Ayusso<sup>4</sup>, Victor Ferrinho Pereira<sup>3</sup>, Eduardo Bertoni da Fonseca<sup>5</sup>, Hercílio Gomes de Melo<sup>2</sup>, Isolda Costa<sup>4</sup>, Maysa Terada<sup>4</sup>, Aline Fátima Santos Bugarin<sup>4</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Escola Politécnica de Universidade de São Paulo, <sup>3</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>4</sup>Instituto de Pesquisas Energeticas e Nucleares, <sup>5</sup>Faculdade de Engenharia Mecânica, Unicamp
- 11:00 Experimental investigation on surface integrity in face milling of Inconel 625** **P.P1.67**  
Monica Costa Rodrigues Guimarães<sup>1</sup>, Anselmo Eduardo Diniz<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Mecânica, Unicamp
- 11:00 Analysis of electrically conductive materials for the application of thermal anemometry** **P.P1.68**  
Murilo Franco Coradini<sup>1</sup>, Robson Leal Silva<sup>1,2</sup>, Júlio César Dainezi Oliveira<sup>1</sup>, Dario Machado Júnior<sup>1</sup>, Matheus Vinicius Oliveira Herrero<sup>1</sup>, Nayssa Martins Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Fundação Universidade Federal da Grande Dourados
- 11:00 Evaluation of the influence of polymer supports on the formation of dendritic structures of polydapson** **P.P1.69**  
Naiana Serafim da Silva Goulart<sup>1</sup>, Elizabete Yoshie Kawachi<sup>2</sup>, Luiz Fernando de Araujo Ferrão<sup>2</sup>, Kamila Pereira Cardoso<sup>1</sup>; <sup>1</sup>Instituto de Aeronáutica e Espaço, <sup>2</sup>Instituto Tecnológico de Aeronáutica
- 11:00 The influence of chemical treatments of degasification, refining and modification in the mechanical properties of an aluminum alloy AlSiMg** **P.P1.70**  
Nair Cristina Margarido Brondino<sup>1</sup>, Odney Carlos Brondino<sup>2</sup>, Claudemiro Bolfarini<sup>3</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Tecnológica Federal do Paraná, <sup>3</sup>Universidade Federal de São Carlos
- 11:00 Effect of titanium on the martensitic transformation temperature of Cu-14Al-4Ni Shape Memory Alloy rapidly solidified** **P.P1.71**  
Nicole Oliveira de Araujo<sup>1</sup>, Camila Aguiar Teixeira<sup>2</sup>, Marília da Silva Bortolotto<sup>1</sup>, Marcelo Nava<sup>1</sup>, Emmanuel Pacheco Rocha Lima<sup>3</sup>, Pedro Cunha de Lima<sup>4</sup>; <sup>1</sup>Instituto Federal da Bahia, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Universidade de Brasília, <sup>4</sup>Instituto Federal de Educação, Ciência e Tecnologia da Bahia
- 11:00 The influence of the cooling rate on the formation of fragilizing phases in aluminum alloys AlSiCu (A380.0)** **P.P1.72**  
Odney Carlos Brondino<sup>1</sup>, Nair Cristina Margarido Brondino<sup>2</sup>, Claudemiro Bolfarini<sup>3</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>São Paulo State University, <sup>3</sup>Universidade Federal de São Carlos
- 11:00 Development of diffusion bonded joints of A2219 Aluminum Alloy to AISI 316LN Stainless Steel for ultra-high vacuum applications in Sirius undulators** **P.P1.73**  
 Ricardo Luiz Parise<sup>1</sup>, Osmar Roberto Bagnato<sup>2,1</sup>; <sup>1</sup>Laboratorio Nacional de Luz Sincrotron, <sup>2</sup>Universidade São Francisco

- 11:00 Influence of the primary/secondary/tertiary dendritic branches on the tensile properties of the directionally solidified AL7Si3Cu alloy** P.P1.74  
Otávio Fernandes Lima Rocha<sup>1</sup>, Marlo Costa Oliveira<sup>2</sup>, Fabricio Vinicius Andrade de Souza<sup>2</sup>, Igor Alessander Barbosa Magno<sup>2</sup>, Jacson Malcher Nascimento<sup>2</sup>, Maria Adrina Paixão de Souza da Silva<sup>2</sup>; <sup>1</sup>Federal Institute of Education, Science and Technology of Pará, <sup>2</sup>Federal University of Pará
- 11:00 Evaluation of the catalytic activity of iron oxide in binder for aerospace propulsion** P.P1.75  
Paula Cristina Gomes Fernandes<sup>1</sup>, Lia Junqueira Pimont<sup>2</sup>, Kamila Pereira Cardoso<sup>1</sup>, Márcio Yuji Nagamachi<sup>2</sup>, Luiz Fernando de Araujo Ferrão<sup>1</sup>, Elizabete Yoshie Kawachi<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Aeronáutica e Espaço
- 11:00 Impact of Ce-base Mischmetal on the Microstructure and Mechanical Behaviour of ZK60 Magnesium Casting Alloys** P.P1.76  
Erenilton Pereira Silva<sup>1</sup>, Felipe Marques<sup>2</sup>, Tamires de Souza Nossa<sup>3</sup>, PEDRO RENATO TAVARES AVILA<sup>4</sup>, Haroldo Cavalcanti Pinto<sup>4</sup>; <sup>1</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri, <sup>2</sup>Departamento de Engenharia de Materiais - UFSCar (São Carlos), <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>4</sup>Escola de Engenharia de São Carlos
- 11:00 Microwave absorption and electronic conduction properties of Ti nanometric films** P.P1.77  
Rafael Gallina Delatorre<sup>1</sup>, Guilherme Eugênio Brustolin<sup>1</sup>, Viviane Lilian Soehte<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Porosity analyzes and microstructural characterization of AL AA7050 alloys recycled by casting in sand and reprocessed by extrusion** P.P1.78  
Danilo Ruy<sup>1</sup>, Renê Bronze Santos<sup>1</sup>, Odney Carlos Brondino<sup>1</sup>, Nair Cristina Margarido Brondino<sup>2</sup>, Claudemiro Bolfarini<sup>3</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universidade Federal de São Carlos
- 11:00 Mechanical analyzes and microstructural characterization of aluminum alloys AlMgZnSiCu produced by Spray Forming** P.P1.79  
Fabrício Fernandes Carvalho<sup>1</sup>, Odney Carlos Brondino<sup>1</sup>, Matheus Henrique Andrade Barbosa<sup>1</sup>, Nair Cristina Margarido Brondino<sup>2</sup>, Claudemiro Bolfarini<sup>3</sup>, Renê Bronze Santos<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universidade Federal de São Carlos
- 11:00 Production of Surface Aluminium Matrix Composites by Friction Stir Processing** P.P1.80  
Leonardo Giovanetti<sup>1</sup>, Ricardo Floriano<sup>1</sup>; <sup>1</sup>Faculdade de Ciências Aplicadas, Unicamp
- 11:00 The use of structural composites in the aerospace industry: Technological propection** P.P1.81  
Sabrina Anicácia de Brito Correia<sup>1</sup>, Vitoria Regina Sousa Bispo<sup>1</sup>, Lucas Oliveira da Silva<sup>1</sup>, Daniella Stepheny Carvalho Andrade<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 11:00 Mechanical properties and heat treatments of ferrous alloy 18% Ni studies** P.P1.82  
Moises Martins de Oliveira<sup>1</sup>, Maíze Aparecida dos Santos Kodama<sup>2</sup>, Andréia Souza M. Cardoso<sup>2</sup>, Maria Margareth da Silva<sup>1</sup>, Susana Zepka<sup>1</sup>, Danieli Aparecida Pereira Reis<sup>2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Universidade Federal de São Paulo

- 11:00 Absorption measurements of microwave carbonyl iron / epoxy resin composite and microwave optimization processing algorithm** **P.P1.83**  
 Nicholas Eras Fonseca<sup>1</sup>, Caroline Paganucci Malère<sup>1</sup>, Larissa Cristina C. Garcia<sup>1</sup>, Bruno Ferraz Donati<sup>1</sup>, Gustavo Freitas de Souza<sup>1</sup>, Newton Adriano dos Santos Gomes<sup>2</sup>, Valdirene Aparecida da Silva<sup>1</sup>; <sup>1</sup>Universidade do Vale do Paraíba, <sup>2</sup>Instituto Tecnológico de Aeronáutica
- 11:00 The effect of functionalized CNT behavior on the absorption of microwaves in nanocomposite NTC / epoxy resin** **P.P1.84**  
 Bruno Ferraz Donati<sup>1</sup>, Caroline Paganucci Malère<sup>1</sup>, Larissa Cristina C. Garcia<sup>1</sup>, Nicholas Eras Fonseca<sup>1</sup>, Gustavo Freitas de Souza<sup>1</sup>, Newton Gomes<sup>2</sup>, Valdirene Aparecida da Silva<sup>1</sup>; <sup>1</sup>Universidade do Vale do Paraíba, <sup>2</sup>Instituto Tecnológico de Aeronáutica
- 11:00 Application of thermoplastic matrices used in aeronautical composites: a technological propection** **P.P1.85**  
 Daniella Stepheny Carvalho Andrade<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 11:00 Flaperon design for UAV using nickel titanium shape memory alloy** **P.P1.86**  
Victor Leone Rabito Chaves<sup>1</sup>, João Gabriel Benedito Duarte<sup>1</sup>, Edson Godoy<sup>1</sup>, Vanessa Motta Vanessa<sup>1</sup>, Marcia Moreira Medeiros<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso
- 11:00 Microstructural characterization of a gamma-titanium aluminide obtained by powder metallurgy** **P.P1.87**  
Vinicius Rodrigues Henriques<sup>1</sup>, Eduardo tavares Galvani<sup>2</sup>; <sup>1</sup>Instituto de Aeronáutica e Espaço, <sup>2</sup>Hoganas
- 11:00 Development of Copper Alloys for Aerospace Applications** **P.P1.88**  
Vinicius Rodrigues Henriques<sup>1</sup>; <sup>1</sup>Instituto de Aeronáutica e Espaço



# **SYMPOSIUM Q - Advances in steel metallurgy and applications**

## **Symposium organizers:**

Hamilton Ferreira Gomes de Abreu (Universidade Federal do Ceará)  
Helio Goldenstein (Escola Politécnica, Universidade de São Paulo)  
Márcio Gustavo Di Vernieri Cuppari (CECS, Universidade Federal do ABC)  
Roberto Gomes de Aguiar Veiga (CECS, Universidade Federal do ABC)  
Sydney Ferreira Santos (CECS, Universidade Federal do ABC)



# WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

## *SESSION Q.01.D3 (09:30 - 10:30) - Room Egeu*

- 09:30 The complexity and beauty of steel microstructures during Quenching & Partitioning processing** Q.O1.D3.1\*  
Jilt Sietsma<sup>1</sup>, Maria Jesus Santofimia<sup>1</sup>; <sup>1</sup>Delft University of Technology TU Delft
- 10:00 New Bainitic Steels for Plastics Processing with Ni Addition and Improved Hardenability** Q.O1.D3.2  
Conrado Ramos Moreira Afonso<sup>1</sup>, Jose Britti Bacalhau<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 10:15 Simulation of nucleation and growth of the sigma phase in duplex stainless steel via 3D numerical modeling** Q.O1.D3.3  
Ana Gabriella Conceição dos Santos<sup>1</sup>, Fernanda Nascimento Moreira<sup>1</sup>, Wesley Luiz da Silva Assis<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense

## *SESSION Q.02.D3 (11:00 - 12:00) - Room Egeu*

- 11:00 Steel based hybrid materials produced by severe plastic deformation routes.** Q.O2.D3.1\*  
Anibal Mendes<sup>1</sup>, Rimma Lapovok<sup>2</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Deakin University
- 11:30 Experimental analysis and numerical simulation of the hot stamping process for the 22MnB5 steel** Q.O2.D3.2  
Edwan Anderson Ariza<sup>1</sup>, ANDRÉ PAULO TSCHIPTSCHIN<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 11:45 The evolution of microstructure, mechanical properties and crystallographic texture in the manufacture of CA-60 bars.** Q.O2.D3.3  
Pedro Guilherme do Nascimento Pereira<sup>1</sup>, Luis Flávio Gaspar Herculano<sup>1</sup>, Iuri Araújo Abreu<sup>1</sup>, Hamilton Ferreira Gomes de Abreu<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará

## *SESSION Q.03.D3 (14:00 - 16:15) - Room Egeu*

- 14:00 A Quantitative Study of the Correlation Between Microstructure and Plastic Flow Behavior of Duplex Stainless Steels Strained by Torsion** Q.O3.D3.1\*  
Oscar Balancin<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 14:30 Sintering behavior of NbC based cemented carbides bonded with steel** Q.O3.D3.2  
Ana Júlia de Oliveira Tertuliano<sup>1</sup>, Newton Kiyoshi Fukumasu<sup>2</sup>, Vanessa Seriacopi<sup>3</sup>, Erika Fernanda Prados<sup>4</sup>, Izabel Fernanda Machado<sup>1</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>4</sup>Universidade Federal do ABC
- 14:45 Development of low temperature sintered self-lubricating composite** Q.O3.D3.3  
Letícia Maria Anselmo<sup>1</sup>, Gisele Hammes<sup>1</sup>, Cristiano Binder<sup>1</sup>, Guilherme Mônico<sup>1</sup>, Aloisio Nelmo Klein<sup>1</sup>, José Daniel Biasoli de Mello<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal de Uberlândia

- 15:00 Correlationship of mechanical properties and porous structure parameters of sintered iron samples, compacted with different pressures, by 3D image analysis** Q.O3.D3.4  
Maurício Vitor Kozerski Giaretton<sup>1</sup>, Anderson Moreira<sup>1</sup>, Priscila da Costa Gonçalves<sup>1</sup>, Marcia Barbosa Henriques Mantelli<sup>1</sup>, Celso Peres Fernandes<sup>1</sup>, Aloisio Nelmo Klein<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 15:15 Effect of thermal aging at high temperature on the corrosion resistance of lean duplex stainless steel 2404** Q.O3.D3.5  
Cristie Luis Kugelmeier<sup>1</sup>, Rodrigo Silva<sup>1</sup>, Guilherme Santos Vacchi<sup>1</sup>, Ícaro Gabriel Rodrigues Santos<sup>1</sup>, Vitor Luiz Sordi<sup>1</sup>, Carlos Alberto Della Rovere<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 15:30 Tempering effect on corrosion behavior of an UNS S41426 supermartensitic stainless steels** Q.O3.D3.6  
Ícaro Gabriel Rodrigues Santos<sup>1</sup>, Rodrigo Silva<sup>1</sup>, Cristie Luis Kugelmeier<sup>1</sup>, Guilherme Santos Vacchi<sup>1</sup>, Carlos Alberto Della Rovere<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 15:45 Characterization of Corrosion Within Friction Stir Weld Zones of an API X-70 Steel Using a Novel Capillary-Based Microcell Set Up** Q.O3.D3.7  
Juliane Ribeiro da Cruz<sup>1</sup>, Rodnei Bertazzoli<sup>2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPENM)

## THURSDAY, SEPTEMBER 26

\* Invited Lecture

### *SESSION Q.O1.D4 (09:30 - 11:00) - Room Egeu*

- 09:30 The relationships of microstructure-mechanical properties in hot stamping quenching and partitioning (HSQ&P) steel in TRIP-assisted steel** Q.O1.D4.1\*  
 Edwan Anderson Ariza<sup>1</sup>, Mohammad Masoumi<sup>2</sup>, Dairo Hernan Mesa<sup>3</sup>, ANDRÉ PAULO TSCHIPTSCHIN<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade Federal do ABC, <sup>3</sup>Universidad Tecnológica de Pereira
- 10:00 Theoretical Study of the Massive Transformation in the Fe-Mn System** Q.O1.D4.2  
Marcio Gustavo Di Vernieri Cuppari<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 10:15 Novel solutions on electron microscopy for nano-materials characterization** Q.O1.D4.3  
Rafael Villaurrutia<sup>1</sup>; <sup>1</sup>ThermoFisher Scientific
- 10:30 Microstructure and hardness of low-density steels Fe-30Mn-(8-14)Al-0.25C prepared by arc melting** Q.O1.D4.4  
Juliano Soyama<sup>1</sup>, Sydney Ferreira Santos<sup>2</sup>, Carlos Triveño Rios<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal do ABC
- 10:45 Kinetic study of austenite reversal of ASTM 201LN steel after rolling and annealing** Q.O1.D4.5  
LEANDRA CARLA APARECIDA CORDEIRO<sup>1</sup>, YURI MIKAEL DOS SANTOS ALVES<sup>1</sup>, Náhrima Chambela Moraes<sup>1</sup>, Camila Oliveira de Souza<sup>1</sup>, CAROLLINE SERAFIM SILVA<sup>2</sup>, ANDERSAN DOS SANTOS PAULA<sup>1</sup>; <sup>1</sup>Instituto Militar de Engenharia, <sup>2</sup>Galvasud

# TUESDAY , SEPTEMBER 24

## Poster presentations

### SESSION Q.P3 (11:00 - 12:30)

- 11:00 Influence of austenite prior grain refining on mechanical properties in a maraging steel 300 18% Ni by different heat treatment cycles** Q.P3.1  
Rodrigo de Carvalho Paes Loureiro<sup>1</sup>, Breno Rabelo Coutinho Saraiva<sup>1</sup>, Hamilton Ferreira Gomes de Abreu<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará
- 11:00 Oxidation behavior of austenitic Fe-Mn-Si-Cr-Ni shape memory alloys at high temperature** Q.P3.2  
Rodrigo Silva<sup>1</sup>, Guilherme Santos Vacchi<sup>2</sup>, Artur Mariano de Sousa Malafaia<sup>3</sup>, Anibal Mendes<sup>4</sup>, Ícaro Gabriel Rodrigues Santos<sup>2</sup>, Carlos Alberto Della Rovere<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universidade Federal de São João Del Rei, <sup>4</sup>Universidade Federal do ABC
- 11:00 Characterization of eutectoid and *HYPEREUTECTOID* rails welded using flash butt welding process** Q.P3.3  
Luiz Felipe Bauri<sup>1,2</sup>, Dany Michell Andrade Centeno<sup>2</sup>, Luiz Henrique Dias Alves<sup>3</sup>, Hélio Goldenstein<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Escola Politécnica de Universidade de São Paulo, <sup>3</sup>Universidade Federal de Juiz de Fora
- 11:00 Study of stainless steel AISI 304 pitting corrosion in solutions containing chloride** Q.P3.4  
Aila Cossovan Alves<sup>1</sup>, Renato Altobelli Antunes<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Microstructure and mechanical properties of AlFeCrCoNiX High Entropy Alloys** Q.P3.5  
Ana Maria Zemanate<sup>1</sup>, Kátia Regina Cardoso<sup>1</sup>, Gisele Ferreira Lima<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 11:00 Atomization of Fe-Al-Cr-Ni-Co High Entropy Alloy and Consolidation by Powder Metallurgy.** Q.P3.6  
Anderson Rech<sup>1</sup>, Régis Daniel Cava<sup>1</sup>, Cesar Edil Costa<sup>2</sup>, Guilherme Zepon<sup>3</sup>, Claudemiro Bolfarini<sup>3</sup>, Vinicius Moretti<sup>1</sup>; <sup>1</sup>Universidade da Região de Joinville, <sup>2</sup>Fundação Universidade do Estado de Santa Catarina, <sup>3</sup>Universidade Federal de São Carlos
- 11:00 Fatigue behavior of low density Fe-Mn-Al-C austenitic steel** Q.P3.7  
André Luiz Vidilli<sup>1</sup>, Claudemiro Bolfarini<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 11:00 TiO<sub>2</sub> coatings as ambiental friendly solution for marine biofouling on stainless steel surfaces** Q.P3.8  
Bruna Nunes<sup>1</sup>, Rafael Gallina Delatorre<sup>1</sup>, Igor Kasper Dedeco<sup>1</sup>, Moisés Luiz Parucker<sup>2</sup>, André Concer<sup>1</sup>, Viviane Lilian Soehte<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal de Itajubá
- 11:00 Characterization of the corrosion behavior of FeCoCrNiAl high entropy alloy** Q.P3.9  
Camila Boldrini Nascimento<sup>1</sup>, Renato Altobelli Antunes<sup>1</sup>, Carlos Triveño Rios<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

- 11:00 Failure Analysis of turbo gearboxes TA 67N** **Q.P3.10**  
 Carla Isabel dos Santos Maciel<sup>1</sup>, Waldek Wladimir Bose Filho<sup>1</sup>, Cassius Olivo Figueiredo Terra Ruchert<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Escola de Engenharia de Lorena - Universidade de São Paulo
- 11:00 Microstructure and mechanical properties of resistance spot welded DP-780 steel sheets** **Q.P3.11**  
Cleber Caramatti Machado<sup>1</sup>, Carlos Triveño Rios<sup>1</sup>, Renato Altobelli Antunes<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Evaluation of the Influence of Normalization, Quenching and Tempering Heat Treatments on Mechanical Properties of ASTM A131 steel** **Q.P3.12**  
Dalmir dos Santos Matos<sup>1</sup>, Rute Nara de Jesus Farias da Silva<sup>1</sup>, Emerson Rodrigues dos Prazeres<sup>1</sup>, Francisco Ferreira Barbosa Junior<sup>1</sup>, Ednelson da Silva Costa<sup>1</sup>, EDUARDO MAGALHÃES BRAGA<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará
- 11:00 Microstructural evolution of AISI 304 austenitic stainless steel during straining at room and cryogenic temperatures: in-situ X-ray diffraction of synchrotron light** **Q.P3.13**  
 Denilson José Marcolino de Aguiar<sup>1</sup>, Maicon Rogério Crivoi<sup>2</sup>, Leonardo Wu<sup>3</sup>, Oswaldo Mitsuyuki Cintho<sup>2</sup>, Alexandre Magnus Gomes Carvalho<sup>4</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Campus Ponta Grossa, <sup>2</sup>Universidade Estadual de Ponta Grossa, <sup>3</sup>Brazilian Synchrotron Light Laboratory, <sup>4</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 11:00 Characterization of the heat-affected zone (HAZ) of the UNS S31308 steel welded by the Submerged Arc process using as addition metal 309L Stainless Steel** **Q.P3.14**  
Douglas Morais Morais<sup>1</sup>, Peterson Gomes Carneiro<sup>1</sup>, Raul Pavanelli Colicchiu<sup>1</sup>, Fabio Conte Correia<sup>1</sup>, Paulo Henrique Ogata<sup>1</sup>, Rafael Rocha Maia<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Itaquera
- 11:00 Stabilization of retained austenite in the AISI D2 tool steel** **Q.P3.15**  
Edward Giovanni Rodriguez<sup>1</sup>, Freddy A Grijalba<sup>1</sup>, Hélio Goldenstein<sup>2</sup>, Paula Fernanda da Silva Farina<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade de São Paulo
- 11:00 In-situ Formation of Hexagonal-BN in Ferritic Stainless Steel** **Q.P3.16**  
Ellen Rodrigues dos Santos<sup>1</sup>, Claudemiro Bolfarini<sup>1</sup>, Claudio S. Kiminami<sup>1</sup>, Guilherme Zepon<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos
- 11:00 Study of the influence of gap between welded steel plates by robotized process on the mechanical strength of the weld region.** **Q.P3.17**  
 Rodrigo Otávio Venturini Salamão<sup>1</sup>, Erika Peterson Gonçalves<sup>1</sup>; <sup>1</sup>Universidade do Vale do Paraíba
- 11:00 Identification and quantification of phases in duplex stainless steels UNS S31308 post-thermal treatment** **Q.P3.18**  
Fabio Conte Correia<sup>1</sup>, Guilherme do Nascimento Schiavi<sup>1</sup>, Paulo Henrique Ogata<sup>1</sup>, Rafael Rocha Maia<sup>1</sup>, Douglas Morais Morais<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Itaquera
- 11:00 FeCoNiGaNb High Entropy Alloy: Microstructure and Magnetic Properties** **Q.P3.19**  
Fábio Martins Cardoso<sup>1</sup>, Pâmela Cristine Pereira<sup>1</sup>, Cristina Bormio Nunes<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena - USP
- 11:00 Intermetallic growth and thermal stability of IF steel-Al composites produced by asymmetric accumulative roll bonding.** **Q.P3.20**  
 Gabriele Ribeiro Gomes<sup>1</sup>, Rimma Lapovok<sup>2</sup>, Anibal Mendes<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Deakin University

- 11:00 An interatomic potential for cementite** **Q.P3.21**  
Gabriel Henrique Perez<sup>1</sup>, Roberto Gomes de Aguiar Veiga<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Microstructural study on SAE 1020 steel welded through barkhausen magnetic noise** **Q.P3.22**  
GUDSON NICOLAU DE MELO<sup>1</sup>, Felipe Bohn<sup>1</sup>, NÚBIA RIBEIRO MACHADO<sup>1</sup>, Nicolau Apoena Castro<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 11:00 Effect of friction stir welding (FSW) on the surface corrosion behavior of an UNS S32760 super duplex stainless steel joint.** **Q.P3.23**  
Guilherme Santos Vacchi<sup>1</sup>, Rodrigo da Silva<sup>1</sup>, Cristie luiz kugelmeir<sup>1</sup>, Ícaro Gabriel Rodrigues Santos<sup>1</sup>, Cristian Pohl Meinhardt<sup>2</sup>, Carlos Alberto Della Rovere<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Centro Universitário Univates
- 11:00 Austempering of a vermicular steel** **Q.P3.24**  
Gustavo Satoru Takeya<sup>1</sup>, Ana Beatriz Gombio Rocha<sup>1</sup>, Fabio Edson Mariani<sup>1</sup>, Luiz Carlos Casteletti<sup>2,1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Universidade de São Paulo
- 11:00 Two-step austempering of a graphitic cast iron** **Q.P3.25**  
Gustavo Satoru Takeya<sup>1</sup>, Ana Beatriz Gombio Rocha<sup>1</sup>, Fabio Edson Mariani<sup>1</sup>, Luiz Carlos Casteletti<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP)
- 11:00 Analysis of crystallographic texture and grain size of warm and cold rolled IF steels Nb / Ti** **Q.P3.26**  
Felipe Azevedo de Carvalho<sup>1</sup>, Hector Reynaldo Meneses Costa<sup>1</sup>, Cristiane Maria Basto Bacaltchuk<sup>1</sup>, Gilberto Alexandre Castello Branco<sup>1</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca
- 11:00 Study of mechanical and microstructural properties of aisi 904l stainless steel coating deposited by gmaw-p welding in sae 1020 steel substrate** **Q.P3.27**  
Hector Reynaldo Meneses Costa<sup>1</sup>, André Luiz de Aguiar Marques<sup>1</sup>, Verona Biancardi Oliveira<sup>2</sup>, Ricardo Alexandre Amar de Aguiar<sup>1</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, <sup>2</sup>Universidade do Estado do Rio de Janeiro
- 11:00 The effect of rapid solidification processing on austenitic stainless steel AISI 316L** **Q.P3.28**  
Raira Chefer Apolinario<sup>1</sup>, Isabela Dainezi<sup>1</sup>, Cristiano Ramos Cunha<sup>1</sup>, Lucíola Lucena de Sousa<sup>1</sup>, Neide Aparecida Mariano<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 11:00 The effect of thermal aging treatment on the microstructure of SAF 2205 duplex stainless steel** **Q.P3.29**  
Isabela Dainezi<sup>1</sup>, Lucíola Lucena de Sousa<sup>1</sup>, Neide Aparecida Mariano<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 11:00 Influence of the Austenitization Temperature on Decarburization and Corrosion Behavior of the SAE 9254 Spring Steel** **Q.P3.30**  
Jéssica Cristina Costa de Castro Santana<sup>1</sup>, Renato Altobelli Antunes<sup>1</sup>, Sydney Ferreira Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Comparative analysis of the ASTM A36 carbon steel microstructure welded by SAW Tandem Arc and SAW Tandem Arc+ICE™ processes.** **Q.P3.31**  
Jorge Luiz Rosa<sup>1</sup>, Karen Rubiana Silva<sup>2</sup>, Ygor Nieto Oliveira<sup>2</sup>, Maria Cristina Borges<sup>2</sup>, Júlio Cesar Lourenço<sup>1</sup>, Emerson Augusto Raymundo<sup>2</sup>; <sup>1</sup>Escola de Engenharia de Lorena - USP, <sup>2</sup>Faculdade de Tecnologia de Pindamonhangaba

- 11:00 Corrosion behavior of friction stir welded API X70 steel joints** **Q.P3.32**  
Joseane Moreira Giarola<sup>1</sup>, Gualter Silva Pereira<sup>1</sup>, Cristie Luis Kugelmeier<sup>2</sup>, Maysa Terada<sup>3</sup>, José Benedito Marcomini<sup>1</sup>, Carlos Alberto Della Rovere<sup>2</sup>, Julian Arnaldo Avila<sup>4</sup>, Waldek Wladimir Bose Filho<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>3</sup>Instituto de Pesquisas Energeticas e Nucleares, <sup>4</sup>Universidade Estadual de São Paulo
- 11:00 Estimation of the mechanical behavior of IF-steel resistance spot welding joints by numerical analysis** **Q.P3.33**  
Joseph Richard Pinheiro de Carvalho<sup>1</sup>, Ricardo Alexandre Amar de Aguiar<sup>1</sup>, Hector Reynaldo Meneses Costa<sup>1</sup>, Pedro Manuel Calas Lopes Pacheco<sup>1</sup>, Juliana Primo Basílio de Souza<sup>2</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, <sup>2</sup>Universidade Federal de Minas Gerais
- 11:00 Effect of Mn depletion induced by vacuum annealing on oxidation resistance of stainless steels at high temperature** **Q.P3.34**  
Júlia Nascimento Pereira<sup>1</sup>, Yohan Valadares Moreira dos Santos<sup>1</sup>, Artur Mariano de Sousa Malafaia<sup>1</sup>, João Gabriel da Cruz Passos<sup>1</sup>; <sup>1</sup>Universidade Federal de São João Del Rei
- 11:00 Effect of vacuum annealing on the microstructure and oxidation behavior of FeMnSiCrNi alloys containing different amount of cerium** **Q.P3.35**  
 João Gabriel da Cruz Passos<sup>1</sup>, Raphael Francisco Coutinho dos Santos<sup>1</sup>, Rodrigo da Silva<sup>2</sup>, Carlos Alberto Della Rovere<sup>3</sup>, Artur Mariano de Sousa Malafaia<sup>1</sup>, Júlia Nascimento Pereira<sup>1</sup>; <sup>1</sup>Universidade Federal de São João Del Rei, <sup>2</sup>Departamento de Engenharia de Materiais - UFSCar (São Carlos), <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos
- 11:00 Thermal behavior of trip steel with aluminum additions** **Q.P3.36**  
larissa nunes nunes<sup>1</sup>, Mônica Aline Magalhães Gurgel<sup>1</sup>, Eustáquio De Souza Baêta Júnior<sup>1</sup>, Andersan Dos Santos Paula<sup>1</sup>, Luiz Paulo Mendonca Brandão<sup>1</sup>; <sup>1</sup>Instituto Militar de Engenharia
- 11:00 Microstructural and microhardness modifications in metal matrix by carbon nanotubes incorporation in arc welding** **Q.P3.37**  
Letícia Assunção da Costa<sup>1</sup>, diego jorge alves borges<sup>1</sup>, Danyella Crystyane Silva cardoso<sup>1</sup>, Victor Oliveira Ferreira<sup>1</sup>, Boaz de Souza Pereira<sup>1</sup>, Marcos Allan Leite dos Reis<sup>1</sup>, Cristhian Ricardo Loayza<sup>1</sup>, EDUARDO MAGALHÃES BRAGA<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará
- 11:00 Development of a self-lubricating composite based on pre alloyed commercial powder** **Q.P3.38**  
 Guilherme Mônico<sup>1</sup>, Letícia Maria Anselmo<sup>1</sup>, Mateus Henrique Cornelsen<sup>1</sup>, Matheus Hromatka<sup>1</sup>, Julia Galhardo Serafim<sup>1</sup>, Cristiano Binder<sup>1</sup>, Gisele Hammes<sup>1</sup>, Aloisio Nelmo Klein<sup>1</sup>, José Daniel Biasoli de Mello<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal de Uberlândia
- 11:00 Influence of Carburizing Treatment Time in the Surface Hardness of SAE 1020 Steel Samples** **Q.P3.39**  
Lucas de Almada Torres<sup>1</sup>, Francisco Edson Nogueira Fraga<sup>1</sup>, Manoel Quirino Silva Júnior<sup>1</sup>, Daniel Alves Bezerra<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido



- 11:00 Corrosion resistance of dissimilar welds between lean duplex stainless steel DSS 2304 and austenitic stainless steel ASS 316L** **Q.P3.40**  
Lucas Henrique Oliveira Souza<sup>1</sup>, Neice Ferreira dos Santos<sup>1</sup>, Aline Simone Ferreira de Oliveira<sup>2</sup>, Karina Rocha Fonseca Souza<sup>2</sup>, Mônica Maria de Abreu Mendonça Schvartzman<sup>2</sup>, Wagner Reis da Costa Campos<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Pontifícia Universidade Católica de Minas Gerais
- 11:00 Plasma nitriding aiming corrosion reduction in anodic stubs of electrolytic cells** **Q.P3.41**  
Lucca Monteiro Silva Semensato<sup>1</sup>, Neide Aparecida Mariano<sup>1</sup>, José de Jesus Barbosa<sup>2</sup>, Caroline Moraes Cruz<sup>1</sup>, Sylma Carvalho Maestrelli<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Faculdade Pitágoras de Poços de Caldas
- 11:00 Influence of grain size in hydrogen embrittlement of Co-containing 18Ni 300 maraging steel** **Q.P3.43**  
Marcelo José Gomes da Silva<sup>1</sup>, Dayane de Sousa Carvalho<sup>1</sup>, Letícia Rabelo Muniz<sup>1</sup>, Jorge Luiz Cardoso<sup>1</sup>, Juan Manuel Pardal<sup>2</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Universidade Federal Fluminense
- 11:00 Evaluation of influence adhesive wear agent on surface coatings** **Q.P3.44**  
Marina Kauling Almeida<sup>1</sup>, João Pedro Fagundes Cararo<sup>1</sup>, Angela Beatriz Coelho Arnt<sup>1</sup>, Adilson Oliveira<sup>1</sup>, Marcio Roberto da Rocha<sup>2</sup>; <sup>1</sup>Universidade do Extremo Sul Catarinense, <sup>2</sup>Universidade Federal de Santa Catarina
- 11:00 Studies of Wear Mechanisms on Brake Systems from Discs with Different Materials** **Q.P3.45**  
Marina Kauling Almeida<sup>1</sup>, Angela Beatriz Coelho Arnt<sup>1</sup>, Adilson Oliveira<sup>1</sup>; <sup>1</sup>Universidade do Extremo Sul Catarinense
- 11:00 Surface enrichment via iron plasma with molybdenum and nickel** **Q.P3.46**  
Matheus Kamers Andrade<sup>1</sup>, Cristiano Binder<sup>1</sup>, Tatiana Bendo<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Acoustic porous metals used in refrigeration system discharge** **Q.P3.47**  
Matheus Kamers Andrade<sup>1</sup>, Cristiano Binder<sup>1</sup>, Gisele Hammes<sup>1</sup>, Aloisio Nelmo Klein<sup>1</sup>, Leandro Rodrigues Barbosa<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Bead characterization on GMAW welding of a metal solid wire** **Q.P3.48**  
Matheus Nantes Costa<sup>1</sup>, Bruno Felipe da Silva<sup>1</sup>, Alysson Martins Almeida Silva<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 11:00 Eco-friendly PMMA-silica coatings for corrosion protection of reinforcing steel** **Q.P3.49**  
Mayara Carla Uvida<sup>1</sup>, Peter Hammer<sup>1</sup>, Celso Valentim Santilli<sup>1</sup>; <sup>1</sup>São Paulo State University (UNESP), Institute of Chemistry, Araraquara, SP, Brazil
- 11:00 AISI D2 tool steel thermal cycle possibilities – A Review** **Q.P3.50**  
Maycoln Depianti Conci<sup>1,2</sup>, Paula Fernanda da Silva Farina<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>2</sup>Faculdade de Engenharia Mecânica, Unicamp
- 11:00 Effect of bainite transformation on microstructure and wear resistance in pearlitic rail steel** **Q.P3.51**  
Gustavo Tressia<sup>1</sup>, Amilton Sinatora<sup>1</sup>, Hélio Goldenstein<sup>2</sup>, Mohammad Masoumi<sup>3</sup>; <sup>1</sup>Instituto Tecnológico Vale, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Universidade Federal do ABC
- 11:00 A study on the effect of cluster's RADII at the phase transformation's kinetics** **Q.P3.53**  
Nathan Fernandes Ignácio<sup>1</sup>, Carlos Henrique Gomes Sampaio<sup>1</sup>, Wesley Luiz da Silva Assis<sup>1</sup>, Paulo Rangel Rios<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense

- 11:00 A study on the effect of nuclei's density at the phase transformation's kinetics of a single cluster** Q.P3.54  
Nathan Fernandes Ignácio<sup>1</sup>, Felipe da Silva Siqueira<sup>1</sup>, Wesley Luiz da Silva Assis<sup>1</sup>, Paulo Rangel Rios<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 11:00 Microstructural and hardness analysis of SAE 1050 steel after quenching using different unconventional cooling fluids** Q.P3.55  
Otávio Contart Gamboni<sup>1</sup>, Bruno de Paulo Ferreira<sup>1</sup>, João Vitor Jardim<sup>1</sup>, Péricles Bosquetti<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Sertãozinho
- 11:00 Influence of the relief of voltages in the mechanical properties of steel G17CrMoV5-10 after solving with E9018-B3 electrode** Q.P3.56  
Péricles Bosquetti<sup>1</sup>, Sidnei Davi Souza<sup>1</sup>, Luis Fernando Castro<sup>1</sup>, Otávio Contart Gamboni<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Sertãozinho
- 11:00 Effect of heat input of sensitization in Stainless Steels welded by GTAW Process** Q.P3.57  
Peterson Timoteo Ribeiro<sup>1</sup>, Douglas Morais Morais<sup>1</sup>, Fabio Conte Correia<sup>1</sup>, Rafael Rocha Maia<sup>1</sup>, Paulo Henrique Ogata<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Itaquera
- 11:00 Microstructure and chemical characterization in weld bead of Dual Phase DP 600 Steel welded by Yb: fiber Laser beam for automotive industry application** Q.P3.58  
James de Lima Percy Júnior<sup>1</sup>, ANA MARIA DO ESPIRITO SANTO<sup>1</sup>, Milton Sergio Fernandes Lima<sup>2</sup>, Rafael Humberto Mota de Siqueira<sup>3</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto de Estudos Avançados, <sup>3</sup>Institute for Advanced Studies
- 11:00 Influence of the homogenization treatment on isothermal oxidation at 900 °C of the high entropy CoCrFeMnNi alloy** Q.P3.59  
Régis Valker Santos<sup>1</sup>, Artur Mariano de Sousa Malafaia<sup>1</sup>; <sup>1</sup>Universidade Federal de São João Del Rei
- 11:00 Comparison between cyclic and isothermal oxidation of the high entropy CoCrFeMnNi alloy at 900 °C** Q.P3.60  
Régis Valker Santos<sup>1</sup>, Artur Mariano de Sousa Malafaia<sup>1</sup>; <sup>1</sup>Universidade Federal de São João Del Rei
- 11:00 Boron modified superduplex stainless steels: a combination of wear and corrosion resistant to harsh applications** Q.P3.61  
Ricardo Mimo Halak<sup>1</sup>, Guilherme Yuuki Koga<sup>1</sup>, Guilherme Zepon<sup>1</sup>, Lucas Barcelos Otani<sup>1</sup>, Claudemiro Bolfarini<sup>1</sup>, Claudio S. Kiminami<sup>1</sup>, Walter José Botta<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 11:00 Theoretical and experimental analysis of the fick law solution for mobile oxide border / atmosphere** Q.P3.62  
Roberto Paulo Barbosa Ramos<sup>1</sup>, Emiliane Advíncula Malheiros<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 11:00 Microstructural evolution of 91 grade steels exposed to different temperature incursion times** Q.P3.63  
Rodrigo Mantovani Ronchi<sup>1</sup>, Gary Critchlow<sup>2</sup>, Rebecca Higginson<sup>2</sup>, Simon Hogg<sup>2</sup>, Sydney Ferreira Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Loughborough University
- 11:00 Mechanical behavior assessment of epoxy adhesive bonding metal** Q.P3.64  
Silvana de Abreu Martins<sup>1</sup>, Alan sala Bourguignon<sup>1</sup>, Carlos Moreira Netto<sup>1</sup>, Iávinia alves borges<sup>2</sup>, Daniel Castello<sup>2</sup>, Iuana Orlandini<sup>2</sup>; <sup>1</sup>Centro Universitário Estadual da Zona Oeste, <sup>2</sup>Universidade Federal do Rio de Janeiro

- 11:00 Effect of Thermomechanical Treatment on the Microstructure and Dynamic Mechanisms of Hardening and Softening in SAE 9254 Steel** Q.P3.65  
Silvano Leal dos Santos<sup>1,2</sup>, Felipe Ribeiro Toloczko<sup>2</sup>, Sydney Ferreira Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Faculdade de Tecnologia de São Paulo
- 11:00 Influence of Heat Treatment Parameters under Continuous Cooling of the SAE 9254 steel** Q.P3.66  
Silvano Leal dos Santos<sup>1,2</sup>, Sydney Ferreira Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Faculdade de Tecnologia de São Paulo
- 11:00 Influence of Decarburization on the Local Corrosion Behavior of the SAE 9254 Spring Steel** Q.P3.67  
 Jéssica Cristina Costa de Castro Santana<sup>1</sup>, Rejane Maria Pereira da Silva<sup>2</sup>, Renato Altobelli Antunes<sup>1</sup>, Sydney Ferreira Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Instituto de Pesquisas Energeticas e Nucleares
- 11:00 Influence of Decarburization Phenomenon on the Fatigue Behavior of a SAE 9254 Spring Steel** Q.P3.68  
 Jéssica Cristina Costa de Castro Santana<sup>1</sup>, Silvano Leal dos Santos<sup>1</sup>, Renato Altobelli Antunes<sup>1</sup>, Sydney Ferreira Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Digital Image Correlation (DIC) method application in shear test of exploded welded joints of ASME 516-70 and super duplex ZERON 100** Q.P3.69  
 GUILHERME GASTARDELI GASTARDELI<sup>1</sup>, Tamires de Souza Nossa<sup>1</sup>, Haroldo Cavalcanti Pinto<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Escola de Engenharia de São Carlos
- 11:00 Experimental Characterization on the mechanical and metallurgical properties of railway wheels manufactured using ER8 material** Q.P3.70  
Tiago Alegretti Zucarelli<sup>1</sup>, Lindolfo Araújo Moreira Filho<sup>2</sup>; <sup>1</sup>Instituto de Aeronáutica e Espaço, <sup>2</sup>Instituto Tecnológico de Aeronáutica
- 11:00 Oxidation in synthetic air atmosphere of AISI 439 ferritic stainless steel in thermobalance at high temperatures** Q.P3.71  
 Gabriel de Souza Veras Fontinele<sup>1</sup>, Giscard Eanes Dias Viana<sup>2</sup>, Maria de Fátima Salgado<sup>1</sup>, Valney Moura Silva<sup>3</sup>; <sup>1</sup>Universidade Estadual do Maranhão, <sup>2</sup>Universidade Estadual do Piauí, <sup>3</sup>Instituto Federal do Piauí
- 11:00 Thermodynamic simulations for the investigation of solidification paths and phases formation in boron-modified superduplex stainless steel** Q.P3.72  
Vinicius Antonio de Oliveira<sup>1</sup>, Claudemiro Bolfarini<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Universidade Federal de São Carlos
- 11:00 Influence of dilution in cutting fluid on the surface quality of the AISI 4340 steel grinding by MQL technique with CBN wheel** Q.P3.73  
Wagner Barbosa Costa<sup>1</sup>, Bruno Kenta Sato<sup>1</sup>, José Claudio Lopes<sup>1</sup>, Hamilton José de Mello<sup>1</sup>, Paulo Roberto de Aguiar<sup>1</sup>, Eduardo Carlos Bianchi<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista
- 11:00 FeCoCrNiCuAl, Fe<sub>2</sub>CoCrNiCuAl and Fe<sub>2</sub>CoCrNi<sub>2</sub>CuAl<sub>0,5</sub> high entropy alloys: processing, microstructure, mechanical and corrosive behavior** Q.P3.74  
William de Paula Santos<sup>1</sup>, Carlos Triveño Rios<sup>1</sup>, Renato Altobelli Antunes<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Investigation of high configurational entropy system using different computational thermodynamics softwares** Q.P3.75  
Willian Martins Pasini<sup>1,2</sup>, Vinicius Cardoso da Rocha<sup>2</sup>, Wagner Bielefeldt<sup>2</sup>, Vinicius Karlinski de Barcellos<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul, <sup>2</sup>Universidade Federal do Rio Grande do Sul

**11:00 Equal channel angular pressing and characterization of a patented eutectoid Fe-C steel Q.P3.76**

YASMIM CAROLINE BRITO<sup>1</sup>, Barbara Woinaroviz Ramos<sup>1</sup>, Osvaldo Mitsuyuki Cintho<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa

# **SYMPOSIUM R - Fundamentals and applications of plasma processing of materials**

## **Symposium organizers:**

Elidiane C Rangel (Laboratory of Technological Plasmas - Unesp)

Nilson C Cruz (Laboratory of Technological Plasmas - Unesp)

Clodomiro Alves Jr. ( UFERSA - Department of Natural and Mathematical Sciences )

Rodrigo Savio Pessoa (Instituto Tecnológico de Aeronáutica)

André Paulo Tschiptschin (Escola Politécnica da Universidade de São Paulo)

Lucia Vieira (Universidade do Vale do Paraíba)



## WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

### *SESSION R.01.D3 (09:30 - 10:30) - Room Ártico*

- 09:30 Reactive plasmas for materials and chemical conversion at low temperatures** R.O1.D3.1\*  
R. Mohan Sankaran<sup>1</sup>; <sup>1</sup>Case Western Reserve University
- 10:00 Use of atomic force microscopy to evaluate the biocompatibility of living cells on titanium surfaces by plasma treatment** R.O1.D3.2  
Janine Karla França da Silva Braz<sup>1</sup>, Nicole Morales<sup>2</sup>, Pamela Naulin<sup>2</sup>, Christian Fuentes<sup>2</sup>, Nelson Barrera<sup>2</sup>, Hugo Alexandre de Oliveira Rocha<sup>3</sup>, MOACIR FRANCO DE OLIVEIRA<sup>1</sup>, Clodomiro Alves-Junior<sup>1</sup>, Carlos Eduardo Bezerra Moura<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido, <sup>2</sup>Pontificia Universidad Católica de Chile, <sup>3</sup>Universidade Federal do Rio Grande do Norte

### *SESSION R.02.D3 (11:00 - 12:00) - Room Ártico*

- 11:00 New Features of PECVD Technique for DLC growth and Its Perspective for Many Application** R.O2.D3.1\*  
Vladimir Jesus Trava-Airoldi<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 11:30 Analysis of the optical emissions in the plasma during sputtering depositions of TiO<sub>2</sub> films** R.O2.D3.2  
João Saccoman<sup>1</sup>, Lucas Jorge Affonço<sup>1</sup>, José Humberto Dias da Silva<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru
- 11:45 How the polarity of plasma influences the interaction with bittern** R.O2.D3.3  
Clodomiro Alves-Junior<sup>1</sup>, Francisco Edmilson Rodrigues-Junior<sup>1</sup>, Jussier de Oliveira Vitoriano<sup>2</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido, <sup>2</sup>Universidade Federal do Rio Grande do Norte

### *SESSION R.03.D3 (14:00 - 16:15) - Room Ártico*

- 14:00 Cross-linked lignin coatings produced by UV light and SF<sub>6</sub> plasma treatments** R.O3.D3.1\*  
José Roberto Souza Jr.<sup>1</sup>, Joyce Rodrigues Araujo<sup>2</sup>, Renata Antoun Simão<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>National Institute of Metrology
- 14:30 Properties of the DLC film deposited from ejected plasma from inside the titanium tube** R.O3.D3.2  
Nazir Monteiro dos Santos<sup>1</sup>, Mario Ueda<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 14:45 Improvement of Thermoplastic Elastomer Degradation Resistance by One-step Aleatory Nanostructures Delineation** R.O3.D3.3  
Renato Carvalho Resende<sup>1</sup>, Rafael Parra Ribeiro<sup>1</sup>, Walter Ruggeri Waldman<sup>2</sup>, Joyce Rodrigues Araujo<sup>3</sup>, Nilson C. Cruz<sup>1</sup>, Elidiane C. Rangel<sup>4</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>3</sup>National Institute of Metrology, <sup>4</sup>Universidade Estadual Paulista

- 15:00 Alumina PEO coatings decorated with silver** R.O3.D3.4  
 Andressa Rodrigues<sup>1</sup>, Janaina Soares Santos<sup>1</sup>, Mariana S Sikora<sup>2</sup>, Francisco Trivinho Strixino<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 15:15 Study of the abrasive wear on the nitrogen martensitic layer formed on the AISI 409 ferritic stainless steel through the shtpn and quenching processes** R.O3.D3.5  
Joao Humberto Coelho<sup>1</sup>, Elisiane Maria Berton<sup>1</sup>, Ane Cheila Rovani<sup>1</sup>, Paulo César Borges<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 15:30 Microstructures and properties of mild steel treated by the surface treatments of chromium plating, chromizing and plasma nitrocarburizing** R.O3.D3.6  
Vladimir Henrique Baggio-Scheid<sup>1</sup>, José Paulo Breda Destro<sup>1</sup>, Davi Neves<sup>1</sup>, Erasmo Cardoso de Faria Morais<sup>1</sup>, João Paulo Machado<sup>2</sup>; <sup>1</sup>Instituto de Estudos Avançados, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais
- 15:45 Influence of pulse frequency and substrate oscillation on production of Cr-Al-N coatings by HiPIMS** R.O3.D3.7  
**Influence of pulse frequency and substrate oscillation on production of Cr-Al-N coatings by HiPIMS**  
PEDRO RENATO TAVARES AVILA<sup>1</sup>, Erenilton Pereira Silva<sup>1</sup>, Bruno César Noronha Marques de Castilho<sup>1</sup>, Jose Luis Garcia<sup>2</sup>, Fabiola Pineda<sup>3</sup>, Magdalena Walczak<sup>3</sup>, Haroldo Cavalcanti Pinto<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos, <sup>2</sup>Sandvik Coromant, <sup>3</sup>Pontificia Universidad Católica de Chile
- 16:00 Deposition of fluorocarbon thin films on wood surface by low-pressure plasma** R.O3.D3.8  
Pedro Henrique Gonzalez de Cademartori<sup>1</sup>, Pierre Vinchon<sup>2</sup>, Luc Stafford<sup>2</sup>, Graciela Ines Bolzon Muñoz<sup>1</sup>, Washington Luiz Esteves Magalhães<sup>1,3</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Université de Montreal, <sup>3</sup>Embrapa Florestas

## THURSDAY , SEPTEMBER 26

### Poster presentations

#### *SESSION R.P7 (09:30 - 11:00)*

- 09:30 Results on Plasma Ion Implantation Experiments Using Metallic Cylindrical Sieve Configuration Aided by Computer Simulations for the Treatments of Metal Wires, Springs, Grids and Small Components** R.P7.1  
Carla da Silva<sup>1</sup>, Mario Ueda<sup>1</sup>, Gelson Biscaia de Souza<sup>2</sup>, Luc Pichon<sup>3</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Universidade Estadual de Ponta Grossa, <sup>3</sup>Université de Poitiers, Institut Pprime
- 09:30 Effect of surface treatments and surface coatings on the formation of calcium carbonate scale deposits** R.P7.2  
 Lucas Muraro Sassi<sup>1</sup>, Filipe Viana Ferreira<sup>1</sup>, Mauro Meliga Wysard<sup>1</sup>, Thiara Francis Mateus Rodrigues<sup>2</sup>, Gustavo Miranda Rocha<sup>3</sup>, Sidnei Paciornik<sup>4</sup>, Sérgio de Souza Camargo Jr.<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro/COPPE, <sup>2</sup>Vallourec, <sup>3</sup>Universidade Federal do Rio de Janeiro, <sup>4</sup>Pontifícia Universidade Católica do Rio de Janeiro



- 09:30 Growth of porous Zirconia on biomedical Ti-6Al-4V alloy by plasma electrolytic oxidation** **R.P7.3**  
Aline Cristine Nanuh da Silva<sup>1</sup>, Lívia Sottovia<sup>1</sup>, Nilson C Cruz<sup>1</sup>, Elidiane C. Rangel<sup>1</sup>, Diego Rafael Nespeque Correa<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 09:30 HiPIMS-MS co-sputtering of Cr/SiC thin films on Ti-6Al-4V substrate with improved adherence** **R.P7.4**  
Abrão Chiaranda Merij<sup>1</sup>, M. Massi<sup>2</sup>, Argemiro Soares da Silva Sobrinho<sup>3</sup>, Gislene Valdete Martins<sup>4</sup>, Danieli Aparecida Pereira Reis<sup>5</sup>; <sup>1</sup>Faculdade de Tecnologia de São Paulo, <sup>2</sup>Universidade Presbiteriana Mackenzie, <sup>3</sup>Instituto Tecnológico de Aeronáutica, <sup>4</sup>Instituto Nacional de Pesquisas Espaciais, <sup>5</sup>Universidade Federal de São Paulo
- 09:30 RBS analysis of mixed oxide coatings on Aluminum prepared by DC PEO** **R.P7.5**  
Adriana Oliveira Delgado-Silva<sup>1</sup>, Maria Angélica Cassú Menck<sup>1</sup>, Andressa Rodrigues<sup>1</sup>, Yasmin Bastos Pissolitto<sup>1</sup>, Cleber Lima Rodrigues<sup>2</sup>, Manfredo Harri Tabacniks<sup>2</sup>, Janaina Soares Santos<sup>1</sup>, Francisco Trivinho Strixino<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>2</sup>Instituto de Física - Universidade de São Paulo
- 09:30 Characterization of the organosilicon films deposited by plasma and analysis in relation to photodegradation** **R.P7.6**  
Amanda de S. M. de Freitas<sup>1</sup>, Felipe O. Fernandes<sup>2</sup>, Ana Carolina Cugler Moreira<sup>1</sup>, Walter Ruggeri Waldman<sup>1</sup>, Adriana Oliveira Delgado-Silva<sup>1</sup>, Elidiane Cipriano Rangel<sup>2</sup>, Nilson C Cruz<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>2</sup>Universidade Estadual Paulista
- 09:30 Supported metal catalysts obtained by nonthermal plasma: a new process approach** **R.P7.7**  
Andrey Mello dos Santos<sup>1</sup>, Rafael de Camargo Catapan<sup>1</sup>, Diego Alexandre Duarte<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Thermal stability, mechanical properties and corrosion resistance of the nitrogen expanded phase produced on the superferritic stainless steel** **R.P7.8**  
Bruna Corina Emanuely Schibicheski Kurelo<sup>1,2</sup>, Gelson Biscaia de Souza<sup>1</sup>, Carlos Maurício Lepienski<sup>2</sup>, Willian Rafael de Oliveira<sup>1</sup>, Rafael Fillus Chuproski<sup>1</sup>, Francisco Carlos Serbena<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 09:30 Heat transfer evaluation in steel samples quenched in plasma** **R.P7.9**  
Bruno Cuchi Bordignon<sup>1</sup>, Jorge L Cargnin<sup>1</sup>, Julia B Bisogno<sup>1</sup>, Natália F Daudt<sup>1</sup>, Otavio A Disconzi<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Maria
- 09:30 Gold thin films deposited by ion implantation + iPVD-based processes on EQUARS satellite plasma sensors** **R.P7.10**  
Carina Barros Mello<sup>1</sup>, Fabricio Iusuti Medeiros<sup>1</sup>, Ing Hwie Tan<sup>1</sup>, Graziela da Silva Savonov<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 09:30 Influence of the electrical contact in memristive behavior of Nb<sub>2</sub>O<sub>5</sub>** **R.P7.11**  
Roberto Aguiar Ramos Jr<sup>1</sup>, Lucas Jorge Affonço<sup>1</sup>, Silvia Leticia Fernandes<sup>1</sup>, Miguel Henrique Boratto<sup>1</sup>, José Humberto Dias da Silva<sup>1</sup>, Carlos FO Graeff<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru

- 09:30 Organ Silicone Films Doped With Cerium By Hybrid CVD-PECVD** **R.P7.12**  
César Augusto Antônio Júnior<sup>1</sup>, Nilson Aguiar Neves<sup>1</sup>, Rafael Parra Ribeiro<sup>2,3</sup>, Larissa Solano Almeida<sup>4</sup>, Nilson C Cruz<sup>2</sup>, Elidiane Cipriano Rangel<sup>3</sup>, LUCIANA SGARBI ROSSINO<sup>5</sup>; <sup>1</sup>Instituto de Ciência e Tecnologia - Câmpus de Sorocaba, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>São Paulo State University, <sup>4</sup>Universidade Federal de São Carlos - Campus Sorocaba, <sup>5</sup>FACULDADE DE TECNOLOGIA DE SOROCABA
- 09:30 Production of self-lubricating composites of high tribological performance obtained by plasma enrichment process** **R.P7.13**  
Keli Vanessa Salvador Damin<sup>1</sup>, Daniel Auri Schaefer<sup>1</sup>, Gabriel da Rosa Tasior<sup>1</sup>, Tatiana Bendo<sup>1</sup>, Aloisio Nelmo Klein<sup>1</sup>, Cristiano Binder<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Plasma-assisted Pyrolysis (PAP) of Polymer-derived CrSiCN Ceramic Coatings on Low Alloy Sintered Steel** **R.P7.14**  
Daniel Auri Schaefer<sup>1</sup>, Günter Motz<sup>2</sup>, Aloisio Nelmo Klein<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universität Bayreuth
- 09:30 Influence of electrolyte concentration on TiO<sub>2</sub> deposition on galvanized aluminum – Galvalume - by plasma electrolytic oxidation** **R.P7.15**  
Lívia Sottovia<sup>1</sup>, Diego Rafael Nespeque Correa<sup>1</sup>, Elidiane Cipriano Rangel<sup>2</sup>, Nilson C Cruz<sup>3</sup>; <sup>1</sup>Instituto de Ciência e Tecnologia - Câmpus de Sorocaba, <sup>2</sup>São Paulo State University, <sup>3</sup>Universidade Estadual Paulista
- 09:30 Study of electrolyte concentration on TiO<sub>2</sub> deposition on 1230 aluminum alloy by plasma electrolytic oxidation** **R.P7.16**  
Lívia Sottovia<sup>1</sup>, Diego Rafael Nespeque Correa<sup>1</sup>, Elidiane Cipriano Rangel<sup>2</sup>, Nilson C Cruz<sup>3</sup>; <sup>1</sup>Instituto de Ciência e Tecnologia - Câmpus de Sorocaba, <sup>2</sup>São Paulo State University, <sup>3</sup>Universidade Estadual Paulista
- 09:30 Time evolution of molybdenum laser-ablated plasma plume** **R.P7.17**  
Emmanuela Sternberg<sup>1</sup>, Filipe Leoncio Braga<sup>2</sup>, Nicolau André Silveira Rodrigues<sup>3</sup>, Pedro Campos<sup>1</sup>, Soraia Cristina Gonzaga Neves Braga<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>2</sup>Instituto Federal do Espírito Santo, <sup>3</sup>Instituto de Estudos Avançados
- 09:30 On the Influence of the thickness of AISI 316 stainless steel samples on its tribological properties when using plasma nitriding** **R.P7.18**  
Fabício César Lobato de Almeida<sup>1</sup>, Marcelo Campos<sup>2</sup>, João Paulo Davim<sup>3</sup>, Sylvio Dionysio de Souza<sup>4</sup>, Maristela Olzon-Dionysio<sup>4</sup>; <sup>1</sup>Faculdade de Ciência e Engenharia da UNESP-campus de Tupã, <sup>2</sup>São Paulo State University, <sup>3</sup>Mechanical Engineering, University of Aveiro, <sup>4</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri
- 09:30 Adhesion evaluation of silver thin film deposited on glass for thermal control solar reflectors** **R.P7.19**  
Fabricio Iusuti Medeiros<sup>1</sup>, Carina Barros Mello<sup>1</sup>, Graziela da Silva Savonov<sup>1</sup>, Gabriela Santos Nascimento<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 09:30 Implantation energy and ion fluence-based parameterization of structural changes imposed by PI3 on an austenitic alloy** **R.P7.20**  
Rafael Fillus Chuproski<sup>1</sup>, Willian Rafael de Oliveira<sup>1</sup>, Bruna Corina Emanuely Schibicheski Kurelo<sup>1,2</sup>, Francisco Carlos Serbena<sup>1</sup>, Gelson Biscaia de Souza<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Universidade Tecnológica Federal do Paraná

- 09:30 Deposition of adherent and corrosion resistant DLC multilayer coatings onto stainless steel AISI 420** **R.P7.21**  
Gil Capote<sup>1</sup>, Ariel Capote<sup>2</sup>, Vladimir Jesus Trava-Airoldi<sup>3</sup>; <sup>1</sup>Universidad Nacional de Colombia, <sup>2</sup>Universidad de los Andes Colombia, <sup>3</sup>Instituto Nacional de Pesquisas Espaciais
- 09:30 Evaluation of the Electric Plasma Pen in the Inactivation of Bacterial Dental Plate Biofilm** **R.P7.22**  
 Thaisa B. Santos<sup>1</sup>, Michely Glenda Silva<sup>1</sup>, Lucas Augusto Manfroi<sup>1</sup>, Angela A. Vieira<sup>1</sup>, Priscila Leite<sup>1</sup>, Juliana Guerra Pinto<sup>1</sup>, Graziela da Silva Savonov<sup>2</sup>, Lucia Vieira<sup>1</sup>; <sup>1</sup>Instituto de Pesquisa e Desenvolvimento - Univap, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais
- 09:30 Processing of Intermetallic NiAl coatings modified with Tungsten Carbide** **R.P7.23**  
Heber Oswaldo Abreu<sup>1</sup>, Ana Sofia Clímaco Monteiro D'Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 09:30 The influence of the grinding route and the sintering pressure on the densification and hardness of Nb-Cu samples consolidated by SPS, analyzed by MEV FEG and EBSD.** **R.P7.24**  
Hérik Dantas De Lima<sup>1</sup>, Uílame Umbelino Gomes<sup>1</sup>, Marcello Filgueira<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Estadual do Norte Fluminense Darcy Ribeiro
- 09:30 Tuning the stoichiometry of Ta<sub>2</sub>O<sub>x</sub> thin films for resistive switching applications** **R.P7.25**  
João Henrique Quintino Palhares<sup>1</sup>, Gilberto Medeiros Ribeiro<sup>2</sup>, Cláudio Radtke<sup>3</sup>, André Santarosa Ferlauto<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidade Federal de Minas Gerais, <sup>3</sup>Instituto de Química - UFRGS
- 09:30 Nitriding of rods for soil preparation in semi-arid region of Rio Grande do Norte** **R.P7.27**  
 Amanda Dayane da Costa Martins<sup>1</sup>, Edvaldo Rodrigues da Rocha Jr.<sup>1</sup>, Francisco Odolberto de Araújo<sup>1</sup>, Júlio César Pereira Barbosa<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido
- 09:30 Zn<sub>2</sub>BO<sub>4</sub>:N (B = Ti, Sn) spinels obtained by the Pechini method, with N-doping by plasma processing** **R.P7.28**  
LAIS CHANTELE DE LIMA<sup>1</sup>, André Luiz Menezes de Oliveira<sup>1</sup>, Márcia Rejane Santos da Silva<sup>1</sup>, Clodomiro Alves-Junior<sup>2</sup>, Iêda Maria Garcia dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Universidade Federal Rural do Semi-árido
- 09:30 Effects of plasma treatment on rotational DBD with regard to the wettability, morphology and chemical composition of polyamide 6.6** **R.P7.29**  
LARISSA MACIEL Maciel NASCIMENTO<sup>1</sup>, Rodrigo Sávio Pessoa<sup>1</sup>, Gilberto Petraconi Filho<sup>1</sup>, Fernando Gasi<sup>2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Universidade Federal do ABC
- 09:30 Reactive dyeing of cotton fabrics functionalized by the plasma technique** **R.P7.30**  
Laura Palermo Gomes<sup>1</sup>, Daniela Becker<sup>2</sup>, Luis Cesar Fontana<sup>2</sup>, maria Elisa Philippsen Missner<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Fundação Universidade do Estado de Santa Catarina
- 09:30 Investigations of structure and nanoindentation characteristics of TiN films deposited by RF Magnetron Sputtering.** **R.P7.31**  
Lucas Jorge Affonço<sup>1</sup>, Elidiane Cipriano Rangel<sup>2</sup>, Luis Augusto Rocha<sup>1</sup>, Paulo Noronha Lisboa Filho<sup>1</sup>, Felon Martinho Pontes<sup>1</sup>, José Humberto Dias da Silva<sup>2,1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>2</sup>Universidade Estadual Paulista

- 09:30 A comparison of biocompatibility and Osseointegration on ceramic with and without DLC-Ag films: an in vitro study** **R.P7.32**  
 Angela A. Vieira<sup>1</sup>, Polyana Alves Radi<sup>2</sup>, Thaisa B. Santos<sup>1</sup>, Michely Glenda Silva<sup>1</sup>, Lucas A. Manfroi<sup>1</sup>, Sergio Francisco Santos<sup>3</sup>, Jose Vitor Candido de Souza<sup>3</sup>, Newton Soares Silva<sup>1</sup>, Priscila Leite<sup>1</sup>, Lucia Vieira<sup>1</sup>; <sup>1</sup>Instituto de Pesquisa e Desenvolvimento - Univap, <sup>2</sup>Universidade Federal de São Paulo, <sup>3</sup>Universidade Estadual de São Paulo - Campus Guaratinguetá
- 09:30 Plasma ions actuation on stainless steel with and without diamond-like carbon film for *Candida albicans* inactivation** **R.P7.33**  
 Simone Maria Menegatti de Oliveira<sup>1</sup>, Ana Claudia Sene<sup>1</sup>, Newton Soares Silva<sup>1</sup>, Rinaldo Ferreira Gandra<sup>2</sup>, Daniele Schaab Boff Junges<sup>2</sup>, Marco Antonio Ramirez<sup>1</sup>, Lucia Vieira<sup>1</sup>; <sup>1</sup>Instituto de Pesquisa e Desenvolvimento - Univap, <sup>2</sup>Universidade Estadual do Oeste do Paraná
- 09:30 Synchrotron radiation applied to the Crystallographic Structure Study of the Expanded Austenite formed on Plasma nitrided ASTM F138 under different gas mixture** **R.P7.34**  
Marcelo Campos<sup>1</sup>, João Paulo Davim<sup>2</sup>, Sylvio Dionysio de Souza<sup>3</sup>, Fabrício César Lobato de Almeida<sup>4</sup>, Maristela Olzon-Dionysio<sup>3</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>University of Aveiro, <sup>3</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri, <sup>4</sup>Faculdade de Ciência e Engenharia da UNESP-campus de Tupã
- 09:30 Surface modifications of the internal wall of a 0.6 cmØ small SS tube by nitrogen or argon Plasma Immersion Ion Implantation (PIII)** **R.P7.35**  
Mario Ueda<sup>1</sup>, Carla da Silva<sup>1</sup>, Fabricio Iusuti Medeiros<sup>1</sup>, Carina Barros Mello<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 09:30 Influence of the surface treatment on the durability of biocomposites** **R.P7.36**  
Martha Lissette Sanchez<sup>1</sup>, Gil Capote<sup>2</sup>; <sup>1</sup>Universidad Militar Nueva Granada, <sup>2</sup>Universidad Nacional de Colombia
- 09:30 Plasma Electrolytic Oxidation: a versatile tool for material processing** **R.P7.37**  
 Lívia Sottovia<sup>1</sup>, Thaís Matiello Gonçalves<sup>2</sup>, César A Antonio<sup>3</sup>, Rosana Fernandes Antonio<sup>4</sup>, Elidiane C Rangel<sup>2</sup>, Nilson C. Cruz<sup>3</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Laboratory of Technological Plasmas, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>Faculdade de Engenharia de Sorocaba
- 09:30 Role of the reactive sputtering deposition power in the phase control of cobalt oxide films** **R.P7.38**  
Nilton Francelosi Azevedo Neto<sup>1,2</sup>, Cristiane Stegemann<sup>3</sup>, João Carlos Angélico<sup>1</sup>, Douglas Marcel Gonçalves Leite<sup>3</sup>, José Humberto Dias da Silva<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Faculdade de Tecnologia de Bauru, <sup>3</sup>Instituto Tecnológico de Aeronáutica
- 09:30 Influence of treatment atmosphere on the plasma nitrocarburized DIN 100Cr6 steel morphology** **R.P7.39**  
 Marcos Alves Fontes<sup>1</sup>, Vladimir Henrique Baggio-Scheid<sup>2</sup>, David de Souza Machado<sup>3</sup>, Luiz Carlos Casteletti<sup>4</sup>, Pedro Augusto de Paula Nascente<sup>5</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Instituto de Estudos Avançados, <sup>3</sup>Tecumseh do Brasil Ltda, <sup>4</sup>Universidade de São Paulo, <sup>5</sup>Universidade Federal de São Carlos
- 09:30 Evaluation of tempering temperatures in nitrogen martensitic layer sensitization formed on steel AISI 409 after STHPN and quenching** **R.P7.40**  
Pedro Victorio Caetano Abrantes de Quadros<sup>1</sup>, Elisiane Maria Berton<sup>1</sup>, Paulo César Borges<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná

- 09:30 Titanium inner coating of narrow alumina tubes by DC magnetron sputtering R.P7.41**  
Rafael Defavari<sup>1</sup>, Osmar Roberto Bagnato<sup>1</sup>, Fernanda Regina Francisco<sup>1</sup>, Daniel Yukio Kakizaki<sup>1</sup>, Felipe Eduardo Manoel<sup>1</sup>; <sup>1</sup>Laboratorio Nacional de Luz Sincrotron
- 09:30 Production and Characterization of DLC-Phytos Aiming to Prevent Bacterial Biofilm R.P7.42**  
Regina Célia<sup>1</sup>, Michely Glenda Silva<sup>1</sup>, Thaisa B. Santos<sup>1</sup>, Angela A. Vieira<sup>1</sup>, Larissa Lobo<sup>1</sup>, Lucas A. Manfroi<sup>1</sup>, Priscila Leite<sup>1</sup>, Lucia Vieira<sup>2,1</sup>; <sup>1</sup>Instituto de Pesquisa e Desenvolvimento - Univap, <sup>2</sup>Universidade do Vale do Paraíba
- 09:30 Study of problems caused in thin films due to plasma shutdown methodology R.P7.43**  
Larissa Lobo<sup>1</sup>, Regina Célia<sup>1</sup>, Angela A. Vieira<sup>1</sup>, Michely Glenda Silva<sup>1</sup>, Thaisa B. Santos<sup>1</sup>, Lucas A. Manfroi<sup>1</sup>, Lucia Vieira<sup>2,1</sup>; <sup>1</sup>Instituto de Pesquisa e Desenvolvimento - Univap, <sup>2</sup>Universidade do Vale do Paraíba
- 09:30 Corrosion resistance of carbon steel coated with SiO<sub>x</sub>C<sub>y</sub>H<sub>z</sub>/SiO<sub>x</sub> film R.P7.44**  
Rita de Cássia Cipriano Rangel<sup>1</sup>, Nilson C Cruz<sup>1</sup>, Rafael Parra Ribeiro<sup>1,2</sup>, Elidiane Cipriano Rangel<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>São Paulo State University
- 09:30 PLA, PS and PVC nanofibers modified by non thermal plasma for cell adhesion R.P7.45**  
Rodrigo Balen<sup>1</sup>, Taís Felix<sup>1</sup>, Nito Angelo Debacher<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Manufacturing porous Fe electrodes by mim and plasma sintering R.P7.46**  
Tábata Schütz dos Santos<sup>1</sup>, Natália F Daudt<sup>1</sup>, LIRIO SCHAEFFER<sup>2</sup>, Cristiano Binder<sup>3</sup>; <sup>1</sup>Universidade Federal de Santa Maria, <sup>2</sup>Universidade Federal do Rio Grande do Sul, <sup>3</sup>Universidade Federal de Santa Catarina
- 09:30 The use of oxygen, nitrogen and hydrogen plasma treatments in chitosan R.P7.47**  
Moisés das Virgens Santana<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>, Hitalo de Jesus Bezerra da Silva<sup>1</sup>, Humberto Denys De Almeida Silva<sup>2</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Faculdade do Vale do Itapecurú
- 09:30 Development and characterization of polystyrene membranes expanded with and without addition of plasma-treated polyvinilpirrolidone and polyetersulfone R.P7.48**  
Wellen Stieven<sup>1</sup>, Paola Egert Ortiz<sup>1</sup>, Jonathan Bork<sup>1</sup>, Heloisa Regina Turatti Silva<sup>1</sup>, Allan Seeber<sup>2</sup>, Wladimir Hernandez Flores<sup>2</sup>, André Gundel<sup>2</sup>; <sup>1</sup>Universidade do Sul de Santa Catarina, <sup>2</sup>Universidade Federal do Pampa
- 09:30 Morphological, compositional and electronic characterization of mixed Al-Nb oxides obtained by plasma electrolytic oxidation R.P7.49**  
Yasmin Bastos Pissolitto<sup>1</sup>, Maria Angélica Cassú Menck<sup>1</sup>, Francisco Trivinho Strixino<sup>1</sup>, Janaina Soares Santos<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Sorocaba



# **SYMPOSIUM S - Computational Design for Development of Functional Materials - Synergy Between Theoreticians and Experimentalists**

**Symposium organizers:**

Julio Ricardo Sambrano (São Paulo State University, Bauru, Brazil)  
Miguel A. San-Miguel (São Paulo State University of Campinas, Brazil)  
Aníbal J. Rodríguez-Cuesta (Oak Ridge National Laboratory, USA)  
Silvia Casassa (Torino University, Italy)





# MONDAY , SEPTEMBER 23

\* Invited Lecture

## *SESSION S.01.D1 (09:30 - 10:30) - Room Mariscal Lateral*

**09:30 Femtosecond laser irradiation-induced structural organization and crystallinity of Bi-based semiconductors** S.O1.D1.1\*

Elson Longo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos

**10:15 Environmental effects on the geometry of ZnO nanoparticles: multiscale-guided Wulff construction** S.O1.D1.2

Antônio Manesco<sup>1</sup>, Elton José Figueiredo de Carvalho<sup>2</sup>, Gabrielle Weber<sup>1</sup>, Eduardo Rezende Triboni<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena - USP, <sup>2</sup>Universidade Federal do Rio Grande do Norte

## *SESSION S.02.D1 (11:00 - 12:00) - Room Mariscal Lateral*

**11:00 Multifunctional Nanostructured Co-doped ZnO: The Co Spatial Distribution and the Correlated Magnetic Properties** S.O2.D1.1

Rafael Tomaz Silva<sup>1</sup>, Alexandre Mesquita<sup>2</sup>, Angela Ortiz de Zevallos<sup>3</sup>, Thalita Chiaramonte<sup>4</sup>, Xavier Gratens<sup>5</sup>, Valmir Antonio Chitta<sup>5</sup>, Juliana Maria Abreu da Silva Morbec<sup>6</sup>, Gul Rahman<sup>7</sup>, Victor Manuel García-Suárez<sup>8</sup>, Antonio Carlos Doriguetto<sup>3</sup>, Maria Ines Basso Bernardi<sup>5</sup>, Hugo Bonette de Carvalho<sup>3</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universidade Federal de Alfenas, <sup>4</sup>Universidade Federal de São João Del Rei, <sup>5</sup>Universidade de São Paulo, <sup>6</sup>University of Duisburg-Essen, <sup>7</sup>Quaid-i-Azam University Islamabad, <sup>8</sup>Universidad de Oviedo

**11:15 Porphyrin dyes supported on ZnO(1010) and  $\alpha$ -TiO<sub>2</sub>(101) surfaces: Electronic and optical properties from ab initio calculations** S.O2.D1.2

Walter Orellana<sup>1</sup>; <sup>1</sup>Universidad Andrés Bello

**11:45 Morphology and the photocatalytic activity: there is a big deal?** S.O2.D1.4

Amanda Fernandes Gouveia<sup>1</sup>, Laécio Santos Cavalcante<sup>2</sup>, Juan Andrés<sup>3</sup>, Elson Longo<sup>4</sup>, Miguel A. San-Miguel<sup>1</sup>; <sup>1</sup>Instituto de Química, Unicamp, <sup>2</sup>Universidade Estadual do Piauí, <sup>3</sup>Departament de Química-Física i Analítica, Universitat Jaume I, <sup>4</sup>Federal University of São Carlos

## *SESSION S.03.D1 (14:00 - 16:15) - Room Mariscal Lateral*

**14:00 Functionalization of two-dimensional nanostructures with organic molecules** S.O3.D1.1\*

Andreia Luisa da Rosa<sup>1,2</sup>, Flávio Bento de Oliveira<sup>1</sup>, Erika Nascimento Lima<sup>3</sup>, Renato Borges Pontes<sup>1</sup>, Tome Mauro Schmidt<sup>4</sup>, Mauricio Chagas Silva<sup>2</sup>, Thomas Frauenheim<sup>2</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Universität Bremen, <sup>3</sup>Universidade Federal de Mato Grosso, <sup>4</sup>Universidade Federal de Uberlândia

**14:45 Mechanical and electronic properties of carbon nanofibers: elucidating the role of saturations and nitrogen doping** S.O3.D1.2

Pedro G. Demingos<sup>1</sup>, André R. Muniz<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

- 15:00 Effective model for Majorana modes in graphene** **S.O3.D1.3**  
 Antônio Manesco<sup>1</sup>, Durval Rodrigues Jr.<sup>1</sup>, Gabrielle Weber<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena - USP
- 15:15 Computational screening of bulk materials with intermediate bands** **S.O3.D1.4**  
Gustavo Martini Dalpian<sup>1</sup>, Douglas José Ribeiro Baquião<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 15:30 Carbonates: acoustic velocities, stability, and phase diagrams** **S.O3.D1.5\***  
Lucy V. Credidio Assali<sup>1</sup>, Joao Francisco Justo<sup>2</sup>, Michel Lacerda Marcondes Santos<sup>1</sup>, Samuel Silva Santos<sup>3</sup>; <sup>1</sup>Instituto de Física - Universidade de São Paulo, <sup>2</sup>Escola Politécnica de Universidade de São Paulo, <sup>3</sup>Universidade do Porto

## TUESDAY , SEPTEMBER 24

\* Invited Lecture

### *SESSION S.O1.D2 (09:30 - 10:30) - Room Mariscal Lateral*

- 09:30 Topological quantization and gauge invariance of charge transport in liquid insulators** **S.O1.D2.1\***  
Stefano Baroni<sup>1</sup>; <sup>1</sup>Scuola Internazionale Superiore di Studi Avanzati
- 10:15 Carbon-fibre composites with graphene filler for enhanced properties** **S.O1.D2.2**  
Ragnar Larsson<sup>1</sup>, Brina Blinzler<sup>1</sup>, Linnea Selegård<sup>2</sup>, Danilo Justino Carastan<sup>3</sup>; <sup>1</sup>Chalmers University of Technology, <sup>2</sup>Saab AB, <sup>3</sup>Universidade Federal do ABC

### *SESSION S.O2.D2 (11:00 - 12:00) - Room Mariscal Lateral*

- 11:00 First principles study of polarons using many-body X-ray absorption spectroscopy** **S.O2.D2.1**  
Sebastian Eduardo Reyes-Lillo<sup>1</sup>, David Prendergast<sup>2</sup>; <sup>1</sup>Universidad Andrés Bello, <sup>2</sup>Lawrence Berkeley National Laboratory
- 11:15 Cationic substitution of LSCF to enhance solid oxide fuel cells performances** **S.O2.D2.2**  
cecile autret-lambert<sup>1</sup>, daniela Neasca<sup>1</sup>, houssem guessmi<sup>1</sup>, Mohamed El Amrani<sup>1</sup>, Sonia Didry<sup>1</sup>, Rodolphe Sopracase<sup>1</sup>, Vinh Ta-Phuoc<sup>1</sup>, François Gervais<sup>1</sup>; <sup>1</sup>Université de Tours Francois Rabelais
- 11:30 Synthesis and characterization of ZnO-MgO-NiO-CoO-CuO high entropy oxides** **S.O2.D2.3**  
Valmor Roberto Mastelaro<sup>1</sup>, Amandine Ganzin<sup>2,3</sup>, Maria Ines Basso Bernardi<sup>2</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Instituto de Física de São Carlos - USP, <sup>3</sup>L'Institut Universitaire de Technologie (IUT) de l'université d'Aix-Marseille
- 11:45 Core-shell design to improve nanomaterials for industrial applications** **S.O2.D2.4**  
De Almeida Sonia<sup>1</sup>, Meledje nomel<sup>1</sup>, Cécile Autret<sup>1</sup>, Anthony Lucas<sup>2</sup>, François Pacreau<sup>2</sup>, François Gervais<sup>1</sup>; <sup>1</sup>Université de Tours Francois Rabelais, <sup>2</sup>SRT Microcéramique

### **SESSION S.O3.D2 (14:00 - 16:15) - Room Mariscal Lateral**

- 14:00 Ethanol Adsorption on Core@Pt-Shell Nanoparticles** S.O3.D2.1  
Vagner Alexandre Rigo<sup>1</sup>, Caetano Rodrigues Miranda<sup>2</sup>, Francesca Baletto<sup>3</sup>; <sup>1</sup>Federal University of Technology - Cornélio Procópio, <sup>2</sup>Instituto de Física - Universidade de São Paulo, <sup>3</sup>King's College London
- 14:15 Adsorption studies of organic molecules onto carbonates using first principles calculations** S.O3.D2.2  
Michele Aparecida Salvador<sup>1</sup>, Caetano Rodrigues Miranda<sup>1</sup>; <sup>1</sup>Instituto de Física - Universidade de São Paulo
- 14:30 Analysis of amino acid pyrolysis under high pressure using reactive molecular dynamics simulations** S.O3.D2.3  
Augusto Mohr Christmann<sup>1</sup>, Alan A Chequim<sup>1</sup>, María Alexandra Puerto Medina<sup>1</sup>, Naira Maria Balzaretto<sup>1</sup>, André R. Muniz<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 14:45 A meta-heuristic for classical atomistic and coarse-grained force field parameterization** S.O3.D2.4  
Jhonat Heberon Avelino de Souza<sup>1</sup>, Elton José Figueiredo de Carvalho<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 15:00 Sodium tantalate NaTa-O<sub>2</sub> terminated orthorhombic surface: an intrinsically enhanced water-splitting system** S.O3.D2.5  
Guilherme Ribeiro Portugal<sup>1</sup>, Sydney Ferreira Santos<sup>1</sup>, Jeverson Teodoro Arantes<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 15:15 Biomass-derived catalysts for dehydrogenative coupling of silanes with alcohols** S.O3.D2.6  
Iván Sorribes<sup>1</sup>, David Ventura-Espinosa<sup>1</sup>, Marcelo de Assis de Assis<sup>2</sup>, Jose A. Mata<sup>1</sup>, Elson Longo<sup>3</sup>, Juan Andrés<sup>1</sup>; <sup>1</sup>Universitat Jaume I, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos
- 15:30 Theoretical study of the interaction of gas phase molecules on 3D metal organic structures (MOF)** S.O3.D2.7\*  
Rafael Añez<sup>1</sup>; <sup>1</sup>Instituto Venezolano de Investigaciones Científicas

## **WEDNESDAY, SEPTEMBER 25**

### **Poster presentations**

#### **SESSION S.P5 (11:00 - 12:30)**

- 11:00 Analysis of Co incorporation into ZnO matrix and grain grown dynamics of nanostructured samples processed via mechanical milling** S.P5.1  
Rafael Tomaz Silva<sup>1</sup>, Hugo Bonette de Carvalho<sup>2</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Universidade Federal de Alfenas
- 11:00 Studies on the Mn incorporation into the wurtzite ZnO structure via solid state reaction: Functionalization via defect engineering** S.P5.2  
Viviane Maciel Almeida<sup>1</sup>, Felipe dos Santos Vieira<sup>2</sup>, Rafael Tomaz Silva<sup>1</sup>, Alexandre Mesquita<sup>3</sup>, Maria Ines Basso Bernardi<sup>4</sup>, Hugo Bonette de Carvalho<sup>2</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Universidade Federal de Alfenas, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>Universidade de São Paulo

- 11:00 Displacement fields and shear bands in Cu-Zr-Al metallic glasses** **S.P5.3**  
Alejandro Zuniga<sup>1</sup>, Marcela Bergamaschi Tercini<sup>1</sup>, Roberto Gomes de Aguiar Veiga<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Si and Ge (111) surface electronic structure** **S.P5.4**  
Alexandre Olivieri Kraus<sup>1</sup>, Humberto Naoyuki Yoshimura<sup>1</sup>, Jeverson Teodoro Arantes<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Cationic exchange in polymerized magnesium and cadmium sulphides** **S.P5.5**  
Alexandro Amorim Linhares<sup>1</sup>, Miguel Henrique Boratto<sup>1,2</sup>, André Avelino Pasa<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Estadual Paulista
- 11:00 Exploring Surface Effects in Transition-metal Doped ZnO Nanowires With Hybrid-Density Functional Theory** **S.P5.6**  
Andreia Luisa da Rosa<sup>1</sup>, Leticia Lira Tacca<sup>1</sup>, Thomas Frauenheim<sup>2</sup>, Dennis Franke<sup>2</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Universität Bremen
- 11:00 Theoretical Studies on Diffusion of Silver Atoms in  $\beta$ -Ag<sub>2</sub>WO<sub>4</sub> by in Situ Electron Beam irradiation** **S.P5.7**  
André Rodrigues Pinheiro<sup>1</sup>, Edison Zacarias da Silva<sup>2</sup>, Juan Andres<sup>3</sup>, Elson Longo<sup>4</sup>, Miguel A. San-Miguel<sup>5</sup>; <sup>1</sup>INSTITUTE OF CHEMISTRY/UNICAMP, <sup>2</sup>Instituto de Física "Gleb Wataghin", Unicamp, <sup>3</sup>Universitat Jaume I, <sup>4</sup>Universidade Federal de São Carlos, <sup>5</sup>Universidade Estadual de Campinas
- 11:00 Polypyrrole derivatives for optoelectronic applications: a DFT study on the influence of side groups** **S.P5.8**  
Alex Pifer Coleone<sup>1</sup>, Leonardo Gois Lascane<sup>2</sup>, Augusto Batagin-Neto<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>2</sup>Universidade Estadual Paulista - Campus Itapeva
- 11:00 Computational Analysis of poly(ether-imide) Pyrolysis toward carbon membrane production** **S.P5.9**  
Augusto Mohr Christmann<sup>1</sup>, Janice B.S. Hamm<sup>1</sup>, Liliane Damaris Pollo<sup>1</sup>, Nilson Romeu Marcilio<sup>1</sup>, Isabel Cristina Tessaro<sup>1</sup>, André R. Muniz<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 11:00 A DFT and EHT Study in Systems Based on Fe, Ni, Se and Te.** **S.P5.10**  
Jorge Luiz Pimentel Júnior<sup>1</sup>, Augusto Nazareno Soares Costa<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande
- 11:00 Theoretical and experimental evaluation of the Molecularly Imprinted Polymer (MIP) synthesis for triclosan adsorption** **S.P5.11**  
Camila Santos Dourado<sup>1</sup>, Fabiana Casarin<sup>1</sup>, Daniel Francisco Scalabrini Machado<sup>1</sup>, Jez Willian Batista Braga<sup>1</sup>, ANA CRISTI BASILE DIAS<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 11:00 Theoretical investigation of silver nanoparticles growth on the Ag<sub>3</sub>PO<sub>4</sub> surfaces stimulated by electron beam.** **S.P5.12**  
Carlos Eduardo Silva<sup>1</sup>, Edison Zacarias da Silva<sup>2</sup>, Juan Andrés<sup>3</sup>, Elson Longo<sup>4</sup>, Miguel A. San-Miguel<sup>1</sup>; <sup>1</sup>Instituto de Química, Unicamp, <sup>2</sup>Instituto de Física "Gleb Wataghin", Unicamp, <sup>3</sup>Departament de Química-Física i Analítica, Universitat Jaume I, <sup>4</sup>Instituto de Química, Unesp
- 11:00 PEDOT:PSS/AgNW thin films by spin coating technique for polymer solar cells application** **S.P5.13**  
Eduardo Lima Costa<sup>1</sup>, Carlos Eduardo Cava<sup>1</sup>, Edvani Curti Muniz<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Londrina
- 11:00 High throughput screening and discovery of compounds with Giant Rashba splitting** **S.P5.14**  
Elton Ogoshi de Melo<sup>1</sup>, CARLOS MERA<sup>1</sup>, Gustavo Martini Dalpian<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

- 11:00 Photoelectrochemical study of mesoporous hematite thin film decorated with Bi nanoparticles as light scattering centers** S.P5.15  
Fabrcio Benedito Destro<sup>1</sup>, Marcelo Antonio Donizetti Martinho<sup>2</sup>, Cipriano Benedito Gozzo<sup>2</sup>, Mario Rodrigo dos Santos Soares<sup>2</sup>, Marco Aurlio Liutheviciene Cordeiro<sup>3</sup>, Edson Roberto Leite<sup>4</sup>; <sup>1</sup>Programa de Pds-Graduao em Cincia e Engenharia de Materiais (UFSCar), <sup>2</sup>Departamento de Qumica da UFSCar - So Carlos, <sup>3</sup>Departamento de Engenharia de Materiais - UFSCar (So Carlos), <sup>4</sup>Laboratrio Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)
- 11:00 Study of the acid and reduction properties of Fe-M/ZSM-5 (M = Cu, Zr) using TPD-NH<sub>3</sub>, TPR-H<sub>2</sub> and DFT calculations** S.P5.16  
Felipe Girondi Denardin<sup>1</sup>, Andre R. Muniz<sup>1</sup>, Oscar William Perez Lopez<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 11:00 Theoretical Assessment of Photoexcitation and Electron Beam Irradiation Effects on Ag<sub>3</sub>PO<sub>4</sub> Photocatalytic Properties** S.P5.17  
Felipe Lipsky Gonzalez<sup>1</sup>, Elson Longo<sup>2,3</sup>, Juan Andrs<sup>4</sup>, Miguel A. San-Miguel<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal de So Carlos - Campus So Carlos, <sup>3</sup>Universidade Federal de So Carlos, <sup>4</sup>Universitat Jaume I
- 11:00 Numerical model of prediction of mechanical properties for duplex stainless steel aged at 800 °C, due to the appearance of the sigma phase** S.P5.18  
Fernanda Nascimento Moreira<sup>1</sup>, Ana Gabriella Conceio dos Santos<sup>1</sup>, Wesley Luiz da Silva Assis<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 11:00 Atomic and electronic properties of functionalized germanene** S.P5.19  
Flvio Bento de Oliveira<sup>1</sup>, Andreia Luisa da Rosa<sup>1</sup>, Erika Nascimento Lima<sup>2</sup>, Thomas Frauenheim<sup>3</sup>; <sup>1</sup>Universidade Federal de Goias, <sup>2</sup>Universidade Federal de Mato Grosso, <sup>3</sup>Universitt Bremen
- 11:00 Calcite/brine Interfacial Free Energy Calculations: Applications on Enhanced Oil Recovery** S.P5.20  
Gabriela Dias da Silva<sup>1</sup>, James Moraes de Almeida<sup>2</sup>, Alessandro Kirch<sup>1</sup>, Caetano Rodrigues Miranda<sup>1</sup>; <sup>1</sup>Instituto de Ffsica - Universidade de So Paulo, <sup>2</sup>Universidade Federal do ABC
- 11:00 First-Principles Study of the Polyol Electro-Oxidation Reaction on Pt Surfaces** S.P5.21  
Gabriela Volpini Soffiati<sup>1</sup>, Edison Zacarias da Silva<sup>2</sup>, Miguel Angel San-Miguel<sup>1</sup>; <sup>1</sup>Instituto de Qumica, Unicamp, <sup>2</sup>Instituto de Ffsica "Gleb Wataghin", Unicamp
- 11:00 Electronic properties of single and double-walled nanotubes of AlN and GaN under strain effects** S.P5.22  
Giovanne Bruno Mantovani Pinhal<sup>1</sup>, Naiara Letcia Marana<sup>1</sup>, Julio Ricardo Sambrano<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Jlio de Mesquita Filho" - Campus Bauru
- 11:00 Structural, electronic and piezoelastic properties of porous silicene and silicenylene nanotubes** S.P5.23  
Guilherme da Silva Lopes Fabris<sup>1</sup>, Jos Artigas dos Santos Laranjeira<sup>2</sup>, Julio Ricardo Sambrano<sup>3,1</sup>; <sup>1</sup>So Paulo State University, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universidade Estadual Paulista "Jlio de Mesquita Filho" - Campus Bauru
- 11:00 Theoretical studies of the structural, electronic and morphologic properties of the NaNbO<sub>3</sub> perovskites** S.P5.24  
Heitor Secco Seleghini<sup>1</sup>, Douglas Henrique Pereira<sup>2</sup>, Elson Longo<sup>3</sup>, Juan Andrs<sup>4</sup>, Miguel Angel San-Miguel<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal do Tocantins, <sup>3</sup>Universidade Federal de So Carlos, <sup>4</sup>Universitat Jaume I

- 11:00 Preparation and structural characterization of nanostructured multifunctional co-doped ZnO:Mn:Zr oxide** S.P5.25  
Isabella Silva de Souza<sup>1</sup>, Hugo Bonette de Carvalho<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 11:00 Defect Induced Room Temperature Ferromagnetism in Co-doped ZnO Bulk Samples** S.P5.26  
Marcio Peron Franco de Godoy<sup>1</sup>, Valmir Antonio Chitta<sup>2</sup>, Alexandre Mesquita<sup>3</sup>, Maurício Morais de Lima Jr.<sup>4</sup>, Andres Cantarero<sup>4</sup>, Juliana Maria Abreu da Silva Morbec<sup>5</sup>, Gul Rahman<sup>6</sup>, Hugo Bonette de Carvalho<sup>7</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Universidade Estadual de São Paulo, <sup>4</sup>Universitat de València, <sup>5</sup>University of Duisburg-Essen, <sup>6</sup>Quaid-i-Azam University Islamabad, <sup>7</sup>Universidade Federal de Alfenas
- 11:00 Synthesis of Gd-doped SrTiO<sub>3</sub> (Sr<sub>1-x</sub>Gd<sub>x</sub>TiO<sub>3</sub>): A multipurpose and functional oxide** S.P5.27  
Hellen Pereira de Jesus<sup>1</sup>, E. Thizay Magnavita<sup>1</sup>, Rafael Tomaz Silva<sup>1</sup>, Alexandre Mesquita<sup>2</sup>, Maria Ines Basso Bernardi<sup>3</sup>, Hugo Bonette de Carvalho<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universidade de São Paulo
- 11:00 Modeling of interdigitated electrodes for the identification of additives in biodiesel / diesel blends** S.P5.28  
Inocêncio Santos Santos Neto<sup>1</sup>, Pedro Y. C. de Santana<sup>1</sup>, Cassio Salomão Andrade<sup>1</sup>, Christian Diniz Carvalho<sup>1</sup>, Allan Kardec D. B. Filho<sup>1</sup>, Gilberto B. A. Filho<sup>1</sup>, Luciana M. R. Alencar<sup>1</sup>, Francisco S. M. Sinfrônio<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 11:00 Host-guest complexation between ammonium pillar[5]arene and anti-tuberculosis drugs: experimental and theoretical studies** S.P5.29  
Isabela Alves de Albuquerque Bessa<sup>1</sup>, Tamires Soares Fernandes<sup>1</sup>, Vinicius Gomes da Costa Madriaga<sup>1</sup>, Luciano Tavares da Costa<sup>1</sup>, Célia Machado Ronconi<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 11:00 Theoretical and Experimental Properties of New Ag<sub>2</sub>SeO<sub>3</sub> Crystals** S.P5.30  
Ivo Mateus Pinatti<sup>1</sup>, Ana Cristina Mora<sup>1</sup>, Juan Andrés<sup>2</sup>, Elson Longo<sup>1,3</sup>, Alexandre Z. Simões<sup>4</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Universitat Jaume I, <sup>3</sup>Universidade Federal de São Carlos, <sup>4</sup>São Paulo State University
- 11:00 Theoretical study of doping types n and p on single-walled boron nitride nanotubes** S.P5.31  
Jeziel Rodrigues Santos<sup>1</sup>, José Divino dos Santos<sup>1</sup>; <sup>1</sup>Universidade Estadual de Goiás
- 11:00 Iron implantation as catalyst for oriented graphitic structures by developed Electron Beam Irradiation System (EBIS)** S.P5.32  
João Paulo Campos Costa<sup>1,2</sup>, Vinícius Teodoro<sup>2</sup>, Marcelo de Assis de Assis<sup>2</sup>, Jefferson Bettini<sup>3</sup>, Lourdes Gracia<sup>4</sup>, Juan Andrés<sup>5</sup>, João Paulo Pereira Carmo<sup>1</sup>, Elson Longo<sup>2</sup>; <sup>1</sup>University of São Paulo, <sup>2</sup>Federal University of São Carlos, <sup>3</sup>Brazilian Nanotechnology National Laboratory, <sup>4</sup>Universitat Jaume I, <sup>5</sup>Departament de Química-Física i Analítica, Universitat Jaume I
- 11:00 Electronic, Vibrational and Morphological Study of CaMoO<sub>4</sub> and CaWO<sub>4</sub>** S.P5.33  
José Artigas dos Santos Laranjeira<sup>1</sup>, Guilherme da Silva Lopes Fabris<sup>2</sup>, Julio Ricardo Sambrano<sup>2,3</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>3</sup>São Paulo State University
- 11:00 Morphology evolution of  $\alpha$ -Ag<sub>2</sub>WO<sub>4</sub> and their photoluminescence emissions and antibacterial activities** S.P5.34  
Leticia O. Laier<sup>1</sup>, Marcelo de Assis de Assis<sup>2</sup>, Amanda Fernandes Gouveia<sup>3</sup>, Camila Cristina de Foggi<sup>1</sup>, Elson Longo<sup>2</sup>, Juan Andrés<sup>4</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universidade Estadual do Piauí, <sup>4</sup>Universitat Jaume I

- 11:00 Theoretical study of the morphological properties of PbMoO<sub>4</sub>** **S.P5.35**  
 José Artigas dos Santos Laranjeira<sup>1</sup>, Guilherme da Silva Lopes Fabris<sup>2</sup>, Julio Ricardo Sambrano<sup>2,3</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>3</sup>São Paulo State University

## THURSDAY , SEPTEMBER 26

### Poster presentations

#### SESSION S.P7 (09:30 - 11:00)

- 09:30 Facet-Dependent Photocatalytic and Microbiological Activities of Ag<sub>2</sub>CrO<sub>4</sub>: Integration of Experiment and Simulation** **S.P7.1**  
Ieda Lúcia Viana Rosa<sup>1</sup>, Marcelo de Assis de Assis<sup>2</sup>, Vinícius Teodoro<sup>2</sup>, Camila Cristina de Foggi<sup>3</sup>, João Paulo Campos Costa<sup>4,5</sup>, Thaianie Alcarde Robeldo<sup>2</sup>, Iván Sorribes<sup>6</sup>, Carlos Eduardo Vergani<sup>7</sup>, Carlos Eduardo Silva<sup>8</sup>, Miguel A. San-Miguel<sup>9</sup>, Juan Andrés<sup>6</sup>, Elson Longo<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>Escola de Engenharia de São Carlos, <sup>5</sup>Escola de Engenharia de Lorena - USP, <sup>6</sup>Universitat Jaume I, <sup>7</sup>Faculdade de Odontologia de Araraquara-UNESP, <sup>8</sup>INSTITUTE OF CHEMISTRY/UNICAMP, <sup>9</sup>Universidade Estadual de Campinas
- 09:30 Synthesis of Ag nanoparticles/AgX (X=Cl, Br, and I) heterostructures via electron beam. A novel material with enhanced photocatalytic and toxicological activity.** **S.P7.2**  
Marcelo de Assis de Assis<sup>1</sup>, Thaianie Alcarde Robeldo<sup>1</sup>, Amanda Fernandes Gouveia<sup>2</sup>, Camila Cristina de Foggi<sup>3</sup>, Tassia Flavia Dias Castro<sup>1</sup>, Ricardo Carneiro Borra<sup>1</sup>, João Paulo Campos Costa<sup>4,5</sup>, Juan Andrés<sup>6</sup>, Elson Longo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal do Piauí, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>Escola de Engenharia de São Carlos, <sup>5</sup>Escola de Engenharia de Lorena - USP, <sup>6</sup>Universitat Jaume I
- 09:30 Phase transition of cubic BaSnO<sub>3</sub> under pressure** **S.P7.3**  
 Thiago Marinho Duarte<sup>1</sup>, Iêda Maria Garcia dos Santos<sup>1</sup>, Elson Longo<sup>2</sup>, Juan Andrés<sup>3</sup>, Anderson Reis Albuquerque<sup>4</sup>, Lourdes Gracia<sup>3</sup>, Julio Ricardo Sambrano<sup>5</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universitat Jaume I, <sup>4</sup>Universidade Federal do Rio Grande do Norte, <sup>5</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"
- 09:30 Diffusion study for α-RbAg<sub>4</sub>I<sub>5</sub>-system at room temperature by molecular dynamics** **S.P7.4**  
Juan Carlos Burbano<sup>1</sup>, Diego Peña-Lara<sup>2</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Universidad del Valle
- 09:30 Experimental planning and optimization of the computing modeling of an anaerobic reactor manufactured in rotomolded high density polyethylene** **S.P7.5**  
Julio Roberto Santos Bicalho<sup>1</sup>, Sergio Maciel Faragasso<sup>1</sup>, Pericles Andre Assis Azevedo<sup>1</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca

- 09:30 Simulation of Solvent Evaporation to Study the Morphology of an Organic Thin Film** S.P7.6  
Karlisson Rodrigo de Almeida Sousa<sup>1</sup>, Leandro Benatto<sup>1</sup>, Luana Cristina Woulk de Menezes<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>, Marlus Koehler<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 09:30 Study of the chelating effect on the synthesis of  $\alpha$ -Ag<sub>2</sub>WO<sub>4</sub> crystals prepared by the sonochemical method** S.P7.7  
Lara Kelly Ribeiro<sup>1</sup>, Amanda Fernandes Gouveia<sup>2</sup>, Laécio Santos Cavalcante<sup>3</sup>, Geraldo Eduardo Luz Junior<sup>3</sup>, Elson Longo<sup>1</sup>, Ieda Lúcia Viana Rosa<sup>4</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>INSTITUTE OF CHEMISTRY/UNICAMP, <sup>3</sup>Universidade Estadual do Piauí, <sup>4</sup>Universidade Federal de São Carlos - Campus São Carlos
- 09:30 Spectroscopic evidence of defective species in nanostructured lanthanum (La)-doped cerium oxide (CeO<sub>2</sub>) gas sensors** S.P7.8  
Leandro Silva Rosa Rocha<sup>1</sup>, Rafael Aparecido Ciola Amoresi<sup>2,3</sup>, Thiago Marinho Duarte<sup>4</sup>, Naiara Letícia Marana<sup>5</sup>, Julio Ricardo Sambrano<sup>2</sup>, Celso Manuel Aldao<sup>6</sup>, Alexandre Z. Simões<sup>2</sup>, Miguel Adolfo PONCE<sup>6</sup>, Elson Longo<sup>7</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>São Paulo State University, <sup>3</sup>Universidade Estadual de São Paulo - Campus Guaratinguetá, <sup>4</sup>Universidade Federal da Paraíba, <sup>5</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>6</sup>Universidad Nacional de Mar del Plata, <sup>7</sup>Universidade Federal de São Carlos
- 09:30 DFT simulation on cubic phase of the relaxor Ba(Zr<sub>x</sub>Ti<sub>1-x</sub>)O<sub>3</sub> material** S.P7.9  
Leonardo Konopaski Andreani<sup>1</sup>, Sergio Ricardo de Lazaro<sup>1</sup>, Luis Henrique da Silveira Lacerda<sup>1</sup>, Renan Augusto Pontes Ribeiro<sup>2</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos
- 09:30 Synthesis and Characterization of the  $\beta$ -Ag<sub>2</sub>MoO<sub>4</sub> by Coprecipitation Method and DMSO as solvent** S.P7.10  
Lílian Cruz Santos<sup>1</sup>, Mayara Mondego Teixeira<sup>1</sup>, Leticia O. Laier<sup>2</sup>, Vinícius Teodoro<sup>1</sup>, Marcelo de Assis de Assis<sup>1</sup>, Elson Longo<sup>1</sup>; <sup>1</sup>Departamento de Química da UFSCar - São Carlos, <sup>2</sup>Instituto de Química, Unesp
- 09:30 Resistive Switching in Prussian Blue Thin Films** S.P7.11  
Lindiomar Borges de Avila Junior<sup>1</sup>, Fabrício Luiz Faita<sup>2</sup>, José Pedro Bastos Silva<sup>3</sup>, Maria de Jesus Matos Gomes<sup>3</sup>, André Avelino Pasa<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal do Rio Grande do Sul, <sup>3</sup>Universidade do Minho
- 09:30 Synthesis, Characterization and antifungal activity of Ag<sub>2</sub>Mo<sub>x</sub>W<sub>x-1</sub>O<sub>4</sub> compounds** S.P7.12  
Jussara Fratelli<sup>1</sup>, Luis Henrique Cardozo Amorin<sup>2</sup>, Victor Yuudi Suzuki<sup>2</sup>, Gabriela Souza<sup>2</sup>, Juliana Daniel<sup>1</sup>, Felipe de Almeida La Porta<sup>2</sup>; <sup>1</sup>Federal University of Technology - Paraná, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 09:30 Automating the computational investigation of catalytic activity of nanoparticles supported on metal oxide surfaces: a water gas shift reaction model** S.P7.13  
Manoel Victor Frutuoso Barrionuevo<sup>1</sup>, Miguel A. San-Miguel<sup>2</sup>; <sup>1</sup>INSTITUTE OF CHEMISTRY/UNICAMP, <sup>2</sup>Universidade Estadual de Campinas



- 09:30 Unveiling the Nature and Structure of ZnO-Bi<sub>2</sub>O<sub>3</sub> Grain boundaries** **S.P7.14**  
Marcelo Antonio Donizetti Martinho<sup>1</sup>, Gabriel Dornela Alves da Rocha<sup>2</sup>, Marco Aurélio Liutheviciene Cordeiro<sup>3</sup>, Edson Roberto Leite<sup>4</sup>; <sup>1</sup>Departamento de Química da UFSCar - São Carlos, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Departamento de Engenharia de Materiais - UFSCar (São Carlos), <sup>4</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)
- 09:30 CaZrO<sub>3</sub>:Eu<sup>3+</sup>: Energy, electronic, morphological, geometrical and photoluminescence properties: A synergy between experimental and first-principles calculations.** **S.P7.15**  
Marisa Carvalho Oliveira<sup>1</sup>, Renan Augusto Pontes Ribeiro<sup>2</sup>, Lourdes Gracia<sup>3</sup>, Sergio Ricardo de Lazaro<sup>4</sup>, Juan Andrés<sup>3</sup>, Elson Longo<sup>2</sup>, Mauricio Roberto Delmonte Bomio<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>3</sup>Universitat Jaume I, <sup>4</sup>Universidade Estadual de Ponta Grossa
- 09:30 A DFT study OF fluorination effects on Exciton Binding Energy of Pi-Conjugated Donor Polymers and the ITIC Molecular Acceptor** **S.P7.16**  
 Leandro Benatto<sup>1</sup>, Marlus Koehler<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 09:30 Theoretical validation of vibrational modes of BiOBr** **S.P7.17**  
Mateus Meneghetti Ferrer<sup>1</sup>, João Elias Figueiredo Soares Rodrigues<sup>2</sup>, Mário Lúcio Moreira<sup>1</sup>, Julio Ricardo Sambrano<sup>3</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>São Paulo State University
- 09:30 Computational study on the degradation of the endocrine disruptor acetochlor by the hydroxyl radical** **S.P7.18**  
Michell de Oliveira Almeida<sup>1</sup>, Káthia Maria Honório<sup>2,3</sup>, Marcos Roberto Vasconcelos Lanza<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos-USP, <sup>2</sup>Centro de Ciências Naturais e Humanas - UFABC, <sup>3</sup>Escola de Artes, Ciências e Humanidades - USP
- 09:30 Effect of quenching on the microstructural and magnetic properties of Co-ferrite** **S.P7.19**  
 Rafaella Casado Silva<sup>1</sup>, Giovanni Fiori Tini<sup>1</sup>, Victor Yuudi Suzuki<sup>1</sup>, Nathália Maria Costa Guari<sup>1</sup>, WALMIR ENO POTTKER<sup>1</sup>, Patrícia Cordeiro<sup>1</sup>, Jefferson Araujo<sup>2</sup>, Miguel Angel Cobos Fernandez<sup>3</sup>, Felipe de Almeida La Porta<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Department of physics, Pontifical Catholic University of Rio de Janeiro - PUC-Rio, <sup>3</sup>Universidad Complutense de Madrid
- 09:30 Simulation of reflection loss for multilayer radar absorbing material** **S.P7.20**  
Miguel Angelo do Amaral Junior<sup>1</sup>, Aline Fontana Batista<sup>2</sup>, Rafael Cardoso Toledo<sup>1</sup>, Braulio Haruo Kondo Lopes<sup>1</sup>, Ana Paula Silva Oliveira<sup>1</sup>, Pedro José de Castro<sup>1</sup>, Mauricio Ribeiro Baldan<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Departamento de Ciência e Tecnologia Aeroespacial
- 09:30 Simulation of reflection loss for monolayers in X, KU, K and KA bands for aeronautical and aerospace areas** **S.P7.21**  
Miguel Angelo do Amaral Junior<sup>1</sup>, Aline Fontana Batista<sup>1</sup>, Rafael Cardoso Toledo<sup>1</sup>, Braulio Haruo Kondo Lopes<sup>1</sup>, Ana Paula Silva Oliveira<sup>1</sup>, Pedro José de Castro<sup>1</sup>, Mauricio Ribeiro Baldan<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 09:30 Cation-Exchange in Zn<sub>x</sub>Cd<sub>1-x</sub>S films for Application as Switchable Memory** **S.P7.22**  
Miguel Henrique Boratto<sup>1</sup>, Alexandro Amorim Linhares<sup>2</sup>, Mirko Congiu<sup>1</sup>, Carlos FO Graeff<sup>1</sup>, André Avelino Pasa<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Universidade Federal de Santa Catarina

- 09:30 Structural defects in two-dimensional transition-metal dichalcogenides** S.P7.23  
Murilo Kendjy Vieira Onita<sup>1</sup>, Andreia Luisa da Rosa<sup>1</sup>, Flávio Bento de Oliveira<sup>1</sup>, Erika Nascimento Lima<sup>2</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Universidade Federal de Mato Grosso
- 09:30 Investigation of the growth of Ag nanoparticles on the surfaces of two different morphologies of  $\alpha$ -Silver tungstate via SEM electron beam irradiation and their effect on the photocatalytic activity** S.P7.24  
Nadia Guerra Macedo<sup>1</sup>, Thales Rafael Machado<sup>1</sup>, Marcelo de Assis de Assis<sup>1</sup>, Román Alvarez Roca<sup>1</sup>, Camila Cristina de Foggi<sup>2</sup>, Verónica Puerto-Belda<sup>3</sup>, Gladys Mínguez-Vega<sup>3</sup>, André Rodrigues Pinheiro<sup>4</sup>, Miguel A. San-Miguel<sup>4</sup>, Eloísa Cordoncillo<sup>3</sup>, Héctor Beltrán-Mir<sup>3</sup>, Juan Andrés<sup>3</sup>, Elson Longo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Universitat Jaume I, <sup>4</sup>Universidade Estadual de Campinas
- 09:30 ZnO nanotubes as piezoelectric gas sensor: DFT study** S.P7.25  
Naiara Letícia Marana<sup>1</sup>, Julio Ricardo Sambrano<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>2</sup>São Paulo State University
- 09:30 Biomimetic polymers of plant cutin: An approach from coarse-grained molecular modeling** S.P7.26  
Otto Mao Vargas M. Bueno<sup>1</sup>, Miguel Angel San-Miguel<sup>2</sup>; <sup>1</sup>INSTITUTE OF CHEMISTRY/UNICAMP, <sup>2</sup>Universidade Estadual de Campinas
- 09:30 Apollom: An automated approach to identify semiconductor properties** S.P7.27  
Paulo Augusto Nardi<sup>1</sup>, Fauze Ahmad Aouada<sup>2</sup>, Ana Paula de Moura<sup>3</sup>, Máximo Siu Li<sup>4</sup>; <sup>1</sup>Federal University of Technology - Cornélio Procópio, <sup>2</sup>São Paulo State University, <sup>3</sup>Universidade Tecnológica Federal do Paraná, <sup>4</sup>Instituto de Física de São Carlos - USP
- 09:30 Modeling Small-Angle X-ray Scattering Data for DNA-Lipid Complexes: A Novel Approach** S.P7.28  
Pedro Leonidas Oseliero Filho<sup>1</sup>, Frédéric Nallet<sup>2</sup>, Cristiano Luís Pinto de Oliveira<sup>1</sup>; <sup>1</sup>Instituto de Física - Universidade de São Paulo, <sup>2</sup>Centre de Recherche Paul-Pascal
- 09:30 Micellar containing lipopeptides: A computational study comparing two different macrostructured assemblies** S.P7.29  
Pedro Tendrih Sodré<sup>1,2</sup>, Maurício Domingues Coutinho-Neto<sup>1</sup>, Wendel Andrade Alves<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Centro de Ciências Naturais e Humanas - UFABC
- 09:30 Modeling of potential distribution for cathodic protection in submarine systems** S.P7.30  
Priscilla Mengarda<sup>1,2</sup>, Patricio Rodolfo Impinnisi<sup>2</sup>, Igor de Lacerda<sup>2</sup>, Luiz Alkimin de Lacerda<sup>2</sup>, Roberto Dalledone Machado<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Instituto de Tecnologia para o Desenvolvimento
- 09:30 Modulation of the electrical properties of CeO<sub>2</sub> by modifying the morphology during the synthesis** S.P7.31  
Regiane Cristina Oliveira<sup>1</sup>, Rafael Aparecido Ciola Amoresi<sup>1</sup>, Priscila Barros de Almeida<sup>2</sup>, Naiara Letícia Marana<sup>1</sup>, Julio Ricardo Sambrano<sup>1</sup>, Elson Longo<sup>2,3</sup>, Alexandre Z. Simões<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>3</sup>Universidade Federal de São Carlos
- 09:30 DFT study about the role of oxygen vacancies on the multiferroic properties of ATiO<sub>3</sub> (A = Mn, Fe, Ni)** S.P7.32  
Renan Augusto Pontes Ribeiro<sup>1</sup>, Marisa Carvalho Oliveira<sup>2</sup>, Juan Andrés<sup>3</sup>, Mauricio Roberto Delmonte Bomio<sup>2</sup>, Sergio Ricardo de Lazaro<sup>4</sup>, Elson Longo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Universidade Federal do Rio Grande do Norte, <sup>3</sup>Universitat Jaume I, <sup>4</sup>Universidade Estadual de Ponta Grossa

- 09:30 Theoretical study of TiO<sub>2</sub> nanotube with silver clusters** **S.P7.33**  
Richard Castro Júnior<sup>1</sup>, Naiara Letícia Marana<sup>2</sup>, Julio Ricardo Sambrano<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Bauru, <sup>3</sup>São Paulo State University
- 09:30 Optimization of Ti<sub>6</sub>Al<sub>4</sub>V auxetic structures** **S.P7.34**  
Ruben Acevedo<sup>1</sup>, Radek Kolman<sup>2</sup>, Marcio Celso Fredel<sup>1</sup>, Edson Santos<sup>3</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Thermomechanics Institute of the Czech Academy of Sciences, <sup>3</sup>Zeiss
- 09:30 Tuning In<sub>2</sub>O<sub>3</sub> properties towards catalytic applications** **S.P7.35**  
Samantha Custódio Silva Lemos<sup>1</sup>, Iván Sorribes<sup>2</sup>, Edson Nossol<sup>1</sup>, ANTONIO OTAVIO T PATROCINIO<sup>1</sup>, Juan Andrés<sup>2</sup>, Renata Cristina de Lima<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Universitat Jaume I
- 09:30 Comparative study of high pressure and doping induced In<sub>2</sub>O<sub>3</sub> phase transition** **S.P7.36**  
Samantha Custódio Silva Lemos<sup>1</sup>, Lourdes Gracia<sup>2</sup>, Juan Andrés<sup>2</sup>, Renata Cristina de Lima<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Universitat Jaume I
- 09:30 Magnetoelectric PbBO<sub>3</sub> (B = Cu, Cr, Mn, Co and V) materials: lead-based multiferroics with high potential for spintronics and multiferroic devices** **S.P7.37**  
Luis Henrique da Silveira Lacerda<sup>1</sup>, Sergio Ricardo de Lazaro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa
- 09:30 First-principles DFT calculations applied on MnTiO<sub>3</sub> surfaces** **S.P7.38**  
Sergio Ricardo de Lazaro<sup>1</sup>, Renan Augusto Pontes Ribeiro<sup>2</sup>, Elson Longo<sup>3</sup>, Juan Andrés<sup>4</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>4</sup>Universitat Jaume I
- 09:30 4D-printed origami-inspired multimaterial structures** **S.P7.39**  
Silvia Lenyra Meirelles Campos Titotto<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 09:30 Structure-property correlation: a computational approach to perovskite** **S.P7.40**  
Suellen Matias Ferreira<sup>1</sup>, Nélio Henrique Nicoleti<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 09:30 Composition-dependent synergetic properties of Zn<sub>2</sub>GeO<sub>4</sub>/g-C<sub>3</sub>N<sub>4</sub> heterostructure** **S.P7.41**  
Victor Yuudi Suzuki<sup>1</sup>, Luis Henrique Cardozo Amorin<sup>1</sup>, Jussara Rodrigues Fratelli<sup>1</sup>, Rafaella Casado Silva<sup>1</sup>, Giovanni Fiori Tini<sup>1</sup>, Nathália Maria Costa Guari<sup>1</sup>, WALMIR ENO POTTKER<sup>1</sup>, Felipe de Almeida La Porta<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 09:30 Characterization of structural, optical and photocatalyst properties of Mn-doped Zn<sub>2</sub>GeO<sub>4</sub> nanorods** **S.P7.42**  
Victor Yuudi Suzuki<sup>1</sup>, Luis Henrique Cardozo Amorin<sup>1</sup>, Jussara Rodrigues Fratelli<sup>1</sup>, Rafaella Casado Silva<sup>1</sup>, Giovanni Fiori Tini<sup>1</sup>, Nathália Maria Costa Guari<sup>1</sup>, WALMIR ENO POTTKER<sup>1</sup>, Máximo Siu Li<sup>2</sup>, Elson Longo<sup>3,4</sup>, Felipe de Almeida La Porta<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Instituto de Física de São Carlos - USP, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>4</sup>Universidade Federal de São Carlos
- 09:30 Influence of Ni doped Ag<sub>2</sub>CrO<sub>4</sub> on its structural, optical and photocatalytic properties** **S.P7.43**  
Vinícius Teodoro<sup>1</sup>, Aline Barrios Trench<sup>1</sup>, Ana Cristina Mora<sup>2</sup>, Elson Longo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Departamento de Química da UFSCar - São Carlos
- 09:30 Ferroelectric Polarization of (Pb<sub>0.90</sub>Ca<sub>0.10</sub>)TiO<sub>3</sub> Thin Films by Piezoresponse Microscopy** **S.P7.44**  
Wagner Benicio Bastos<sup>1</sup>, Elson Longo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos

**09:30 Kinnetic Monte Carlo Simulation Of The Early Stages Of Metallic Thin Films Growth S.P7.45**

Yasmin Watanabe de Moura<sup>1</sup>, Rodrigo B Capaz<sup>1</sup>, Renata Simao<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro

# **SYMPOSIUM T - Nanofibers, Applications and Related Technology**

## **Symposium organizers:**

Profa. Dra. Claudia Merlini (Universidade Federal de Santa Catarina (UFSC))

Prof. Dr. Cicero R. Cena (Universidade Federal de Mato Grosso do Sul (UFMS))

Prof. Dr. Deuber Lincon da Silva Agostini (Universidade Estadual Paulista "Júlio de Mesquita Filho" (UNESP))

Profa. Dra. Roselena Faez (Universidade Federal de São Carlos (UFSCar) )



# MONDAY , SEPTEMBER 23

\* Invited Lecture

## *SESSION T.01.D1 (09:30 - 10:30) - Room Cáspio*

- 09:30 Nanocelluloses for 3D printing applications** **T.O1.D1.1\***  
Gilberto Siqueira<sup>1</sup>, Michael K. Hausmann<sup>1</sup>, Yannick Nagel<sup>1</sup>, Rafael Libanori<sup>2</sup>,  
Tanja Zimmermann<sup>1</sup>, André Studart<sup>2</sup>, Gustav Nyström<sup>1</sup>; <sup>1</sup>Swiss Federal  
Laboratories for Materials Science and Technology, <sup>2</sup>Swiss Federal Institute of  
Technology / Eidgenössische Technische Hochschule ETH Zürich
- 10:00 Processing biopolymers and their blends and composites with synthetic thermoplastic polymers** **T.O1.D1.2**  
Antonio Jose Felix Carvalho<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade  
de São Paulo (USP)
- 10:15 Using the Solution Blow Spinning Technique to produce Core-shell Nanofibers** **T.O1.D1.3**  
Luiz Henrique Capparelli Mattoso<sup>1</sup>, Rafaella Takehara Paschoalin<sup>2</sup>, Raja  
Sebastian<sup>1</sup>, Osvaldo Novais de Oliveira Jr<sup>3</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Instituto de  
Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>Instituto de  
Física de São Carlos - USP

## *SESSION T.02.D1 (11:00 - 12:00) - Room Cáspio*

- 11:00 Chemical modification of carbon nanostructures enables preparation of electrospun scaffolds for biomedical applications** **T.O2.D1.1\***  
Enzo Menna<sup>1</sup>, Nicola Vicentini<sup>1</sup>, Teresa Gatti<sup>1</sup>, Carla Marega<sup>1</sup>; <sup>1</sup>Università degli  
Studi di Padova
- 11:30 Biopolymer-based membrane functionalized with Teos for drugs identification** **T.O2.D1.2**  
Adriana Marques<sup>1,2</sup>, Sandra Maria da Luz<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência  
e Tecnologia de São Paulo, <sup>2</sup>Universidade de Brasília
- 11:45 New collector design for electrospinning technique** **T.O2.D1.3**  
EDUARDO RADOVANOVIC<sup>1</sup>, Wilker Caetano<sup>1</sup>, Gabriel Batista César<sup>1</sup>, Noboru  
Hioka<sup>1</sup>, Giovanna Picoli Libel<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá

## *SESSION T.03.D1 (14:00 - 16:15) - Room Cáspio*

- 14:00 Electrospinning: the fascinating technique for tissue engineering and drug delivery** **T.O3.D1.1\***  
Ana Paula Immich<sup>1</sup>, Gabriela Maestri<sup>1</sup>, Rafael Luís Boemo<sup>2</sup>, Luiz Henrique  
Catalani<sup>3</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Hospital Joana de  
Gusmão, <sup>3</sup>Universidade de São Paulo

- 14:30 Anti-microbial effects of PLGA electrospun scaffolds.** **T.O3.D1.2**  
 ALINE ORVALHO PEREIRA<sup>1</sup>, Isabella Maria Lopes Italiano<sup>1</sup>, Thaila Quatrini Corrêa<sup>2</sup>, Rafaella Takehara Paschoalin<sup>2</sup>, Francisco van Riel Neto<sup>3</sup>, Ievgeniia Iermak<sup>2</sup>, Heloisa Ciol<sup>2</sup>, Natalia Mayumi Inada<sup>2</sup>, Vanderlei Salvador Bagnato<sup>2</sup>, Osvaldo Novais de Oliveira Jr<sup>4</sup>, Iseli L Nantes-Cardoso<sup>5</sup>, Alexandre Marletta<sup>3</sup>, Patricia Targon Campana<sup>1</sup>, Juliana Casares<sup>5</sup>, David Da Mata Lopes<sup>5</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>Universidade Federal de Uberlândia, <sup>4</sup>Instituto de Física de São Carlos - USP, <sup>5</sup>Universidade Federal do ABC
- 14:45 Polyaniline-coated electrospun PVDF-HFP membrane for removal of chromium from aqueous solution** **T.O3.D1.3**  
Guilherme Dognani<sup>1,2</sup>, Pejman Hadi<sup>1,3</sup>, Hongyang Ma<sup>1,4</sup>, Flavio Camargo Cabrera<sup>2</sup>, Benjamin Hsiao<sup>1</sup>, Aldo Eloizo Job<sup>2</sup>, Deuber L. S. Agostini<sup>2</sup>; <sup>1</sup>Stony Brook University, <sup>2</sup>Universidade Estadual Paulista, Campus de Presidente Prudente, <sup>3</sup>New York State Center for Clean Water Technology, <sup>4</sup>Beijing University of Chemical Technology
- 15:00 Bacterial nanocellulose-based nanocomposites nanomaterials for multifunctional application** **T.O3.D1.4\***  
Hernane da Silva Barud<sup>1</sup>; <sup>1</sup>Universidade de Araraquara
- 15:30 Production of micro and nanofibers by solution blow spinning: current status** **T.O3.D1.5\***  
Eliton S. Medeiros<sup>1</sup>, Juliano E. Oliveira<sup>2</sup>, Gregory M. Glenn<sup>3</sup>, Jonny J. Blaker<sup>4</sup>, Ryan D. Greenhalgh<sup>4</sup>, Romualdo Menezes<sup>5</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Universidade Federal de Lavras, <sup>3</sup>Western Regional Research Center, <sup>4</sup>University of Manchester, <sup>5</sup>Universidade Federal de Campina Grande

## TUESDAY, SEPTEMBER 24

### Poster presentations

#### *SESSION T.P3 (11:00 - 12:30)*

- 11:00 Effects of solution rheology in electrospinning of Hyaluronic acid/ Poly (vinyl alcohol) membranes** **T.P3.1**  
Karine Cappuccio de Castro<sup>1</sup>, Larissa Giorgetti Mendes<sup>1</sup>, Maria Gabriela Nogueira Campos<sup>2</sup>, Lucia Helena Innocentini Mei<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>University of Central Florida
- 11:00 Nanostructured poly (ethylene oxide) (PEO) membrane loaded with human thrombin as biomaterial application** **T.P3.2**  
Larissa Giorgetti Mendes<sup>1</sup>, Karine Cappuccio de Castro<sup>1</sup>, Filipe Vargas Ferreira<sup>1</sup>, Jonny Burga Sanchez<sup>1</sup>, Lucia Helena Innocentini Mei<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 11:00 Rare earth nickelates: nanowires production** **T.P3.3**  
Bruna Niccoli Ramirez<sup>1,2,3</sup>, Jéssica Helisa Hautrive Rossato<sup>3</sup>, Márcia Tsuyama Escote<sup>3</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie, <sup>2</sup>Universidade São Judas Tadeu, <sup>3</sup>Universidade Federal do ABC



- 11:00 Influence of sonication power on the structural and electrical properties of sodium titanate.** T.P3.4  
Bruna Bandeira do Nascimento<sup>1</sup>, Augusto Dias Melo<sup>1</sup>, Juliana Pereira da Silva<sup>1</sup>, Luana Carvalho Leal<sup>1</sup>, Lianet Aguilera Domínguez<sup>1</sup>, Yurimiler Leyet Ruiz<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 11:00 Incorporation of titanium dioxide and iron oxide in polymeric fibers obtained by electrospinning** T.P3.5  
Alessandra Ruyz Medeiros<sup>1</sup>, Fabiana Silva Lima<sup>1</sup>, Josiane Caetano<sup>1</sup>, Douglas Cardoso Dragunski<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 11:00 Development of poly(vinylidene fluoride)/carbon nanotubes fibrous membranes using the electrospinning technique** T.P3.6  
Alex dos Santos<sup>1</sup>, Vanessa Oliveira Castro<sup>1</sup>, Claudia Merlini<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Production of polymeric scaffolds by Electrospinning using poly(lactic-co-glycolic acid) (PLGA) with Photodithazine® (PDZ) addition for Photodynamic Therapy applications.** T.P3.7  
Isabella Maria Lopes Italiano<sup>1</sup>, ALINE ORVALHO PEREIRA<sup>1</sup>, Thaila Quatrini Corrêa<sup>2</sup>, Heloisa Ciol<sup>2</sup>, Ievgeniia Iermak<sup>2</sup>, Vanderlei Salvador Bagnato<sup>2</sup>, Natalia Mayumi Inada<sup>2</sup>, José Roberto Tozoni<sup>3,4</sup>, Alexandre Marletta<sup>3</sup>, Patricia Targon Campana<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>Universidade Federal de Uberlândia, <sup>4</sup>UFU
- 11:00 Production of polymeric scaffolds by Electrospinning using polycaprolactone (PCL) with Photogem® (PG) addition for Photodynamic Therapy (PDT) applications.** T.P3.8  
ALINE ORVALHO PEREIRA<sup>1</sup>, Thaila Quatrini Corrêa<sup>2</sup>, Heloisa Ciol<sup>2</sup>, Ievgeniia Iermak<sup>2</sup>, Vanderlei Salvador Bagnato<sup>2</sup>, Natalia Mayumi Inada<sup>2</sup>, José Roberto Tozoni<sup>3,4</sup>, Alexandre Marletta<sup>3</sup>, Patricia Targon Campana<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>Universidade Federal de Uberlândia, <sup>4</sup>UFU
- 11:00 Effect of sonication time interval on the size and crystallinity degree of cellulose nanocrystals** T.P3.9  
Jéssica da Silva Chagas<sup>1</sup>, Julia Nathalia S. Almeida<sup>1</sup>, Anderson Carlos Lima Pereira<sup>1</sup>, Eliton Souto Medeiros<sup>1</sup>, Bruno Alessandro Silva Guedes de Lima<sup>1</sup>, Juliano Elvis Oliveira<sup>2</sup>, Luiz Henrique Capparelli Mattoso<sup>3</sup>, Amélia Severino Ferreira e Santos<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba, <sup>2</sup>Universidade Federal de Lavras, <sup>3</sup>Embrapa Instrumentação
- 11:00 Nanofibers electrospun of poly(vinylidene fluoride) with polypyrrole for detection of ammonia gas** T.P3.10  
André Antunes da Silva<sup>1</sup>, Bruno Henrique de Santana Gois<sup>1</sup>, Vagner Santos<sup>1</sup>, Pedro Leonardo Silva<sup>1</sup>, Vison Silva Nascimento<sup>1</sup>, Deuber L. S. Agostini<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente
- 11:00 Photocatalytic Activity Evaluation of TiO<sub>2</sub> Nanofibers obtained by Electrospinning** T.P3.11  
Arthur Martins Gabriel<sup>1</sup>, Tauã Emanuel Silva<sup>1</sup>, Fernando Henrique Cristovan<sup>1</sup>, Tatiane Moraes Arantes<sup>1</sup>; <sup>1</sup>Universidade Federal de Jataí

- 11:00 Microwave-assisted hydrothermal synthesis of Na<sub>2</sub>Ti<sub>3</sub>O<sub>7</sub> doped with lithium: Structural and electrical properties.** T.P3.12  
Augusto Dias Melo<sup>1</sup>, Juliana Pereira da Silva<sup>1</sup>, David Silva Moura<sup>1</sup>, Bruna Bandeira do Nascimento<sup>1</sup>, Marcos Marques da Silva Paula<sup>1</sup>, Lianet Aguilera Domínguez<sup>1</sup>, Jose Anglada Rivera<sup>2</sup>, Fidel Guerrero Zayas<sup>1</sup>, Yurimiler Leyet Ruiz<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Amazonas
- 11:00 The influence of aniline derivates polymerization on the structure of cellulose nanofibers** T.P3.13  
Bianca de Andrade Feitosa<sup>1</sup>, Edgar Aparecido Sanches<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP), <sup>2</sup>Universidade Federal do Amazonas
- 11:00 Gas sensor based on poly(vinyl alcohol) and polypyrrole electrospun** T.P3.14  
Bruno Henrique de Santana Gois<sup>1</sup>, André Antunes da Silva<sup>1</sup>, Pedro Leonardo Silva<sup>1</sup>, Vagner Santos<sup>1</sup>, Vison Silva Nascimento<sup>1</sup>, Claudia Merlini<sup>2</sup>, Deuber L. S. Agostini<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente, <sup>2</sup>Universidade Federal de Santa Catarina
- 11:00 Enzymatic assisted production of microfibrillated cellulose** T.P3.15  
Bruno R. Rossi<sup>1</sup>, Vanessa de Oliveira Arnoldi Pellegrini<sup>1</sup>, Emanoele Maria Santos Chiromito<sup>2</sup>, Antonio Jose Felix Carvalho<sup>2</sup>, Igor Polikarpov<sup>1</sup>, Valmor Roberto Mastelaro<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Escola de Engenharia de São Carlos
- 11:00 Development of polymeric membranes containing thermochromic particles using the electrospinning technique** T.P3.16  
Camila Cristina Stapait<sup>1</sup>, Claudia Merlini<sup>1</sup>, Fernando Ribeiro Oliveira<sup>1</sup>, Fernanda Steffens<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Fabrication of electrospun mats polyaniline –coated poly(methyl methacrylate) for gas sensing applications.** T.P3.17  
Danay Manzo Jaime<sup>1</sup>, Claudia Merlini<sup>1</sup>, Guilherme Mariz de Oliveira Barra<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Synthesis and characterization of MoO<sub>3</sub>-based nanopapers** T.P3.18  
Dandara Martins Ferreira<sup>1</sup>, Pedro Henrique Aguiar<sup>1</sup>, Francisco Murilo Tavares de Luna<sup>1</sup>, Francisco Ferreira Sousa<sup>2</sup>, Paulo de Tarso Cavalcante Freire<sup>1</sup>, José Valdenir Silveira<sup>1</sup>, Rosana Maria Alves Saboya<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Universidade Federal do Pará
- 11:00 Evaluation of nanofibers PVA/BiVO<sub>4</sub> as photoanode for photoelectrochemical degradation of glucose** T.P3.19  
Diego N. David-Parra<sup>1</sup>, Nayara A. Alves<sup>1</sup>, Deuber L. S. Agostini<sup>1</sup>, Marcos F. S. Teixeira<sup>1</sup>; <sup>1</sup>São Paulo State University
- 11:00 Effects of eletrospinning parameters on PVA/BiVO<sub>4</sub> nanofibers based** T.P3.20  
Diego N. David-Parra<sup>1</sup>, Deuber L. S. Agostini<sup>1</sup>, Marcos F. S. Teixeira<sup>1</sup>; <sup>1</sup>São Paulo State University
- 11:00 Polymeric fibers with titanium dioxide obtained by electrospinning** T.P3.21  
Eduarda Ballmann<sup>1</sup>, Josiane Caetano<sup>1</sup>, Douglas Cardoso Dragunski<sup>1</sup>, Andressa Giombelli Rosenberger<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 11:00 PVA/MWCNT Nanofibers Composite Filter produced by Electospinning for ammonia adsorption on a gas system** T.P3.22  
Eduardo Lima Costa<sup>1</sup>, Camille Vicente<sup>1</sup>, Carlos Eduardo Cava<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Londrina

- 11:00 PHBV/MFC nanocomposites obtained by spray-drying using PVA as carrier agent** **T.P3.23**  
Emanoele Maria Santos Chiromito<sup>1</sup>, Rafael Grande<sup>1</sup>, Antonio Jose Felix Carvalho<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos
- 11:00 Titanium dioxide particles eletroated and used as a sensor** **T.P3.24**  
 ANDRESSA GIOMBELLI ROSENBERGER<sup>1</sup>, Fabiana Silva Lima<sup>1</sup>, Alessandra Ruyz Medeiros<sup>1</sup>, Douglas Cardoso Dragunski<sup>1</sup>, Josiane Caetano<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 11:00 Evaluation of an electronic tongue system modified with electrospun nanofibers to monitor water contamination by Isoborneol** **T.P3.25**  
Fernanda Migliorini Migliorini<sup>1</sup>, Kelcilene Teodoro<sup>1</sup>, Vanessa Priscila Scagion<sup>1,2</sup>, Danilo Martins dos Santos<sup>1</sup>, Fernando Joseppetti Fonseca<sup>3</sup>, Luiz Henrique Capparelli Mattoso<sup>1</sup>, Daniel Souza Corrêa<sup>1,2</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>3</sup>University of São Paulo
- 11:00 Processing and Characterization of White Clay from the City of Resende Costa - MG** **T.P3.26**  
Francis Faria Goulart<sup>1</sup>, Thaís da Costa Dias<sup>1</sup>, Roseli Marins Balestra<sup>1</sup>; <sup>1</sup>Universidade Federal de São João Del Rei
- 11:00 PBAT/PLA nanofibers containing the drug Cilostazol** **T.P3.27**  
Gabriela Lauer Breitenbach<sup>1</sup>, Lidiane Rodrigues Antunes<sup>1</sup>, Josiane Caetano<sup>1</sup>, Douglas Cardoso Dragunski<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 11:00 Polymethylmethacrylate/chitosan/(silver nanoparticles) composite membranes and their antimicrobial activity** **T.P3.28**  
Hérica Dias da Rocha<sup>1</sup>, Lizeth Carolina Mojica Sánchez<sup>1</sup>, Romario justino da silva<sup>1</sup>, Bruna Gomes Maciel<sup>1</sup>, Filipe Dione Souza Gorza<sup>1</sup>, Graciela da Costa Pedro<sup>1</sup>, Gabriela Plautz Ratkovski<sup>1</sup>, Celso de Melo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 11:00 Polymethylmethacrylate/(rice husk ash)/polypyrrole composite membranes and their use in the remediation of aqueous media** **T.P3.29**  
Hérica Dias da Rocha<sup>1</sup>, Edson Reis<sup>1</sup>, Gabriela Plautz Ratkovski<sup>1</sup>, Romario justino da silva<sup>1</sup>, Filipe Dione Souza Gorza<sup>1</sup>, Graciela da Costa Pedro<sup>1</sup>, Celso de Melo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 11:00 Core-shell electrospun nanofibers of PLA/PVA/Papain for application in topical wounds.** **T.P3.30**  
Ivaneia Barreto Beltrão<sup>1</sup>, Mariano Sato S B Monteiro<sup>2</sup>, Maria Celiana Pinheiro Lima<sup>3</sup>, Marcos Lopes Dias<sup>1</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ, <sup>2</sup>Universidade Federal do Rio de Janeiro, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio de Janeiro
- 11:00 Synthesis of ultrapure  $\beta$ -MoO<sub>3</sub> by sublimation method** **T.P3.31**  
 Maria Vitória Lima Ramos<sup>1</sup>, Rosana Maria Alves Saboya<sup>1</sup>, Odair Pastor Ferreira<sup>1</sup>, Paulo de Tarso Cavalcante Freire<sup>1</sup>, Antonio Gomes Souza Filho<sup>1</sup>, José Valdenir Silveira<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará
- 11:00 Pressure-induced amorphization and polyamorphism in h-MoO<sub>3</sub> nanorods** **T.P3.32**  
José Valdenir Silveira<sup>1</sup>, Francisco Ferreira Sousa<sup>2</sup>, João Victor Barbosa Moura<sup>1</sup>, José Gadelha Silva Filho<sup>1</sup>, Adenilson Oliveira dos Santos<sup>3</sup>, Cleânio Luz Lima<sup>4</sup>, Antonio Gomes Souza Filho<sup>1</sup>, Paulo de Tarso Cavalcante Freire<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Universidade Federal do Pará, <sup>3</sup>Universidade Federal do Maranhão, <sup>4</sup>Universidade Federal do Piauí

- 11:00  $\beta$ -MoO<sub>3</sub> microcrystals under extreme conditions: Raman scattering and XRD studies** T.P3.33  
José Valdenir Silveira<sup>1</sup>, Francisco Ferreira Sousa<sup>2</sup>, Cleânio Luz Lima<sup>3</sup>, Diego Félix Dias<sup>1</sup>, José Marcos Sasaki<sup>1</sup>, Paulo de Tarso Cavalcante Freire<sup>1</sup>, Antonio Gomes Souza Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Universidade Federal do Pará, <sup>3</sup>Universidade Federal do Piauí
- 11:00 Microwaves assisted Na<sub>2</sub>Ti<sub>3</sub>O<sub>7</sub> nanoparticles: effect of synthesis time on structural properties** T.P3.34  
 Lukas Augusto de Lima Basilio<sup>1</sup>, Rodrigo Muniz de Sousa<sup>1</sup>, Juliana Pereira da Silva<sup>1</sup>, José Carlos Calado Junior<sup>1</sup>, Jean Carlos Silva Andrade<sup>1</sup>, Yurimiler Leyet Ruiz<sup>1</sup>, Jose Anglada Rivera<sup>2</sup>, Francisco Xavier Nobre<sup>2</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Amazonas
- 11:00 Electrochemical detection of MRSA bacteria using Layer-by-Layer films containing antimicrobial peptide Hyliina with luminescent nanoparticles immobilized on silk fibroin** T.P3.35  
Lais Roncalho Lima<sup>1</sup>, Marli Leite de Moraes<sup>2</sup>, Eduardo Maffud Cilli<sup>3</sup>, Elenice Deffune<sup>4</sup>, Sidney J.L. Ribeiro<sup>5</sup>; <sup>1</sup>Instituto de Química, Unesp, <sup>2</sup>Universidade Federal de São Paulo, <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>São Paulo State University, <sup>5</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil
- 11:00 Functional bionanocomposites based in natural polymers and sepiolite clay** T.P3.36  
Lais Roncalho Lima<sup>1</sup>, Hernane da Silva Barud<sup>2,3</sup>, Sidney J.L. Ribeiro<sup>4</sup>, Ana Clécia Santos de Alcântara<sup>5</sup>; <sup>1</sup>Instituto de Química, Unesp, <sup>2</sup>Centro Universitário de Araraquara, <sup>3</sup>Universidade de Araraquara, <sup>4</sup>Universidade Estadual Paulista Instituto de Química, Araraquara, 14800-060 Araraquara, SP, Brasil, <sup>5</sup>Universidade Federal do Maranhão
- 11:00 Thermal Stability for Jute Cellulose** T.P3.37  
Lays Furtado de Medeiros Souza Kataoka<sup>1</sup>, Sandra Maria da Luz<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 11:00 Silver nanowires and PEDOT:PSS for use as coated semitransparent electrode** T.P3.38  
Leonardo Dias Cagnani<sup>1</sup>, Roberto Mendonça Faria<sup>2</sup>; <sup>1</sup>Developnow Projetos de Software e Eletrônica Ltda., <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 11:00 Comparison between direct and indirect methods to produce layered hydroxide salts (LHSs) and their effects on the PMMA/LHSs nanocomposites properties** T.P3.39  
 Telma Regina Nogueira<sup>1</sup>, Fernando Wypych<sup>2</sup>, Lucia Helena Innocentini Mei<sup>1</sup>, Liliane Maria Ferrareso Lona<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal do Paraná
- 11:00 Solvent annealing induced nanowetting to produce polymer nanostructures** T.P3.40  
 Gabriel Torres Andreassa<sup>1</sup>, Paula C. Rodrigues<sup>2</sup>, Alfredo Leithold Neto<sup>2</sup>, Lucas Scalon<sup>2</sup>, Andréia G. Macedo<sup>2</sup>; <sup>1</sup>Graduate Program in Physics and Astronomy, Federal University of Technology, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 11:00 Biodegradable high strength films of gelatin/nanofibrillated cellulose composites** T.P3.41  
Luiz Carlos Cambuim Machado<sup>1,2,3</sup>, Antonio Jose Felix Carvalho<sup>4</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Escola de Engenharia de São Carlos, <sup>3</sup>Departamento de Engenharia de Materiais, <sup>4</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP)

- 11:00 Synthesis, characterization and application of TiO<sub>2</sub> in the adsorption of manganese** T.P3.42  
Marcelle Agudo de Freitas Agudo de Freitas<sup>1</sup>, Tania Regina Giraldo<sup>1</sup>, Ariadne Missoni Brondi<sup>2</sup>, Rodrigo Leandro Bonifácio<sup>2</sup>, Patricia Gonçalves<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Comissão Nacional de Energia Nuclear
- 11:00 Characterization of electrospun membranes polycaprolactone/hydroxyapatite and pcl/zinc-hydroxyapatite for guided tissue regeneration** T.P3.43  
MARIA CLARA GUIMARÃES PEDROSA<sup>1</sup>, Alexandre Malta Rossi<sup>2</sup>, Marcos Lopes Dias<sup>3</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Brazilian Center for Research in Physics, <sup>3</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ
- 11:00 Development and characterization of cellulosic substrate for use as a substrate in flexible organic electronic devices** T.P3.44  
Martina Carneiro<sup>1</sup>, Osvaldo Donato Lourenço Junior<sup>1</sup>, Marco Aurélio da Silva Carvalho Filho<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 11:00 Sensor array based on TiO<sub>2</sub> hybrid platforms for volatile organic compounds detection** T.P3.45  
 Patrick Pires Conti<sup>1,2</sup>, Murilo H. M. Facure<sup>1,2</sup>, Luiza Amim Mercante<sup>2</sup>, Rafaela Silveira Andre<sup>2</sup>, Daniel Souza Corrêa<sup>1,2</sup>, Paulo Augusto Marques Chagas<sup>1,2,3</sup>; <sup>1</sup>Federal University of São Carlos, <sup>2</sup>Nanotechnology National Laboratory for Agriculture (LNNA) - Embrapa Instrumentação, <sup>3</sup>PPG Biotec, Post Graduation Program of Biotechnology, Federal University of São Carlos, São Carlos, SP, Brazil.
- 11:00 Study of electrospinning parameters of PCBM/Poly(vinylidene fluoride) for application in photovoltaic devices.** T.P3.46  
Pedro Leonardo Silva<sup>1</sup>, Vagner Santos<sup>1</sup>, Bruno Henrique de Santana Gois<sup>1</sup>, André Antunes da Silva<sup>1</sup>, Vison Silva Nascimento<sup>1</sup>, Deuber L. S. Agostini<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente
- 11:00 Study of the steam explosion system to obtain microfibrillated cellulose from the coffee industry residue** T.P3.47  
RAQUEL SOARES REIS<sup>1</sup>, Diego de Holanda S. Souza<sup>1</sup>, Maria de Fátima Vieira Marques<sup>1</sup>, Matheus Correia de Almeida<sup>1</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ
- 11:00 Towards Cylindrical Silicon Nanowires** T.P3.48  
Raul Back Campanelli<sup>1</sup>, Alexsandro dos Santos Evangelista da Cruz<sup>1</sup>, Kleber Roberto Pirota<sup>1</sup>, Fanny Béron<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 11:00 Nanofibers as supporting material for programmable release nutrients** T.P3.49  
Roselena Faez<sup>1</sup>, Lucas Luiz Messa<sup>2,1</sup>, Débora França<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus Araras, <sup>2</sup>Universidade de São Paulo
- 11:00 Electronic Spectra of L, L diphenylalanine micro/nanotubes multilayers** T.P3.50  
Samira Costa Rosa<sup>1</sup>, Carla Carolina Silva Bandeira<sup>1</sup>, Herculano da Silva Martinho<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Nanocellulose from banana peel waste for carbon nanotube dispersing agent** T.P3.51  
Thomaz Frazatto Carrara<sup>1</sup>, Oscar Giordani Paniz<sup>1</sup>, Alice Gonçalves Osório<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 11:00 Antarctic brown macroalgae *Cystosphaera jacquinotii* was raw material for nanocellulose scaffolds** T.P3.52  
 Oscar Giordani Paniz<sup>1</sup>, Thomaz Frazatto Carrara<sup>1</sup>, Gabriela Escobar Hochmuller da Silva<sup>1</sup>, Claudio Martin Pereira de Pereira<sup>1</sup>, Alice Gonçalves Osório<sup>1</sup>, Neftalí Lenin Villarreal Carreño<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas

- 11:00 Photocatalytic nanofibers of TiO<sub>2</sub> obtained by Solution Blow Spinning** **T.P3.53**  
Tiago Cesar Gimenes<sup>1</sup>, Fernando Rogério de Paula<sup>1</sup>, Edna Regina Spada<sup>2,3</sup>; <sup>1</sup>Universidade Estadual Paulista Faculdade de Engenharia de Ilha Solteira, <sup>2</sup>São Carlos Institute of Physics, University of São Paulo, <sup>3</sup>University of São Paulo, São Carlos – SP
- 11:00 Study of electrospinning parameters Polyaniline/Poly(vinylidene fluoride) for the application in sensors** **T.P3.54**  
Vagner Santos<sup>1</sup>, Pedro Leonardo Silva<sup>1</sup>, Bruno Henrique de Santana Gois<sup>1</sup>, André Antunes da Silva<sup>1</sup>, Vison Silva Nascimento<sup>1</sup>, Deuber L. S. Agostini<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente
- 11:00 Development of primary dressings bioactive for incorporation of silver nanoparticles** **T.P3.55**  
Valcilaine Teixeira Barbosa<sup>1</sup>, Joyelanne Kaline Chagas Souza<sup>1</sup>, Mario Roberto Meneghetti<sup>1</sup>, Johnnatan Duarte de Freitas<sup>2</sup>, Luciano Aparecido Meireles Grillo<sup>1</sup>, Ligia Maria Manzine Costa<sup>1</sup>, Camila Braga Dornelas<sup>1</sup>; <sup>1</sup>Universidade Federal de Alagoas, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de Alagoas
- 11:00 Use of nanofibers of biodegradable polymers and cell viability: a technological prospect** **T.P3.56**  
 Millena de Cassia Sousa e Silva<sup>1</sup>, Valdivânia Albuquerque do Nascimento<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí
- 11:00 Polyurethane based boards loaded with recycled polyvinyl chloride and aluminum anodizing sludge for flame resistance** **T.P3.57**  
Victor Leibnitz Hipólito<sup>1</sup>, Roberto Benavides<sup>2</sup>, Alejandro Espinoza<sup>2</sup>, Luciano da Silva<sup>2</sup>, Rachel Faverzani Magnago<sup>1</sup>, Américo Cruz Jr<sup>3</sup>; <sup>1</sup>Universidade do Sul de Santa Catarina, <sup>2</sup>Centro de Investigación en Química Aplicada, <sup>3</sup>Universidade Federal de Santa Catarina
- 11:00 Electrical conductivity and electromagnetic interference shielding effectiveness of poly vinylidene fluoride/montmorillonite-polypyrrole nanocomposites prepared by electrospinning and solution casting** **T.P3.58**  
Vinicius de Menezes Schiefferdecker<sup>1</sup>, Sílvia D. A. S. Ramôa<sup>1</sup>, Guilherme Mariz de Oliveira Barra<sup>1</sup>, Claudia Merlini<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Ferrites-based spinels hollow nanofibers by Solution Blow Spinning as catalysts for OER** **T.P3.59**  
Vinicius Dias Silva<sup>1</sup>, Luciena dos Santos Ferreira<sup>1</sup>, Thiago Araujo Simoes<sup>1</sup>, Eliton S. Medeiros<sup>1</sup>, Daniel Araújo Macedo<sup>1</sup>; <sup>1</sup>Universidade Federal da Paraíba
- 11:00 Poly(methyl methacrylate) nanofibers with polypyrrole for application in gas sensor** **T.P3.60**  
Vison Silva Nascimento<sup>1</sup>, André Antunes da Silva<sup>1</sup>, Vagner Santos<sup>2</sup>, Pedro Leonardo Silva<sup>2</sup>, Bruno Henrique de Santana Gois<sup>2</sup>, Deuber L. S. Agostini<sup>2,3</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus Presidente Prudente, <sup>3</sup>Universidade Estadual Paulista, Campus de Presidente Prudente
- 11:00 Modified substrate for synthesis of antimicrobial silver nanoparticles.** **T.P3.61**  
Yuri Bilk Matos<sup>1</sup>, Rodrigo Saldanha Romanus<sup>1</sup>, Rodrigo Lupinacci Villanova<sup>1</sup>, Marlene Soares<sup>1</sup>, Emilson Ribeiro Viana Junior<sup>1</sup>; <sup>1</sup>Federal University of Technology - Paraná

# **SYMPOSIUM U - Carbon-based materials and devices**

## **Symposium organizers:**

Murilo Santhiago (CNPEM-LNNano)  
Mathias Strauss (CNPEM-LNNano)  
Danilo J. Carastan (Universidade Federal do ABC)





# MONDAY , SEPTEMBER 23

\* Invited Lecture

## *SESSION U.01.D1 (09:30 - 10:30) - Room Mariscal Frente*

- 09:30 Laser treatment for fabrication of carbon (electro)chemical sensors** U.01.D1.1\*  
Thiago Regis Longo Cesar Paixão<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos - Universidade de São Paulo
- 10:00 Influence of MWCNT presence and MWCNT:PANI ratio in sensors applied to ammonia (NH<sub>3</sub>) detection.** U.01.D1.2  
Marcelo Eising<sup>1</sup>, Carlos Eduardo Cava<sup>2</sup>, Colin O'Callaghan<sup>3</sup>, Mauro Ferreira<sup>3</sup>, Ariane Schmidt<sup>1</sup>, Aldo J.G. Zarbin<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Tecnológica Federal do Paraná, <sup>3</sup>Trinity College University of Dublin
- 10:15 Development of a colorimetric fluorescent sensor for identification of Co<sup>2+</sup>** U.01.D1.3  
Alvernes Carneiro Cruz<sup>1</sup>, Samuel Veloso Carneiro<sup>1</sup>, Lillian Maria Uchoa Dutra Fechine<sup>1</sup>, Gisele Simone Lopes<sup>1</sup>, Rafael Melo Freire<sup>2</sup>, Pierre Basílio Almeida Fechine<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Universidad de Santiago de Chile

## *SESSION U.02.D1 (11:00 - 12:00) - Room Mariscal Frente*

- 11:00 Amino-functionalized graphene oxide anchored in wood residue charcoal as novel adsorbent of Methylene Blue** U.02.D1.1  
Tiago J. M. Fraga<sup>1</sup>, Maryne P. Siva<sup>1</sup>, Letticia E. L. Ferreira<sup>1</sup>, Caroline Araújo<sup>1</sup>, Marilda Nascimento Carvalho<sup>1</sup>, Mauricio Motta<sup>1</sup>, Marcos Gomes Ghislandi<sup>2</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Universidade Federal Rural de Pernambuco
- 11:15 Degradation of pesticide and hydrogen production based on nanocatalysts derived from thin film of graphene** U.02.D1.2  
Leandro Hostert<sup>1</sup>, Aldo J.G. Zarbin<sup>1</sup>, Elisa Souza Orth<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 11:30 Multi-walled Carbon Nanotubes and cellulose composites for pollutants removal on air and water** U.02.D1.3  
Camille Vicente<sup>1</sup>, Carlos Eduardo Cava<sup>2</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade Tecnológica Federal do Paraná - Londrina
- 11:45 Production and application of 3D graphene oxide/agar aerogel to treat textile wastewater in continuous processes** U.02.D1.4  
Caroline Araújo<sup>1</sup>, Gabriel F. O. Nascimento<sup>1</sup>, Gabriel R. B. Costa<sup>1</sup>, Tiago J. M. Fraga<sup>1</sup>, Marilda Nascimento Carvalho<sup>1</sup>, Mauricio Motta<sup>1</sup>, Marcos Gomes Ghislandi<sup>2</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Universidade Federal Rural de Pernambuco

## *SESSION U.03.D1 (14:00 - 16:15) - Room Mariscal Frente*

- 14:00 Electrical and Rheological Behavior of Graphene Blends Nanocomposites** U.03.D1.1\*  
Nicole Raymonde Demarquette<sup>1</sup>, Emnha Helal<sup>1</sup>, Rafael Salles Kurusu<sup>1</sup>, Eric David<sup>1</sup>, Nima Moghimian<sup>2</sup>; <sup>1</sup>Ecole de Technologie Supérieure de Montreal, <sup>2</sup>NanoXplore

- 14:30 Effect of carbon based magnetic filler on the polyethylene properties** U.O3.D1.2  
Muhammad Nisar<sup>1</sup>, Pascal Silas Thue<sup>1</sup>, Cesar A. Heck<sup>1</sup>, Julian Geshev<sup>1</sup>, Éder Cláudio Lima<sup>1</sup>, Griselda Barrera Galland<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 14:45 Mechanical resistant cross-linked PVA/Graphene oxide films** U.O3.D1.3  
Felipe de Andrade Silva Silva<sup>1</sup>, Nathália Maria Barbosa Nogueira<sup>1</sup>, Marcos Gomes Ghislandi<sup>1</sup>; <sup>1</sup>Universidade Federal Rural de Pernambuco
- 15:00 Low resistivity a-C:Fe thin films applied as anti-reflective coating on copper substrates** U.O3.D1.4  
Angela Elisa Crespi<sup>1,2</sup>, Charles Ballage<sup>2</sup>, Marie Christine Hugon<sup>2</sup>, Jacques Robert<sup>2</sup>, Daniel Lundin<sup>2</sup>, Tiberiu MINEA<sup>2</sup>; <sup>1</sup>AddUp, Global Additive Solutions, <sup>2</sup>Paris-Sud University
- 15:15 Mesoscopic continuum description of the microstructures within mesophase pitch-based carbon fibers.** U.O3.D1.5  
Caio César Ferreira Florindo<sup>1</sup>, Christina Papenfuss<sup>2</sup>, Adalberto Bono Maurizio Sacchi Bassi<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Hochschule für Technik und Wirtschaft
- 15:30 DLC films growth with Metallic and non-Metallic nanoparticles incorporated** U.O3.D1.6  
Rebeca Falcão Correia<sup>1,2</sup>, Cristiane Costa Wachesk<sup>1,2</sup>, Thalita Sani Taiariol<sup>1</sup>, Getúlio Vasconcelos<sup>3,4</sup>, Evaldo José Corat<sup>2</sup>, Vladimir Jesus Trava-Airoldi<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais, <sup>3</sup>Instituto de Aeronáutica e Espaço, <sup>4</sup>Instituto de Estudos Avançados
- 15:45 Reuse of granite rejects for obtaining compounds using cementary materials and carbon nanotubes** U.O3.D1.7  
Natália da Conceição Pereira<sup>1</sup>, Gabriel Antônio Cunha dos Santos<sup>1</sup>, Vitor Estolano<sup>1</sup>, Rebeca Ferreira Lemos Vasconcelos<sup>1</sup>, Elaine Cavalcanti Rodrigues Vaz<sup>1</sup>; <sup>1</sup>CENTRO UNIVERSITÁRIO BRASILEIRO

## TUESDAY, SEPTEMBER 24

\* Invited Lecture

### *SESSION U.O1.D2 (09:30 - 10:30) - Room Mariscal Frente*

- 09:30 Nonlinear rheological signatures around percolation in polymers with high aspect ratio fillers** U.O1.D2.1\*  
 Karolina Gaska<sup>1</sup>, Roland Kádár<sup>1</sup>; <sup>1</sup>Chalmers University of Technology
- 10:00 From three to two-dimensional fillers: The effect on rheological properties of polyethylene-based nanocomposites** U.O1.D2.2  
 Eder Henrique Coelho Ferreira<sup>1</sup>, Ricardo Andrade<sup>1</sup>, Guilhermino J. M. Fechine<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie

- 10:15 Delayed capillary flow of elastomers: an efficient method for fabrication and nanofunctionalization of flexible, foldable, twistable, and stretchable electrodes from pyrolyzed paper** U.O1.D2.3  
Sergio Damasceno Damasceno<sup>1,2</sup>, Cátia Crispilho Corrêa<sup>2</sup>, Rubia Figueredo Gouveia<sup>2</sup>, Mathias Strauss<sup>1</sup>, Carlos Cesar Bof Bufon<sup>3,4,1,2</sup>, Murilo Santhiago<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>3</sup>Universidade Estadual Paulista, <sup>4</sup>Universidade Estadual de Campinas

**SESSION U.O2.D2 (11:00 - 12:00) - Room Mariscal Frente**

- 11:00 Enhanced mechanical and electrical properties of GNP and CNT epoxy-based nanocomposites** U.O2.D2.1  
Matheus Mendes de Oliveira<sup>1</sup>, André Giudici Táboas<sup>1</sup>, Marcos Kendy Miyashima Moritugui<sup>1</sup>, Linnea Selegård<sup>2</sup>, Kurt Sillén<sup>3</sup>, Danilo Justino Carastan<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Saab AB, <sup>3</sup>Blackwing Sweden AB
- 11:15 Evaluation of the properties of PVDF composites with graphite and different types of graphene** U.O2.D2.2  
Lucas Galhardo Pimenta Tienne<sup>1</sup>, Fernanda Fabbri Gondim<sup>1</sup>, Ludmila da Silva Candido<sup>1</sup>, Maria de Fátima Vieira Marques<sup>2</sup>, Renata Antoun Simão<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ
- 11:30 Converting sugarcane cellulose and lignin into conductive biocarbon particles and their use in printed paper-based flexible devices** U.O2.D2.3  
Ana Claudia Fingolo<sup>1</sup>, Jefferson Bettini<sup>1</sup>, Manoella Silva Cavalcante<sup>1</sup>, Mariane Peres Pereira<sup>1</sup>, Carlos Cesar Bof Bufon<sup>1</sup>, Murilo Santhiago<sup>1</sup>, Mathias Strauss<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 11:45 Catalytic graphitization of phenolic resin using carbon nanomaterials and metal salts** U.O2.D2.4  
Rafael Borges Alves Rennó<sup>1,2</sup>, Pedro Augusto Silva<sup>2</sup>, PAULA DUTRA DUTRA<sup>2</sup>, Juliana de Fátima Silva<sup>2</sup>, Clascídia A. Furtado<sup>2</sup>, Adelina Pinheiro Santos<sup>2</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Centro de Desenvolvimento da Tecnologia Nuclear

**SESSION U.O3.D2 (14:00 - 16:15) - Room Mariscal Frente**

- 14:00 Research, development and innovation based on carbon nanomaterials** U.O3.D2.1\*  
Glaura G. Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 14:30 Synthesis and characterization of graphene oxide functionalized with PEG for biomedical applications** U.O3.D2.2  
Suélien Maria Amorim<sup>1</sup>, Leticia Ilberto da Silva<sup>1</sup>, Filipy Gobbo Maranha<sup>1</sup>, André Luiz Amorim<sup>1</sup>, Ademir Neves<sup>1</sup>, Rosely Aparecida Peralta<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 14:45 Ionic exchange involving graphene oxide as a tool for the preparation of advanced materials** U.O3.D2.3  
Caroline Mariano Ferreira<sup>1</sup>, Maria Karolina Ramos<sup>1</sup>, Aldo J.G. Zarbin<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 15:00 The adhesion study between single walled carbon nanotubes and 13-atom metal nanoclusters** U.O3.D2.4  
Carina de Souza Teixeira Peraça<sup>1</sup>, Glaucio Régis Nagurniak<sup>1</sup>, Maurício Jeomar Piotrowski<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas

- 15:15 Analysis of the structural properties of c-dots from molecular dynamics simulations** **U.O3.D2.5**  
Matheus Teixeira Novôa<sup>1</sup>, Deise B. froelich<sup>1</sup>, Andre L Martinotto<sup>2</sup>, Cláudio Perotoni<sup>2</sup>, Andre R. Muniz<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade de Caxias do Sul
- 15:30 Effect of pH on the colloidal stability of carbon dots aqueous fluorescent dispersions** **U.O3.D2.6**  
Guilherme Siqueira Gomide<sup>1</sup>, Thiago Fiuza<sup>1</sup>, Fabio Luis de Oliveira Paula<sup>1</sup>, Alex Fabiano Cortez Campos<sup>1</sup>, Renata Aquino<sup>1</sup>, Fabrizio Messina<sup>2</sup>, Jerome Depeyrot<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Università degli Studi di Palermo
- 15:45 Carbon nanomesh-based membranes with strain-tunable selectivity** **U.O3.D2.7**  
Julian Vieira Silveira<sup>1</sup>, André R. Muniz<sup>2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade Federal do Rio Grande do Sul

## WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

### *SESSION U.O1.D3 (09:30 - 10:30) - Room Mariscal Frente*

- 09:30 Complexes materials at liquid interfaces: carbon nanostructures-based thin films for multipurpose application** **U.O1.D3.1\***  
Aldo J.G. Zarbin<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 10:00 Light-responsive systems based on polymer-functionalized reduced graphene oxide as drug delivery carrier for leishmaniasis treatment** **U.O1.D3.2**  
Letícia da Silva Vitorino<sup>1</sup>, Isabela Alves de Albuquerque Bessa<sup>1</sup>, Thiago Custódio dos Santos<sup>1</sup>, Evelyn Christyan da Silva Santos<sup>2</sup>, Rene Alfonso Nome Silva<sup>3</sup>, Célia Machado Ronconi<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense, <sup>2</sup>Brazilian Center for Research in Physics, <sup>3</sup>Universidade Estadual de Campinas
- 10:15 Nanodesign by functionalization: a promiscuous (ideal) tool** **U.O1.D3.3**  
Elisa S Orth<sup>1</sup>, Leandro Hostert<sup>1</sup>, Yane Honorato Santos<sup>1</sup>, Jéssica Eliza Silva Fonsaca<sup>1</sup>, Sirlon Francisco Blaskievicz<sup>1</sup>, Thayna Lima<sup>1</sup>, Naiane Naidek<sup>1</sup>, Maria Luiza Miranda Rocco<sup>2</sup>, Aldo J.G. Zarbin<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Federal do Rio de Janeiro

### *SESSION U.O2.D3 (11:00 - 12:00) - Room Mariscal Frente*

- 11:00 Photocatalytic Method for the Simultaneous Synthesis and Immobilization of Ag Nanoparticles onto Solid Substrates** **U.O2.D3.1**  
Ítalo Azevedo Costa<sup>1</sup>, Leonardo Giordano Paterno<sup>1</sup>, Maria José Sales<sup>1</sup>; <sup>1</sup>Universidade de Brasília

- 11:15 Graphene oxides suppress reactive oxygen species generated by phthalocyanine** **U.O2.D3.2**  
Alan Rocha Baggio<sup>1</sup>, Mayara Simonelly dos Santos<sup>1</sup>, Fabiane Hiratsuka Veiga de Souza<sup>1</sup>, Paulo Eduardo Souza<sup>1</sup>, Sonia Nair Bão<sup>1</sup>, ANTONIO OTAVIO T PATROCINIO<sup>2</sup>, Detlef W. Bahnemann<sup>3</sup>, Luciano Paulino Silva<sup>4</sup>, Maria José Araujo Sales<sup>1</sup>, Leonardo Giordano Paterno<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>UFU, <sup>3</sup>Leibniz Akademie Hannover, <sup>4</sup>EMBRAPA, Centro Nacional de Pesquisa de Recursos Genéticos e Biotecnologia
- 11:30 Graphene/copper nanoparticles thin films as precursor for Graphene/copper hexacyanoferrate nanocomposites: from the preparation to the application in metal-ion** **U.O2.D3.3**  
Maria Karolina Ramos<sup>1</sup>, Aldo J.G. Zarbin<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 11:45 Graphene: Influence of Laser Power Density in Ag Nanoparticles Deposited by Sputtering** **U.O2.D3.4**  
Ana Champi<sup>1</sup>, Larissa Akashi<sup>1</sup>, Carlos Landauro<sup>2</sup>, Justiano Quispe<sup>2</sup>, Jackelyn MV<sup>2</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidad Nacional Mayor de San Marcos

**SESSION U.03.D3 (14:00 - 16:15) - Room Mariscal Frente**

- 14:00 Graphene Technologies for Bioelectronics and Energy Storage** **U.O3.D3.1\***  
Cecilia de Carvalho Castro e Silva<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie
- 14:30 Evaluation and Characterization of Electrodes Based on Graphene Oxide and PEDOT:PSS** **U.O3.D3.2**  
Matheus Felipe Fagundes das Neves<sup>1</sup>, Bruno Gabriel Alves Leite Borges<sup>2</sup>, Soheila Holakoei<sup>2</sup>, Carolina Ferreira Matos<sup>3</sup>, Aldo J.G. Zarbin<sup>1</sup>, Maria Luiza Miranda Rocco<sup>2</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Federal do Rio de Janeiro, <sup>3</sup>Universidade Federal do Pampa
- 14:45 Perovskite Oxide based electrodes for lithium-O<sub>2</sub> batteries** **U.O3.D3.3**  
Lorrane Cristina Cardozo Bonfim Oliveira<sup>1</sup>, Leticia Frigerio Cremasco<sup>1</sup>, Tanna Elyn Rodrigues Fiuza<sup>2</sup>, Daniela Zanchet<sup>2</sup>, Gustavo Doubek<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>INSTITUTE OF CHEMISTRY/UNICAMP
- 15:00 ZnO nanoparticles-graphene oxide-reduced graphene oxide thin films assembled layer-by-layer through non-electrostatic interactions** **U.O3.D3.4**  
Marcos Andriola Gross<sup>1</sup>, Alexandre Mello<sup>2</sup>, Leonardo Giordano Paterno<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Brazilian Center for Research in Physics
- 15:15 Technological applications of graphene multilayer in Materials Science** **U.O3.D3.5**  
ROGÉRIO VALENTIM GELAMO<sup>1</sup>; <sup>1</sup>Universidade Federal do Triângulo Mineiro

**Poster presentations**

**SESSION U.P6 (18:00 - 19:30)**

- 18:00 High-quality crystalline SCD growth with high microwave plasma power density** **U.P6.1**  
Javier Sierra Gómez<sup>1</sup>, José Vieira<sup>1</sup>, Evaldo José Corat<sup>1</sup>, Vladimir Jesus Trava-Airoldi<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais

- 18:00 Hygroelectric generator based on nanostructured carbon and cellulose for energy harvesting devices** U.P6.2  
Kelly Schneider Moreira<sup>1</sup>, Diana Lermen<sup>1</sup>, Thiago A L Burgo<sup>1</sup>, Fernando Galembeck<sup>2</sup>, Leandra Pereira dos Santos<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Maria, <sup>2</sup>Universidade Estadual de Campinas
- 18:00 Characterization of functionalized carbon nanofillers for the production of polymer nanocomposites** U.P6.3  
Thais Cardoso de Oliveira<sup>1</sup>, Beatriz Rossi Canuto de Menezes<sup>1</sup>, Evelyn Alves Nunes Simonetti<sup>2</sup>, Luciana de Simone Cividanes<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 18:00 Enhanced stability of multi-layer graphene as oil additives with surfactants** U.P6.4  
Daiany Wagner<sup>1</sup>, Guilherme Oliveira Barra<sup>1</sup>, José Biasoli de Mello<sup>2</sup>, Valderes Drago<sup>1</sup>, Aloisio Nelmo Klein<sup>1</sup>, Cristiano Binder<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal de Uberlândia
- 18:00 Electroless polymerization of aniline on activated carbon fiber felt** U.P6.5  
Aline Fontana Batista<sup>1</sup>, Aline Castilho Rodrigues<sup>1</sup>, Jossano Saldanha Marcuzzo<sup>1</sup>, Manuella Gobbo de Castro Munhoz<sup>1</sup>, Maurício Ribeiro Baldan<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 18:00 Hydrogel as template for 3D MWCNTs structures applied as macro porous materials** U.P6.6  
Ana Paula Petinati Petinati<sup>1</sup>, Carlos Eduardo Cava<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Londrina
- 18:00 Influence of the oxidation on the electrochemical properties of graphene oxide** U.P6.7  
ANDRÉ FERREIRA SARDINHA<sup>1</sup>, DALVA ALVES DE LIMA ALMEIDA<sup>1</sup>, Neidenei Gomes Ferreira<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 18:00 Simulation of current-voltage characteristics of graphene oxide-based memristors** U.P6.8  
Andrés Vercik<sup>1,2</sup>, Luci Cristina de Oliveira Vercik<sup>1,2</sup>, Isabella Causin Sacco<sup>3,2</sup>, Eliana Cristina da Rigo Rigo<sup>2</sup>, Mariza P Melo<sup>1,2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Faculdade de Zootecnia e Engenharia de Alimentos, <sup>3</sup>University of São Paulo
- 18:00 Preparation of Nanocomposites of Polyamide-11 with Carbon Nanotubes for Application as Barrier Layer in Oil Pipelines** U.P6.9  
Barbara Salles Macena da Cruz<sup>1</sup>, Lucas Galhardo Pimenta Tienne<sup>1</sup>, Matheus Correia de Almeida<sup>1</sup>, Ana Beatriz Rocha dos Santos<sup>1</sup>, Maria de Fátima Vieira Marques<sup>2</sup>, Erica Gervasoni Chaves<sup>3</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ, <sup>3</sup>Petrobras
- 18:00 Characterization of silicon oxycarbide (SiCO) ceramics derived from organic-inorganic hybrid polymers with different proportions of organic phase** U.P6.10  
Beatriz Helena Costa<sup>1</sup>, Maria de Almeida Silva<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 18:00 Investigation of the electrochemical potentialities of silicon oxycarbide (SiCO) ceramics obtained from organic-inorganic hybrid polymers** U.P6.11  
Beatriz Helena Costa<sup>1</sup>, Maria de Almeida Silva<sup>1</sup>, César Ricardo Teixeira Tarley<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 18:00 Gas sensors based on rGO-ZnO nanocomposites** U.P6.12  
Bruno Sanches de Lima<sup>1</sup>, Weverton Alison dos Santos Silva<sup>1</sup>, Maria Ines Basso Bernardi<sup>2</sup>, Valmor Roberto Mastelaro<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>2</sup>Universidade de São Paulo

- 18:00 A thermodynamic approach for microstructures within carbon fibers precursory mesophase pitch based on the Müller-Liu procedure** **U.P6.13**  
Caio César Ferreira Florindo<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 18:00 Investigation of different types of MWCNTs for electrochemical detection of diazepam** **U.P6.14**  
 Isabelle de Oliveira Borges<sup>1</sup>, Caio Raphael Vanoni<sup>1</sup>, Rayane Bueno Goularte<sup>1</sup>, Renan Floriani Bertoldi<sup>1</sup>, Luciano Vitali<sup>1</sup>, Daniela Zambelli Mezalira<sup>1</sup>, Cristiane Luisa Jost<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Single-walled carbon nanotube/iron oxide nanoparticle nanocomposite electrode for determination of salicylic acid in skin care product** **U.P6.15**  
Camila De Lima Ribeiro<sup>1</sup>, João Guilherme Moura Santos<sup>1</sup>, Jurandir Rodrigues de Souza<sup>1</sup>, Leonardo Giordano Paterno<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 18:00 Development of electrically conducting polymer composites with polypropylene matrix and carbonaceous additives** **U.P6.16**  
Carolina Croceta Bombazar<sup>1,2</sup>, Guilherme Mariz de Oliveira Barra<sup>1</sup>, Cláudia Merlini<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>WEG Electrical Equipment S.A.
- 18:00 Design of graphene oxide membranes: a sustainable and revolutionary solution for water desalination** **U.P6.17**  
 Sthefany Zaida Silva do Amparo<sup>1</sup>, Bruna Rafaela Silva Diniz<sup>2</sup>, Duany Pires Aguilar<sup>2</sup>, Marianne Ferreira de Barros<sup>2</sup>, Sofia de Carvalho Britto Sousa<sup>2</sup>, Marcelo Machado Viana<sup>1</sup>, Cláudia Karina Barbosa de Vasconcelos<sup>2</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Pontifícia Universidade Católica de Minas Gerais
- 18:00 Study of GO thin films characteristics for application in resistive memory** **U.P6.18**  
Marina Sparvoli<sup>1</sup>, Lucas Guerra Silvestre<sup>1</sup>, Gisele Aparecida Amaral-Labat<sup>2</sup>, Guilherme Frederico Bernardo Lenz e Silva<sup>3</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Escola Politécnica de Universidade de São Paulo
- 18:00 Production of activated carbon from wetland biomass** **U.P6.19**  
Cristiane Ferraz de Azevedo<sup>1</sup>, Daniel Lucas Costa Rodrigues<sup>1</sup>, Robson Andreazza<sup>1</sup>, Fernando Machado<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 18:00 Direct microwave synthesis of amine-functionalized graphene oxide nanocomposites with nickel and cobalt sulfides for supercapacitor applications.** **U.P6.20**  
Cristiano Carrareto Caliman<sup>1</sup>, Arilza de Oliveira Porto<sup>2</sup>, Anderson Fuzer Mesquita<sup>3</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia da Bahia, <sup>2</sup>Universidade Federal de Minas Gerais, <sup>3</sup>Universidade Federal do Espírito Santo
- 18:00 Flexible binary composites produced by polyaniline electrosynthesis on carbon fiber substrate** **U.P6.21**  
Dalva Alves de Lima Almeida<sup>1</sup>, Andrea Boldarini Couto<sup>1</sup>, Neidenei Gomes Ferreira<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 18:00 Synthesis and CO<sub>2</sub> capture on graphitic carbon nitrides: the influence of nitrogen-precursor** **U.P6.22**  
 Luanne Ester Monteiro Ferreira<sup>1</sup>, Danilo Hisse Miranda<sup>1</sup>, Thiago Custódio dos Santos<sup>1</sup>, Thiago de Melo Lima<sup>1</sup>, Célia Machado Ronconi<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 18:00 Enhancing the water repellency of medium density fiberboard (MDF) by TMCS-SiO<sub>2</sub> nanoparticles coating** **U.P6.23**  
Pedro Henrique Gonzalez de Cademartori<sup>1</sup>, Washington Luiz Esteves Magalhães<sup>1,2</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Embrapa Florestas

- 18:00 Artificial muscles based on block copolymer and graphene** U.P6.24  
Rogério Ramos Sousa Jr<sup>1</sup>, Joana de Barros Sacramento<sup>1</sup>, Danilo Justino Carastan<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 18:00 Manufacturing and application of a graphene temperature device using raman spectroscopy** U.P6.25  
Gustavo Hardt Hardt<sup>1</sup>, Dionathan Alves Campanelli<sup>1</sup>, Juliana Bahu Rodrigues<sup>2</sup>, Jacson weber de Menezes<sup>2</sup>, CHIARA VALSECCHI<sup>2</sup>, Jose Wagner Maciel Kaehler<sup>2</sup>, Luis E. Gomez Armas<sup>2</sup>; <sup>1</sup>Universidade Federal do Pampa, <sup>2</sup>Fundação Universidade Federal do Pampa
- 18:00 Nitrogen-doped graphene quantum dots based electrochemical device for endocrine disruptors sensing** U.P6.26  
Edson Roberto Santana<sup>1</sup>, Almir Spinelli<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 18:00 Polymeric compounds electrical conductors for application as absorbers of electromagnetic waves** U.P6.27  
Elisangela Pereira Cordeiro<sup>1</sup>, Jorge Luiz Vieira Maia<sup>1</sup>, Loan Filipi Calheiros Souto<sup>1</sup>, ELAINE CRISTINA LOPES PEREIRA<sup>1</sup>, Bluma Guenther Soares<sup>1,2</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ
- 18:00 Influence of protonic ionic liquid on the dispersion of carbon nanotube in PLA/EVA blends and blend compatibilization** U.P6.28  
ELAINE CRISTINA LOPES PEREIRA<sup>1</sup>, Maria Eduarda Fernandes da Silva<sup>2</sup>, Ketly Pontes<sup>2</sup>, Bluma Guenther Soares<sup>2,1</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ, <sup>2</sup>Universidade Federal do Rio de Janeiro
- 18:00 Hydrogenation edge effects in POPGraphene nanoribbon structures** U.P6.29  
Elder Augusto Viana Mota<sup>1</sup>, Denner Felipe Silva Ferreira<sup>1</sup>, Mayra Moura Moreira<sup>1</sup>, Jordan Del Nero<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará
- 18:00 Obtaining and characterization of amorphous materials based on SiOC produced in different argon flowing** U.P6.30  
Érica Signori Romagnoli<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 18:00 Influence of different metallic chlorides in the in *IN SITU* formation of carbon nanotubes on silicon oxycarbide ceramic matrices** U.P6.31  
Érica Signori Romagnoli<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 18:00 Investigation of the intrinsic characteristics of graphene electrodes for electrochemical capacitors using the ab initio method.** U.P6.32  
Débora Ariana Corrêa da Silva<sup>1</sup>, Aline Maria Pascon<sup>1</sup>, Eudes Eterno Fileti<sup>2</sup>, Leonardo Ribeiro Fonseca<sup>3</sup>, Hudson Zanin<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal de São Paulo, <sup>3</sup>Universidade Federal de Minas Gerais
- 18:00 Effect of the addition of carbon black on PA6/ LLDPE blends to prepare antistatic packaging** U.P6.33  
Leonardo Nishiguti Silva<sup>1</sup>, Erick Gabriel Ribeiro dos Anjos<sup>1</sup>, Guilherme Ferreira de Melo Morgado<sup>1</sup>, Larissa Stieven Montagna<sup>1</sup>, Fabio Roberto Passador<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 18:00 Comparative analysis of carbon black and carbon nanotubes as an antistatic agent for the production of PLA matrix packaging** U.P6.34  
Gleice Ellen Almeida Verginio<sup>1</sup>, THAIS FERREIRA DA SILVA<sup>1</sup>, Fabio Roberto Passador<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo



- 18:00 PANI/rGO blend as a sensitive layer for NH<sub>3</sub> gas sensing** **U.P6.35**  
Fabio Seiti Hadano<sup>1</sup>, Anderson Emanuel Ximim Gavim<sup>1</sup>, Alisson Lima Martins<sup>1</sup>, Jeferson Ferreira de Deus<sup>1</sup>, Fabio Kurt Schneider<sup>1</sup>, Wilson José Da Silva<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Characterization of C60/rGO hybrid structure for optoelectronics applications** **U.P6.36**  
Felipe Messias Priotto<sup>1</sup>, Fabio Seiti Hadano<sup>1</sup>, Anderson E. X. Gavim<sup>1</sup>, Abd. Rashid bin Mohd Yusoff<sup>2</sup>, Wilson José Da Silva<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Yonsei University
- 18:00 Development of icephobic surface based on Diamond-like Carbon/Vertically Aligned Carbon Nanotubes nanocomposite** **U.P6.37**  
Filipe Menezes Rosa<sup>1</sup>, Romário Araújo Pinheiro<sup>1</sup>, Evaldo José Corat<sup>1</sup>, Vladimir Jesus Trava-Airoldi<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 18:00 Synthesis and characterization of conductive polyaniline/graphene oxide composite** **U.P6.38**  
Flaviane Teixeira Silva<sup>1</sup>, Anderson Emanuel Ximim Gavim<sup>2</sup>, Jeferson Ferreira de Deus<sup>3</sup>, Wilson José Da Silva<sup>3</sup>; <sup>1</sup>Federal University of Technology - Curitiba - PR, <sup>2</sup>Federal University of Technology - Paraná, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 18:00 Development of a gas sensor based on CVD graphene** **U.P6.39**  
Gil Capote Mastrapa<sup>1</sup>, Fernando Lázaro Freire Jr.<sup>2</sup>; <sup>1</sup>Brazilian Center for Research in Physics, <sup>2</sup>Department of physics, Pontifical Catholic University of Rio de Janeiro - PUC-Rio
- 18:00 Carbon micro- and nanospheres from Kraft lignin supported on carbon felt for application in supercapacitors** **U.P6.40**  
 Manuella Gobbo de Castro Munhoz<sup>1</sup>, Aline Castilho Rodrigues<sup>1</sup>, jossano saldanha marcuzzo<sup>1</sup>, Guilherme Frederico Bernardo Lenz e Silva<sup>2</sup>, Gisele Aparecida Amaral-Labat<sup>3</sup>, Maurício Ribeiro Baldan<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Escola Politécnica de Universidade de São Paulo, <sup>3</sup>University of São Paulo
- 18:00 Hierarchical microstructure of nanoparticles of CaCO<sub>3</sub>/epoxy composites: thermomechanical and surface properties** **U.P6.41**  
 Thaís Bastos Miranda<sup>1</sup>, Glaura G. Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 18:00 Graphene-based 3D nanostructures for biosensing applications** **U.P6.42**  
Glenda Biasotto<sup>1</sup>, Maria Aparecida Zaghete<sup>1</sup>, Fabrizio Giorgis<sup>2</sup>, Paola Rivolo<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Politecnico di Torino
- 18:00 Corrosion performance of magnetron sputtered TiC/DLC nanocomposite coatings** **U.P6.43**  
Gustavo C. S. Guimarães<sup>1</sup>, Emanuel Santos Jr.<sup>1</sup>, Sérgio de Souza Camargo Jr.<sup>2</sup>, Marie-Paule Delplancke-Ogletree<sup>3</sup>; <sup>1</sup>Centro Universitário de Volta Redonda, <sup>2</sup>Universidade Federal do Rio de Janeiro, <sup>3</sup>Université Libre de Bruxelles
- 18:00 Influence of screw speed in the extrusion of PVDF/MWCNT composites** **U.P6.44**  
 Fernanda Fabbri Gondim<sup>1</sup>, Lucas Galhardo Pimenta Tienne<sup>1</sup>, Fabio Elias Jorge<sup>1</sup>, Matheus Correia de Almeida<sup>1</sup>, Maria de Fátima Vieira Marques<sup>2</sup>, Erica Gervasoni Chaves<sup>3</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ, <sup>3</sup>Petrobras
- 18:00 Synthesis and characterization of reduced graphene oxide thin films obtained by liquid-liquid interface** **U.P6.45**  
Thalita Antoniassi Canassa<sup>1</sup>, Bruna Soares Dos Reis Aranha<sup>1</sup>, Diego C. B. Alves<sup>1</sup>, Alem-Mar Bernardes Gonçalves<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso do Sul

# THURSDAY , SEPTEMBER 26

## Poster presentations

### *SESSION U.P7 (09:30 - 11:00)*

- 09:30 Influence of the oxygen flow in lithium-oxygen batteries** U.P7.1  
Bruno Aurélio Borges Franciscos<sup>1</sup>, Júlia Paula de Oliveira Júlio<sup>1</sup>, Jean Felipe Leal Silva<sup>1</sup>, Rubens Maciel Filho<sup>1</sup>, Gustavo Doubek<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 09:30 Synthesis of carbon nanotubes on graphite and carbon felt for supercapacitors** U.P7.2  
Camila Alves Escanio<sup>1</sup>, Erica Freire Antunes<sup>1</sup>, Evaldo José Corat<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 09:30 Obtaining hydrogenated nanodiamonds from CVD diamond** U.P7.3  
Rafaela Campos Queiroz<sup>1,2</sup>, Carolina Ramos Hurtado<sup>1,2</sup>, Cristiane Costa Wachesk<sup>2</sup>, Erenilda Ferreira Macedo<sup>2</sup>, Thalita Sani Taiariol<sup>2</sup>, Milton Faria Diniz<sup>3</sup>, Gabriela Ramos Hurtado<sup>4</sup>, Vladimir Jesus Trava-Airoldi<sup>5</sup>, Dayane Batista Tada<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade Federal de São Paulo, <sup>3</sup>Instituto de Aeronáutica e Espaço, <sup>4</sup>Universidade Estadual Paulista, <sup>5</sup>Instituto Nacional de Pesquisas Espaciais
- 09:30 Microwave utilization for preparation of carbonaceous materials from crude glycerin.** U.P7.4  
Thais Aline Prado Mendonça<sup>1</sup>, Maraísa Gonçalves<sup>1</sup>, Tayra R Brazil<sup>1</sup>, Mirabel Cerqueira Rezende<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 09:30 Development of the Nanostructured Batteries based on Buckypapers.** U.P7.5  
Luis Eduardo de Sena dos Santos<sup>1,2</sup>, izaías gonçalves lima<sup>1</sup>, Marcos Allan Leite dos Reis<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Faculdade de Ciências Exatas e tecnologias
- 09:30 Development of Graphene Derivatives Fibers By Wet-Spinning** U.P7.6  
Jaqueline Falchi da Rocha<sup>1</sup>, Mário Ricardo Góngora Rubio<sup>2</sup>, Cecilia de Carvalho Castro e Silva<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie, <sup>2</sup>Instituto de Pesquisas Tecnológicas
- 09:30 Study of the growth environment of CVD diamond films by HFCVD and MWPACVD a comparison** U.P7.7  
Javier Sierra Gómez<sup>1</sup>, Djoille Denner Damm<sup>2</sup>, José Vieira<sup>1</sup>, Evaldo José Corat<sup>1</sup>, Vladimir Jesus Trava-Airoldi<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Universidade Federal de São Paulo
- 09:30 Spatial effect of discharge product buildup on carbon nanotube electrodes of a lithium-air battery** U.P7.8  
Jean Felipe Leal Silva<sup>1</sup>, Leticia Frigerio Cremasco<sup>1</sup>, Bruno Aurélio Borges Franciscos<sup>1</sup>, Júlia Paula de Oliveira Júlio<sup>1</sup>, Gustavo Doubek<sup>1</sup>, Rubens Maciel Filho<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 09:30 Electrical behavior of multiwalled carbon nanotube in silicone oil matrix** U.P7.9  
Jeferson Matos Hrenechen<sup>1</sup>, Celso de Araujo Duarte<sup>1</sup>, Evaldo Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná

- 09:30 Double percolation of melt-mixed PS/PBAT blends loaded with MWCNT: effect of ionic liquid** U.P7.10  
Jéssica Pereira Soares da Silva<sup>1,2</sup>, Bluma Guenther Soares<sup>1,2</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ
- 09:30 MWCNTs/Ni(OH)<sub>2</sub> composite applied as electrochemical sensor for folic acid in food/supplementary samples** U.P7.11  
João Paulo Winiarski<sup>1</sup>, Ricardo Rampanelli<sup>1</sup>, Jean Carlos Bassani<sup>1</sup>, Daniela Zambelli Mezalira<sup>1</sup>, Cristiane Luisa Jost<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Study of the electro-oxidation of alcohols on reduced graphene oxide-supported Ni-Co and Ni-Fe oxides alloys** U.P7.12  
João Pedro Jenson Oliveira<sup>1</sup>, Acelino Cardoso de Sá<sup>2</sup>, Leonardo Lataro Paim<sup>1</sup>; <sup>1</sup>São Paulo State University (Unesp), Campus of Rosana, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 09:30 Synthesis and characterization of chitosan-based adsorbents for CO<sub>2</sub> capture** U.P7.13  
José Adolfo Oliveira das Chagas<sup>1</sup>, Emanuella Vieira Ribeiro<sup>1</sup>, Gustavo Oliveira Crispim<sup>1</sup>, Lucas Cruz Nascimento Mo<sup>1</sup>, Bianca Peres Pinto<sup>1</sup>, Claudio J. A. Mota<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 09:30 Polyaniline/polypyrrole electrodeposited in expanded carbon graphite electrode applied as supercapacitors devices** U.P7.14  
Rafaela Daiane de Oliveira<sup>1</sup>, Juliane Pscheidt<sup>1</sup>, Cleverson Siqueira Santos<sup>2</sup>, Luis Marchesi<sup>3</sup>, Christiana Andrade Pessoa<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Instituto Federal Farroupilha, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 09:30 Construction and characterization of LbL films based on Polyaniline-gum Arabic nanocomposites and graphene oxide** U.P7.15  
Juliane Pscheidt<sup>1</sup>, Rafaela Daiane de Oliveira<sup>1</sup>, Alex Vieira Pedroso<sup>1</sup>, Elvis Luan Alves<sup>1</sup>, Marcio Vidotti<sup>2</sup>, Jarem Garcia<sup>1</sup>, Luis Marchesi<sup>3</sup>, Christiana Andrade Pessoa<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Universidade Federal do Paraná, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 09:30 Thermal and crystallographic investigation of hydroxyapatite with modified carbon nanotubes hybrid** U.P7.16  
Kaio Alves Brayner Pereira<sup>1</sup>, Isabella Carneiro Gonçalves<sup>1</sup>, Luis Claudio Mendes<sup>2</sup>, Sibebe Piedade Cestari<sup>2</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ, <sup>2</sup>Universidade Federal do Rio de Janeiro
- 09:30 Self-Organized Carbon Quantum Dots in Polymer Composite** U.P7.17  
Thais Rosana Cugnier Machado<sup>1</sup>, Claudia Merlini<sup>1</sup>, Lucas Natálio Chavero<sup>1</sup>, Lara Fernandes dos Santos Lavelli<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Chemically exfoliated graphenes in organic solvent - water- mixture** U.P7.18  
Laura Ribeiro Paulinelli<sup>1</sup>, Jefferson Patrício Nascimento<sup>1</sup>, Adelina Pinheiro Santos<sup>1</sup>, Clascídia A. Furtado<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 09:30 Gas sensing device using composite GO:PEDOT:PSS** U.P7.19  
Leila Seleme Mariano Alves<sup>1</sup>, Marcelo Eising<sup>1</sup>, Matheus Felipe Fagundes das Neves<sup>1</sup>, Aldo J.G. Zarbin<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná

- 09:30 FTIR characterization of a nanostructured carbon-based substrate coated with electropolymerized molecularly imprinted poly-o-phenylenediamine for arabinose determination** U.P7.20  
Miguel Sales Porto de Sousa<sup>1</sup>, Cristián Ferretti<sup>2</sup>, Maria N Kneeteman<sup>2</sup>, Leonardo Lataro Paim<sup>1</sup>; <sup>1</sup>São Paulo State University (Unesp), Campus of Rosana, <sup>2</sup>Universidad Nacional del Litoral
- 09:30 Electrochemical characterization of a pencil graphite electrode modified with carbon black/rGO/Nafion coated with electropolymerized molecularly imprinted poly-o-phenylenediamine for ferulic acid** U.P7.21  
Miguel Sales Porto de Sousa<sup>1</sup>, João Pedro Jenson Oliveira<sup>1</sup>, Acelino Cardoso de Sá<sup>2</sup>, Leonardo Lataro Paim<sup>1</sup>; <sup>1</sup>São Paulo State University (Unesp), Campus of Rosana, <sup>2</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 09:30 Synthesis and characterization of the reduced graphene oxide/ tin dioxide and reduced graphene oxide/titanium dioxide** U.P7.22  
Leticia Patricio Christopholi<sup>1</sup>, Andréia G. Macedo<sup>1</sup>, Jeferson Ferreira de Deus<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 09:30 Synthesis and characterization of reduced graphene oxide** U.P7.23  
Leticia Patricio Christopholi<sup>1</sup>, Andréia G. Macedo<sup>1</sup>, Jeferson Ferreira de Deus<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 09:30 Mechanical Properties and Ballistic Impact Resistance of Schwarzites** U.P7.24  
Levi Costa Felix<sup>1</sup>, Cristiano Francisco Woellner<sup>2</sup>, Douglas Soares Galvão<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal do Paraná
- 09:30 Structural investigation on silicon oxycarbide (SiCO) and boron silicon oxycarbide (SiBCO) ceramics from alkoxysilanes precursors containing different organic groups** U.P7.25  
Lívia Ramazzoti Chanan Silva<sup>1</sup>, Patricia Morena Sanchez<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 09:30 Synthesis of polymeric precursors with different carbon contents for obtainment of silicon oxycarbide (SiCO) ceramics** U.P7.26  
Lívia Ramazzoti Chanan Silva<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 09:30 Fabrication of carbon dots/SiO<sub>2</sub> spheres nanocomposite with catalytic properties** U.P7.27  
Alexandre Alborghetti Londero<sup>1</sup>, Bruno Henrique Ristov<sup>1</sup>, Thais Rosana Machado<sup>1</sup>, Jaqueline Vanelli<sup>1</sup>, Lara Fernandes dos Santos Lavelli<sup>1</sup>, Lucas Natálio Chavero<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Microwave assisted synthesis of carbon dots from biodiesel residue (glycerin) for metal ions sensing** U.P7.28  
Ingred Lopes Ferreira<sup>1</sup>, Gabriela Medeiros Marcellino<sup>1</sup>, Rossano Lang<sup>1</sup>, Larissa Otubo<sup>2</sup>, Nirton Cristi Silva Vieira<sup>1</sup>, Maraísa Gonçalves<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto de Pesquisas Energeticas e Nucleares
- 09:30 Nanostructured Capacitor based on Buckypaper and biopolymer electrolyte.** U.P7.29  
izaias gonçalves lima<sup>1</sup>, Luis Eduardo de Sena dos Santos<sup>1,2</sup>, Marcos Allan Leite dos Reis<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Faculdade de Ciencias Exatas e tecnológias

- 09:30 Study of graphene oxide reduction in titanium dioxide paste** **U.P7.30**  
 Matheus Freitas Rodrigues<sup>1</sup>, Andressa de Aguiar Oliveira<sup>1</sup>, Carolina Comin Tegon<sup>1</sup>, Cristiane Stegemann<sup>2</sup>, Argemiro Soares da Silva Sobrinho<sup>2</sup>, Douglas Marcel Gonçalves Leite<sup>2</sup>, Mauro Terence<sup>1</sup>, Juan Alfredo Guevara Carrió<sup>1</sup>, Marcos Massi<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie, <sup>2</sup>Instituto Tecnológico de Aeronáutica
- 09:30 Effect of carbon black (C<sub>black</sub>) on the structure of SiOC/C<sub>black</sub> ceramic composites and investigation as voltammetric sensors** **U.P7.31**  
Maria de Almeida Silva<sup>1</sup>, César Ricardo Teixeira Tarley<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 09:30 Influence of hot pressing method on the structure of C-enriched ceramic composites based on SiOC matrices** **U.P7.32**  
Maria de Almeida Silva<sup>1</sup>, César Ricardo Teixeira Tarley<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 09:30 Assembly of an electrochemical sensor based on novel hybrid silica/titania material modified with an inorganic complex** **U.P7.33**  
Marília Reginato de Barros<sup>1</sup>, João Paulo Winiarski<sup>1</sup>, Franciele de Matos Morawski<sup>1</sup>, Cristiane Luisa Jost<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 09:30 Effect of dispersion techniques on the conductivity of block copolymer gel nanocomposites with graphene** **U.P7.34**  
 Joana de Barros Sacramento<sup>1</sup>, Rogério Ramos Sousa Jr<sup>1</sup>, Danilo Justino Carastan<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 09:30 Morphological and Structural Characterization of a Liquid Graphene Oxide** **U.P7.35**  
MARIO NOGUEIRA BARBOSA JUNIOR<sup>1</sup>, Pilar Hidalgo Falla<sup>2</sup>, Diego Cardoso de Souza<sup>2</sup>, Omar Pandoli<sup>1</sup>, Ivani de Souza Bott<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Universidade de Brasília
- 09:30 Processing sugarcane bagasse biochar into carbon-based fillers for rubber composites** **U.P7.36**  
 Pâmela Sierra Garcia<sup>1</sup>, Ticiane Sanches Valera<sup>1</sup>, Mathias Strauss<sup>2</sup>; <sup>1</sup>University of São Paulo, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 09:30 Synthesis and characterization of nanocomposites of Graphene Oxide + Tin Oxide (GO+SnO<sub>2</sub>) nanocubes** **U.P7.37**  
 Gustavo Henrique Wegher<sup>1</sup>, Paula Cristina Rodrigues<sup>1</sup>, Yuri Bilk Matos<sup>1</sup>, Matheus Torquato<sup>2</sup>, Emilson Ribeiro Viana Junior<sup>1</sup>; <sup>1</sup>Federal University of Technology - Paraná, <sup>2</sup>Instituto Militar de Engenharia
- 09:30 Effect of the addition graphene nanoplates (GNP) on thermal properties of epoxy resin** **U.P7.38**  
 Andrielen Vanzetto<sup>1</sup>, Gabriel Gonem de Lima<sup>1</sup>, Micaela Ferrari Ferrari<sup>1</sup>, Lilian Vanessa Rossa Beltrami<sup>1</sup>, Ademir José Zattera<sup>1</sup>, Diego Piazza<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul
- 09:30 Study of the electrical properties of castor oil-based polyurethane /carbon nanotube/PZT composite with connectivity 0-3** **U.P7.39**  
 Diego Silva Melo<sup>1</sup>, Pedro Henrique Ferrarezi Rodrigues<sup>1</sup>, João Gustavo Leite Costa<sup>1</sup>, Michael Jones Silva<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" - Campus de Rosana
- 09:30 Polydopamine nanofunctionalization of flexible carbon-based electrochemical devices** **U.P7.40**  
 Leonardo Hideki Hasimoto<sup>1</sup>, Cátia Crispilho Corrêa<sup>1</sup>, Murilo Santhiago<sup>1</sup>; <sup>1</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)

- 09:30 Graphene Quantum Dots as Optical Probes for Cyanotoxins Detection** U.P7.41  
 Gabriela Medeiros Marcellino<sup>1</sup>, Ingrid Lopes Ferreira<sup>1</sup>, Fabrício A. dos Santos<sup>2</sup>,  
 Rossano Lang<sup>1</sup>, Larissa Otubo<sup>3</sup>, Maraísa Gonçalves<sup>1</sup>, Valtencir Zucolotto<sup>4,2</sup>, Nirton  
 Cristi Silva Vieira<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto de Física de  
 São Carlos (IFSC) - Universidade de São Paulo (USP), <sup>3</sup>Instituto de Pesquisas  
 Energeticas e Nucleares, <sup>4</sup>Instituto de Física de São Carlos - USP
- 09:30 Thin films of nanocomposites between carbon nanotubes, graphene oxide and reduced graphene oxide** U.P7.42  
Cristian de Souza Pinto<sup>1</sup>, Aldo J.G. Zarbin<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 09:30 Catalytic graphitization of phenolic resin using carbon nanomaterials and metal salts** U.P7.43  
Rafael Borges Alves Rennó<sup>1,2</sup>, Pedro Augusto Silva<sup>2</sup>, PAULA DUTRA DUTRA<sup>2</sup>,  
 Clascídia A. Furtado<sup>2</sup>, Juliana de Fátima Silva<sup>2</sup>, Adelina Pinheiro  
 Santos<sup>2</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Centro de Desenvolvimento da  
 Tecnologia Nuclear
- 09:30 Processing and characterization of a polymeric foam modified with graphite nanoplatelets as a precursor for reticulated vitreous carbon** U.P7.44  
Raissa Samira Rocha da Silva<sup>1</sup>, Silvia Sizuka Oishi<sup>1</sup>, Luiza dos Santos Conejo<sup>2</sup>,  
 Edson Cocchieri Botelho<sup>2</sup>, Neidenei Gomes Ferreira<sup>1</sup>; <sup>1</sup>Instituto Nacional de  
 Pesquisas Espaciais, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho",  
 Faculdade de Engenharia de Guaratinguetá
- 09:30 Flexible conductive composites based on graphite nanoplatelets for wearable electronics** U.P7.45  
 Silvia Vaz Guerra Nista<sup>1</sup>, Junko Tsukamoto<sup>1</sup>, Raluca Savu<sup>1</sup>, Stanislav  
 Moshkalev<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 09:30 Thermal stress reduction in CVD diamond thin films on steel substrate** U.P7.46  
Rômulo Luís Fernandes Martins<sup>1</sup>, Silvia Alves Garcez<sup>2</sup>, Felipe Nascimento Araújo  
 da Silva<sup>1</sup>, Jonathas Sousa Reis<sup>1</sup>, Danilo Maciel Barquete<sup>1</sup>, Djoille Denner Damm<sup>3</sup>,  
 Filipe Menezes Rosa<sup>4</sup>, Romário Araújo Pinheiro<sup>4</sup>; <sup>1</sup>Universidade Estadual de Santa  
 Cruz, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia da  
 Bahia, <sup>3</sup>Universidade Federal de São Paulo, <sup>4</sup>Instituto Nacional de Pesquisas  
 Espaciais
- 09:30 Carbon nanostructures for the manufacture of high-performance cementitious materials: a review** U.P7.47  
Ruana Danielly de Moura<sup>1</sup>, Karen Yasmim Pereira dos Santos  
 Avelino<sup>2</sup>; <sup>1</sup>Faculdade Uninassau Caruaru, <sup>2</sup>Universidade Federal de Pernambuco
- 09:30 Molecular-Interactions Effects on the Rheological Properties of Graphite Dispersions in Complex Binary Blends of Methyl Esters and Hydrocarbons** U.P7.48  
Silvania Lanfredi<sup>1</sup>, Túlio Begena Araújo<sup>1</sup>, Marcos Augusto Lima  
 Nobre<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente
- 09:30 Electrochemical degradation of bisphenol A using micro and ultrananocrystalline diamond grown on reticulated vitreous carbon** U.P7.49  
Silvia Sizuka Oishi<sup>1</sup>, Edson Cocchieri Botelho<sup>2</sup>, Neidenei Gomes  
 Ferreira<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Universidade Estadual  
 Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá
- 09:30 An easy route to incorporate phosphorus into the structure of graphene oxide** U.P7.50  
Tainara Luiza Guerra Costa<sup>1</sup>, Mariana Arpini Vieira<sup>1</sup>, Daniel Fernandes Cipriano<sup>1</sup>,  
 Jair Carlos Checon Freitas<sup>1</sup>, Valdemar Lacerda Júnior<sup>1</sup>, Arlan da Silva  
 Gonçalves<sup>2</sup>; <sup>1</sup>Universidade Federal do Espírito Santo, <sup>2</sup>Instituto Federal de  
 Educação, Ciência e Tecnologia do Espírito Santo

- 09:30 Syntheses of reduced graphene oxide using aqueous extract of *Syzygium cumini* as green reducing agent** U.P7.51  
Tanyse Parada Sampaio<sup>1</sup>, Jordana Moreira Silva<sup>1</sup>, Tássia Parada Sampaio<sup>1</sup>, Cristiane Ferraz de Azevedo<sup>1</sup>, Fernando Machado<sup>1</sup>, Alice Gonçalves Osório<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 09:30 Atomistic description of structural and transport properties of natural gas confined in carbon nanotubes** U.P7.52  
Teresa Duarte Lanna<sup>1</sup>, Alessandro Kirch<sup>1</sup>, Caetano Rodrigues Miranda<sup>1</sup>; <sup>1</sup>Instituto de Física - Universidade de São Paulo
- 09:30 Conductive thin films of carbon nanotubes and silver nanowires chemical treated** U.P7.53  
Thiago Ismael Torrano do Amaral Mello<sup>1</sup>, Carlos Eduardo Cava<sup>1</sup>, Érika Gomes Yamamoto<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná - Londrina
- 09:30 Ultrasensitive detection of Hg<sup>+2</sup> ions by low-damping hybrid Au/graphene SPR sensing platform** U.P7.54  
Tommaso Del Rosso<sup>1</sup>, Quaid Zaman<sup>1</sup>, Andre N Barbosa<sup>1</sup>, Omar Pandoli<sup>1</sup>, Ricardo Queiroz Aucelio<sup>1</sup>, Fernando Lázaro Freire Júnior<sup>1</sup>, Carlos Toloza<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro
- 09:30 Synthesis and characterization of graphene oxide and its H<sub>3</sub>BO<sub>3</sub> composite for impedimetric sensors for ethanol and ketone detection.** U.P7.55  
Údine Rodrigues Oliveira<sup>1</sup>, Mauro Pinheiro Silva<sup>1</sup>, Alex Fabiano Cortez Campos<sup>1</sup>, Marco Roberto Cavallari<sup>2</sup>, Leonardo Giordano Paterno<sup>1</sup>, Richard Landers<sup>3</sup>, Fernando Josepetti Fonseca<sup>2</sup>, Eudes Souza<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Universidade Estadual de Campinas
- 09:30 Synthesis and characterization of graphene oxide chemically modified with copper nitroprusside** U.P7.56  
Vitor Alexandre Maraldi<sup>1</sup>, Devaney Ribeiro do Carmo<sup>1</sup>; <sup>1</sup>São Paulo State University
- 09:30 Bifunctionalization of graphene oxide towards nanoenzymes** U.P7.57  
Yane Honorato Santos<sup>1</sup>, Aldo Jose Gorgatti Zarbin<sup>1</sup>, Elisa S Orth<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 09:30 Temperature effect on the graphene oxide synthesis** U.P7.58  
Yasmin Montero Quispe<sup>1</sup>, Stefany Rodrigues Saraiva<sup>1</sup>, Hugo Gajardoni de Lemos<sup>1</sup>, Luis Marcelo G da Silva<sup>1</sup>, Ediléia Duarte Oliveira<sup>1</sup>, Everaldo Carlos Venancio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 09:30 Fiber Bragg Grating sensor (FGB) decoration with Graphene Oxide (GO) a candidate for antigen detection** U.P7.59  
Yuri Bilk Matos<sup>1</sup>, Jean Filipe Kuhne<sup>1</sup>, Gustavo Henrique Wegher<sup>1</sup>, Ricardo Canute Kamikawachi<sup>1</sup>, Emilson Ribeiro Viana Junior<sup>1</sup>; <sup>1</sup>Federal University of Technology - Paraná
- 09:30 Buckypaper and buckypaper functionalized with silver nanowires to serve as electrode of triboelectric nanogenerators** U.P7.60  
Tiago de Freitas Damasceno da Rocha<sup>1</sup>, Sérgio de Souza Camargo Jr.<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro/COPPE





# **SYMPOSIUM V - Research on 2D material**

## **Symposium organizers:**

Benjamin Fragneaud (UFJF)  
Leonardo Cristiano Campos (UFMG)  
Rodrigo Gribel Lacerda (UFMG)  
Jenaina Ribeiro Soares (UFLA)



## TUESDAY , SEPTEMBER 24

\* Invited Lecture

### *SESSION V.01.D2 (09:30 - 10:30) - Room Índico*

- 09:30 Interactions between electrons and phonons in twisted bilayer graphene and single-layer MOS<sub>2</sub> studied by resonance raman spectroscopy** V.O1.D2.1\*  
Marcos A Pimenta<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 10:00 Study of defects in large area two-dimensional semiconductors** V.O1.D2.2  
Frederico Barros de Sousa<sup>1</sup>, Bárbara Rosa<sup>1</sup>, Kazunori Fujisawa<sup>2</sup>, Tianyi Zhang<sup>2</sup>, Bruno Carvalho<sup>3</sup>, Mauricio Terrones<sup>2</sup>, Leandro M Malard<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Pennsylvania State University, <sup>3</sup>Universidade Federal do Rio Grande do Norte
- 10:15 Temperature-Dependent Phonon Properties of Suspended WSe<sub>2</sub> Monolayer Crystal** V.O1.D2.3  
Thais C. V. Carvalho<sup>1</sup>, Jeferson F. S. Vieira<sup>1</sup>, Clenilton Costa dos Santos<sup>2</sup>, Luciana M. R. Alencar<sup>2</sup>, Antonio Gomes Souza Filho<sup>3</sup>, Jenaina Ribeiro Soares<sup>4</sup>, Anderson Oliveira Lobo<sup>1</sup>, Rafael Silva Alencar<sup>5</sup>, Bartolomeu Cruz Viana<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Federal do Maranhão, <sup>3</sup>Universidade Federal do Ceará, <sup>4</sup>Universidade Federal de Lavras, <sup>5</sup>Universidade Federal do Pará

### *SESSION V.02.D2 (11:00 - 12:00) - Room Índico*

- 11:00 Hybrid Graphene Hydrogels: Smart Soft Materials** V.O2.D2.1\*  
Estrer Vázquez<sup>1</sup>; <sup>1</sup>Universidad Castilla-La Mancha
- 11:30 Metal Organic Framework of alkaline Earth metal with antibacterial activity.** V.O2.D2.2  
Érica Fernanda Poruczinski<sup>1</sup>, Juliana Cheleski Wiggers<sup>1</sup>, Silvia Denofre De Campos<sup>1</sup>, Milena Noronha<sup>1</sup>, Helton José Wiggers<sup>1</sup>, Elvio Antonio de Campos<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 11:45 Solvent effect on Mg-Al and Zn-Al layered double hydroxide (LDH) preparation** V.O2.D2.3  
Walter Mendes de Azevedo<sup>1</sup>, Aldebarã Fausto Ferreira<sup>1</sup>, Joana Eliza de Santana<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

### *SESSION V.03.D2 (14:00 - 16:15) - Room Índico*

- 14:00 Folded monolayer graphene analyzed by Raman spectroscopy** V.O3.D2.1  
Camila Machado França<sup>1</sup>, Clara Muniz Almeida<sup>2</sup>, Monica de Mesquita Lacerda<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>National Institute of Metrology, Standardization and Industrial Quality
- 14:15 Raman spectroscopy, theoretical analysis, and synthesis: from two-dimensional semiconductor to nanostructured biochar** V.O3.D2.2  
Jenaina Ribeiro-Soares<sup>1</sup>, Raphael Longuinhas<sup>1</sup>; <sup>1</sup>Universidade Federal de Lavras

- 14:30 Resonance Raman spectroscopy of few quintuple layers of topological insulator  $\text{Bi}_2\text{Te}_3$**  V.O3.D2.3  
Victor Carozo<sup>1</sup>, Syed Hamza Safeer<sup>1</sup>, Bruno Carvalho<sup>2</sup>, Leandro Seixas Rocha<sup>3</sup>, Mauricio Terrones<sup>4</sup>; <sup>1</sup>Department of physics, Pontifical Catholic University of Rio de Janeiro - PUC-Rio, <sup>2</sup>Universidade Federal do Rio Grande do Norte, <sup>3</sup>Universidade Presbiteriana Mackenzie, <sup>4</sup>Pennsylvania State University
- 14:45 Synthesis and characterization of Hybrid Pseudo Boehmite (PB) based nanoparticles containing Graphene Oxide (GO)** V.O3.D2.3b  
Fábio Jesus Moreira de Almeida<sup>1</sup>, Leila Figueiredo de Miranda<sup>1</sup>, Nei Carlos Oliveira Sousa<sup>1</sup>, Igor José Dester Ladeira<sup>1</sup>, Bruno Luís Soares de Lima<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie
- 15:00 Microwave-assisted hydrothermal synthesis of  $\text{MoS}_2$  nanostructures on paper substrates, tuning of properties and low-cost sensor devices** V.O3.D2.4  
Neusmar Junior Artico Cordeiro<sup>1</sup>, Cristina Henriques Gaspar<sup>2</sup>, Daniela Nunes<sup>2</sup>, Ana Pimentel<sup>2</sup>, Pedro Barquinha<sup>2</sup>, Luís Miguel Pereira<sup>2</sup>, Elvira Maria Correia Fortunato<sup>2</sup>, Rodrigo Ferrão de Paiva Martins<sup>2</sup>, Edson Laureto Laureto<sup>1</sup>, Sidney Alves Lourenço<sup>3</sup>; <sup>1</sup>Universidade Estadual de Londrina, <sup>2</sup>Universidade Nova de Lisboa, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 15:30 Thin and transparent films of two-dimensional molybdenum disulfide** V.O3.D2.5  
Ariane Schmidt<sup>1</sup>, Aldo J.G. Zarbin<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 15:45 Roles of Precursor Conformation and Adatoms in Ullmann Coupling: An Inverted Porphyrin on  $\text{Cu}(111)$**  V.O3.D2.6  
Rodrigo Cezar de Campos Ferreira<sup>1</sup>, Juan Carlos Moreno-López<sup>2,3</sup>, Duncan John Mowbray<sup>3,4</sup>, Alejandro Pérez Paz<sup>3,4</sup>, Alisson Ceccato dos Santos<sup>1</sup>, Paola Ayala<sup>2,3</sup>, Abner de Siervo<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>University of Vienna, <sup>3</sup>Yachay Tech University, <sup>4</sup>Universidad del País Vasco

## WEDNESDAY, SEPTEMBER 25

\* Invited Lecture

### *SESSION V.O1.D3 (09:30 - 10:30) - Room Índico*

- 09:30 New 2D Materials From Non-van der Waals Solids** V.O1.D3.1\*  
Douglas Soares Galvão<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 10:00 Ab Initio Investigations into the Nanoflake Stability and Properties of Transition-Metal Dichalcogenides** V.O1.D3.2  
 Naidel A. M. S. Caturello<sup>1</sup>, Julian Vieira Silveira<sup>1</sup>, Rafael Besse<sup>2</sup>, Augusto C. H. Da Silva<sup>1</sup>, Matheus P. Lima<sup>3</sup>, Juarez L. F. Da Silva<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos-USP, <sup>2</sup>Instituto de Física de São Carlos - USP, <sup>3</sup>Universidade Federal de São Carlos - Campus São Carlos
- 10:15 Amorphous Topological Insulator** V.O1.D3.3  
 Marcio Costa<sup>1</sup>, Gabriel Schleder<sup>1</sup>, Marco Buongiorno Nardelli<sup>2</sup>, Caio Lewenkopf<sup>3</sup>, Adalberto Fazzio<sup>1</sup>; <sup>1</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM), <sup>2</sup>North Texas University, <sup>3</sup>Universidade Federal Fluminense

### **SESSION V.02.D3 (11:00 - 12:00) - Room Índico**

- 11:00 Magnetoresistance and efficient spin-to-charge conversion in graphene/ferromagnetic structures** **V.O2.D3.1\***  
Joaquim Bonfim Santos Mendes<sup>1</sup>; <sup>1</sup>Universidade Federal de Viçosa
- 11:30 Topological valley transport at the curved boundary of a folded bilayer graphene** **V.O2.D3.2**  
Edrian Mania<sup>1,2</sup>, Alisson Ronieri Cadore<sup>2</sup>, Takashi Taniguchi<sup>3</sup>, Kenji Watanabe<sup>3</sup>, LEONARDO CRISTIANO CAMPOS<sup>2</sup>; <sup>1</sup>Universidade Estadual de Feira de Santana, <sup>2</sup>Universidade Federal de Minas Gerais, <sup>3</sup>National Institute for Materials Science
- 11:45 Influence of Substrate on Friction of 2D Materials** **V.O2.D3.3**  
Thiago Gonzalez-Llana Brito<sup>1,2</sup>, Clara Muniz Almeida<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>National Institute of Metrology

### **SESSION V.03.D3 (14:00 - 16:15) - Room Índico**

- 14:00 Femtosecond electron transfer dynamics pathways in two-dimensional MoS<sub>2</sub>/graphene heterostructures: a core-hole clock approach** **V.O3.D3.1**  
Yunier Garcia Basabe<sup>1</sup>, Alexandre Reily Rocha<sup>2</sup>, Flavio C Vicentin<sup>3</sup>, Cesar Enrique Perez Villegas<sup>2</sup>, Eric Cardona Romani<sup>4</sup>, Regiane do Nascimento<sup>5</sup>, Emerson C de Oliveira<sup>6</sup>, Guilhermino J. M. Fechine<sup>6</sup>, Goki Eda<sup>7</sup>, Dunieskys Roberto González Larrude<sup>6</sup>; <sup>1</sup>Universidade Federal da Integração Latino-Americana, <sup>2</sup>Universidade Estadual Paulista, <sup>3</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>4</sup>Instituto SENAI de Tecnologia em Logística da Produção, <sup>5</sup>Universidade Federal de Ouro Preto, <sup>6</sup>Universidade Presbiteriana Mackenzie, <sup>7</sup>National University of Singapore
- 14:15 Effects of H<sub>2</sub> Interaction on MoS<sub>2</sub> monolayer transistors** **V.O3.D3.2**  
Rodrigo Gribel Lacerda<sup>1</sup>, Natália Pereira Rezende<sup>1</sup>, Alisson Ronieri Cadore<sup>1</sup>, Andreij Gadelha<sup>1</sup>, Cintia Lima Pereira<sup>1</sup>, Andre S Ferlauto<sup>2</sup>, Angelo Malachias<sup>1</sup>, LEONARDO CRISTIANO CAMPOS<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Universidade Federal do ABC
- 14:30 Vertical Electronic Transport in 2D materials investigated in the nanoscale** **V.O3.D3.3**  
Daniel Brito de Araújo<sup>1</sup>, Rodrigo Queiros Almeida<sup>2</sup>, Andreij Gadelha<sup>3</sup>, Leonardo C. Campos<sup>3</sup>, Eduardo Bedê Barros<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Ceará, <sup>3</sup>Universidade Federal de Minas Gerais
- 15:00 Surface termination dependent work function and electronic properties of Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene** **V.O3.D3.4**  
Thorsten Schultz<sup>1</sup>, Nathan C. Frey<sup>2</sup>, Kanit Hantanasirisakul<sup>3</sup>, Soohyung Park<sup>4</sup>, Steven J. May<sup>3</sup>, Vivek B. Shenoy<sup>2</sup>, Yury Gogotsi<sup>3</sup>, Norbert Koch<sup>1</sup>; <sup>1</sup>Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, <sup>2</sup>University of Pennsylvania, <sup>3</sup>Drexel University, <sup>4</sup>Korea Institute of Science and Technology
- 15:15 Stability and Electronic properties of Silicene on a NiI<sub>2</sub> substrate** **V.O3.D3.5**  
Douglas Duarte de Vargas<sup>1</sup>, Rogério José Baierle<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Maria
- 15:30 TPU/Ti<sub>3</sub>C<sub>2</sub>(T<sub>x</sub>) MXene Nanocomposite Interactions from Ab Initio Calculations** **V.O3.D3.6**  
Rodrigo Mantovani Ronchi<sup>1</sup>, Sydney Ferreira Santos<sup>1</sup>, Jeverson Teodoro Arantes<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

- 15:45 Thermal Actuation of Graphyne and Graphdiyne Nanoscroll Structures** **V.O3.D3.7**  
Daniel A Solis<sup>1</sup>, Daiane Damasceno Borges<sup>2</sup>, Cristiano Francisco Woellner<sup>3</sup>,  
Douglas Soares Galvão<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade  
Federal de Uberlândia, <sup>3</sup>Universidade Federal do Paraná

## THURSDAY, SEPTEMBER 26

\* Invited Lecture

### *SESSION V.O1.D4 (09:30 - 11:00) - Room Índico*

- 09:30 NanoRaman: Latest Instrumentation and Challenges Results on Correlated Tip-Enhanced Optical Spectroscopy and SPM** **V.O1.D4.1**  
Marc Chaigneau<sup>1</sup>, Joao Lucas Silva<sup>1</sup>, Igor Carvalho<sup>1</sup>; <sup>1</sup>HORIBA Scientific
- 10:00 2D MoS<sub>2</sub> and rGO aerogels: An Electrode Material for Supercapacitor Applications** **V.O1.D4.2**  
Daniel Edward Lippross<sup>1</sup>, Alan Massayuki Perdizio Sakita<sup>1</sup>, Felipe Da Silva Medeiros<sup>1</sup>, Rodrigo Lassarote Lavall<sup>1</sup>, Glaura Goulart Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 10:15 Spray-deposited molybdenum disulfide nanoflakes: towards energy storage and electronic devices applications** **V.O1.D4.3**  
Maykel Santos Klem<sup>1</sup>, Gabriel Leonardo Nogueira<sup>1</sup>, Caroline Sousa Pereira<sup>1</sup>, Neri Alves<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente
- 10:30 Combined micro – reflectance and Raman or Photoluminescence spectroscopy on SMS - Standard Microscope Spectroscopy system** **V.O1.D4.4**  
Joao Lucas Silva<sup>1</sup>, Igor Carvalho<sup>1</sup>, Francis Ndi<sup>2</sup>; <sup>1</sup>HORIBA Scientific, <sup>2</sup>HORIBA Instruments Inc.
- 10:45 Characterization of human blood and its effect on graphene using raman spectroscopy** **V.O1.D4.5**  
Dionathan Alves Campanelli<sup>1</sup>, Gustavo Hardt Hardt<sup>1</sup>, Luis E. Gomez Armas<sup>2</sup>; <sup>1</sup>Universidade Federal do Pampa, <sup>2</sup>Fundação Universidade Federal do Pampa

## MONDAY, SEPTEMBER 23

### Poster presentations

#### *SESSION V.P1 (11:00 - 12:30)*

- 11:00 Carbon-related bilayers: nanoscale building blocks for self-assembly nanomanufacturing** **V.P1.1**  
Bruno Bueno Ipaves Nascimento<sup>1</sup>, Joao Francisco Justo<sup>2</sup>, Lucy V. Credidio Assali<sup>1</sup>; <sup>1</sup>Instituto de Física - Universidade de São Paulo, <sup>2</sup>Escola Politécnica de Universidade de São Paulo

- 11:00 Mechanical, electronic and structural properties of new 2D materials** **V.P1.2**  
Alysson Alves Pinto<sup>1</sup>, Mário Sérgio de Carvalho Mazzoni<sup>2</sup>, Matheus Josué de Souza Matos<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Universidade Federal de Minas Gerais
- 11:00 Analysis of the interaction of type I collagen with two-dimensional materials for the development of biomedical nanocomposites** **V.P1.3**  
Ana Carolina Ferreira de Brito<sup>1</sup>, Natália Cristina Martins da Silva<sup>2</sup>, Rafaela Salvador Souza Lemos<sup>2</sup>, Jaqueline dos Santos Soares<sup>1</sup>, Mariana de Castro Prado<sup>1</sup>, Érika Lorena Fonseca Costa de Alvarenga<sup>3</sup>, Bernardo Ruegger Almeida Neves<sup>4</sup>, Ronaldo Junio Campos Batista<sup>1</sup>, Cláudia Karina Barbosa de Vasconcelos<sup>2</sup>, Marcelo Machado Viana<sup>4</sup>, Ana Paula Moreira Barboza<sup>1</sup>, Taise Matte Manhabosco<sup>1</sup>, Nathanael Vieira Medrado<sup>4</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Pontifícia Universidade Católica de Minas Gerais, <sup>3</sup>Universidade Federal de São João Del Rei, <sup>4</sup>Universidade Federal de Minas Gerais
- 11:00 Investigation of two-dimensional gypsum by SPM techniques** **V.P1.4**  
Arthur Carneiro Chaves dos Santos<sup>1</sup>, Ariana Cristina Santos Almeida<sup>1</sup>, Ana Paula Moreira Barboza<sup>2</sup>, Bernardo Ruegger Almeida Neves<sup>3</sup>, Elisângela Silva Pinto<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de Minas Gerais, <sup>2</sup>Universidade Federal de Ouro Preto, <sup>3</sup>Universidade Federal de Minas Gerais
- 11:00 Robustness evaluation of thermogravimetry and infrared absorption spectroscopy methods applied in carbon nanomaterials characterization** **V.P1.5**  
Carla Onara Gonçalves<sup>1</sup>, Juliana de Fátima Silva<sup>1</sup>, Teresa Adelaide Dias<sup>1</sup>, Solange Maria Valadares<sup>1</sup>, Max Passos Ferreira<sup>1</sup>, Clascídia A. Furtado<sup>1</sup>, Adelina Pinheiro Santos<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 11:00 Piezoelectric thin films of Bi<sub>0.5</sub>Na<sub>0.5</sub>TiO<sub>3</sub>-BaTiO<sub>3</sub> prepared by the sol-gel method** **V.P1.6**  
Carlos Yago Pereira Batista<sup>1</sup>, Yonny Romaguera Barcelay<sup>1</sup>, José Carlos Calado Junior<sup>1</sup>, Walter Ricardo<sup>1</sup>, Yurimiler Leyet Ruiz<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 11:00 Hydrogen and Oxygen Evolution Reaction Activity of SiC single layer doped with alkali (Li, K and Na) and alkali-earth (Be, Ca and Mg) adatoms.** **V.P1.7**  
Caroline Jaskulski Rupp<sup>1</sup>, Rogério José Baierle<sup>2</sup>, Jonas Anversa<sup>3</sup>; <sup>1</sup>Fundação Universidade Federal do Pampa, <sup>2</sup>Universidade Federal de Santa Maria, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul
- 11:00 Direct growth of molybdenum disulfide nanostructures over stainless steel substrates** **V.P1.8**  
Caroline Sousa Pereira<sup>1</sup>, Maykel Santos Klem<sup>1</sup>, Neri Alves<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, Campus de Presidente Prudente
- 11:00 Periodic mesoporous organosilica containing 4,4-bipyridinium group as anchoring agent and stabilizer of high active palladium nanoparticles** **V.P1.9**  
Cezar Augusto Didó<sup>1</sup>, Carlos Daniel Gessi Caneppele<sup>1</sup>, Douglas Santana Charqueiro<sup>1</sup>, Tania Maria Haas Costa<sup>2</sup>, Edilson Valmir Benvenuti<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto de Química - UFRGS
- 11:00 Study of tin sulfide nanoparticles properties for hybrid polymeric/inorganic active layers** **V.P1.10**  
María Eugenia Pérez<sup>1</sup>, Daniela Oreggioni<sup>1</sup>, Loengrid Bethencourt<sup>1</sup>, Ivana Aguiar<sup>1</sup>, Mauricio Rodriguez<sup>1</sup>, Ricardo Santana<sup>2</sup>, Lauro June Queiroz Maia<sup>2</sup>, Laura Fornaro<sup>1</sup>; <sup>1</sup>Universidad de la República, <sup>2</sup>Universidade Federal de Goiás

- 11:00 Edge-dependent properties of borophene nanoribbons** **V.P1.11**  
Daniel Vasconcelos Pazzini Massote<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 11:00 Synthesis of carbonaceous compounds for adsorption of heavy metals** **V.P1.12**  
Danyela Cardoso Carvalho<sup>1</sup>, Gisele Aparecida Amaral-Labat<sup>1</sup>, Patricia Almeida Mattos<sup>1</sup>, Alan Fernando Ney Boss<sup>2</sup>, Guilherme Frederico Bernardo Lenz e Silva<sup>2</sup>; <sup>1</sup>University of São Paulo, <sup>2</sup>Escola Politécnica de Universidade de São Paulo
- 11:00 Theoretical Vision of Water Exfoliation of Phosphorene** **V.P1.13**  
Eduardo Santos Carvalho<sup>1</sup>, Tales José da Silva<sup>1</sup>, Marília J. Caldas<sup>1</sup>; <sup>1</sup>University of São Paulo
- 11:00 Development of conductive inks based on two dimensional materials** **V.P1.14**  
Nathália Maria Moraes Fernandes<sup>1</sup>, Jaqueline Falchi da Rocha<sup>1</sup>, Cecilia de Carvalho Castro e Silva<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie
- 11:00 Impact of grain boundaries on the electronic properties of MoSe<sub>2</sub>** **V.P1.15**  
Fábio Ofredi Maia<sup>1</sup>, Victor Carozo<sup>2</sup>, Indhira Oliveira Maciel<sup>1</sup>, Benjamin Fragneaud<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora, <sup>2</sup>Department of physics, Pontifical Catholic University of Rio de Janeiro - PUC-Rio
- 11:00 effect of the oxidation on electrical resistance of copper ultra thin films before and after percolation** **V.P1.16**  
Francisca Marin<sup>1</sup>, Gabriel Gray<sup>1</sup>, Claudio A. González-Fuentes<sup>1</sup>, Ricardo Henriquez<sup>1</sup>; <sup>1</sup>Universidad Técnica Federico Santa María
- 11:00 Stacking-dependent electronic properties of few layers of WX<sub>2</sub> (X=S, Se and Te)** **V.P1.17**  
Gabriel Henrique Perin<sup>1</sup>, Rafael Rodrigues Barbosa<sup>1</sup>, Rafael da Silva<sup>1</sup>, José Eduardo Padilha de Sousa<sup>2</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Federal do Paraná
- 11:00 SERS substrates produced by the Roll-to-Roll process** **V.P1.18**  
Giovana Rosso Caganani<sup>1</sup>, Marcelo Barbosa Andrade<sup>1</sup>, Debora Terezia Balogh<sup>2</sup>, Roberto Mendonça Faria<sup>3</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>São Carlos Institute of Physics, University of São Paulo
- 11:00 Carbon Nanostructures as Additives of Lubricating Oils** **V.P1.19**  
Diego Cardoso de Souza<sup>1</sup>, Clara Monteiro Marinho<sup>1</sup>, João Henrique Delavechia Guimarães Silva<sup>1</sup>, Lays Furtado de Medeiros Souza Kataoka<sup>1</sup>, Icoana Lais Leitão Mascarenhas Martins<sup>1</sup>, Pilar Hidalgo Falla<sup>1</sup>, Ana Carolina Pinheiro Faria<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 11:00 Multiscale elemental analysis of buried materials and interfaces** **V.P1.20**  
Joao Lucas Silva<sup>1</sup>, Igor Carvalho<sup>1</sup>, Patrick Chapon<sup>2</sup>, Jocelyne Marciano<sup>2</sup>, Sofia Gaiaschi<sup>2</sup>; <sup>1</sup>HORIBA Scientific, <sup>2</sup>HORIBA Scientific FRANCE
- 11:00 Development of a microfluidic platform for probing the interface between liquids and 2D Semiconductor Membranes** **V.P1.21**  
Ive Silvestre<sup>1</sup>, Leonel Meireles<sup>2</sup>, Gustavo Arrighi Ferrari<sup>3</sup>, Ana Barboza<sup>1</sup>, Bernardo Ruedger Almeida Neves<sup>4</sup>, Rodrigo Gribel Lacerda<sup>4</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia de Minas Gerais, <sup>4</sup>Universidade Federal de Minas Gerais
- 11:00 Luminescent multiphase complex europium coordinated by zwitterion** **V.P1.22**  
JANILSON ALVES FERREIRA<sup>1</sup>, Edielen França Santos<sup>1</sup>, Severino Alves Júnior<sup>1</sup>, Tania Cassol<sup>2</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Universidade Tecnológica Federal do Paraná



- 11:00 Single step exfoliation and functionalization of MoS<sub>2</sub>** **V.P1.23**  
 Rebecca Faggion Albers<sup>1,2</sup>, João Batista Souza Junior<sup>3</sup>, Elson Longo<sup>1</sup>, Edson Roberto Leite<sup>1,4</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Departamento de Química - Universidade Federal de São Carlos, <sup>3</sup>Universidade de São Paulo, <sup>4</sup>Laboratório Nacional de Nanotecnologia (LNNano) - Centro Nacional de Pesquisa em Energia e Materiais (CNPEM)
- 11:00 Graphene as sers substrate of biomolecules rhodamine 6G** **V.P1.24**  
Juliana Bahu Rodrigues<sup>1</sup>, Dionathan Alves Campanelli<sup>2</sup>, Luis E. Gomez Armas<sup>1</sup>, Gustavo Hardt Hardt<sup>2</sup>, Lisiane da Silva Severo<sup>1</sup>, Jacson weber de Menezes<sup>1</sup>, CHIARA VALSECCHI<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal do Pampa, <sup>2</sup>Universidade Federal do Pampa
- 11:00 L-cysteine adsorption on Zn/Al layered double hydroxide silver impregnated** **V.P1.25**  
Júlio César Oliveira Ribeiro<sup>1</sup>, Renato Rosseto<sup>1</sup>; <sup>1</sup>Universidade Estadual de Goiás
- 11:00 A preparation route of WS<sub>2</sub>-Graphene and MoS<sub>2</sub>-Graphene nanocomposites by dry ball milling and liquid phase exfoliation approaches** **V.P1.26**  
Lara Marques Daminelli<sup>1</sup>, Rafael Otoniel Ribeiro<sup>1</sup>, Dunieskys Roberto González Larrude<sup>2</sup>, Yunier Garcia Basabe<sup>1</sup>; <sup>1</sup>Universidade Federal da Integração Latino-Americana, <sup>2</sup>Universidade Presbiteriana Mackenzie
- 11:00 High-pressure study of a layered nanometric solid solution SnS<sub>0.5</sub>Se<sub>0.5</sub> by In-situ X-ray characterization and ab-initio calculations** **V.P1.27**  
Larissa Da Silva Marques<sup>1</sup>, Sérgio Michielon de Souza<sup>2</sup>, Angsula Ghosh<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal do Amazonas
- 11:00 Obtain of molybdenum disulphide nanostructures (MoS<sub>2</sub>) and application as an additive for extreme pressure industrial lubricants** **V.P1.28**  
 Diego Cardoso de Souza<sup>1</sup>, Clara Monteiro Marinho<sup>1</sup>, Pilar Hidalgo Falla<sup>1</sup>, Lays Furtado de Medeiros Souza Kataoka<sup>1</sup>, João Henrique Delavechia Guimarães Silva<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 11:00 Dirac materials topologically modified as a novel way for a new generation of spintronic devices** **V.P1.29**  
Leonardo Villegas-Lelovsky<sup>1</sup>, Ricardo Paupitz<sup>1</sup>; <sup>1</sup>Institute of Geosciences and Exact Sciences/UNESP
- 11:00 Electrochemical preparation of Ni(OH)<sub>2</sub>-CoOOH bilayer films for application in energy storage devices** **V.P1.30**  
Lianet Aguilera Domínguez<sup>1</sup>, Yurimiler Leyet Ruiz<sup>1</sup>, Raimundo Ribeiro Passos<sup>1</sup>, Leandro Aparecido Pocrifka<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 11:00 Electrochemical synthesis of  $\gamma$ -CoOOH from  $\alpha$ -Co(OH)<sub>2</sub> for energy storage device applications** **V.P1.31**  
Lianet Aguilera Domínguez<sup>1</sup>, Yurimiler Leyet Ruiz<sup>1</sup>, Raimundo Ribeiro Passos<sup>1</sup>, Leandro Aparecido Pocrifka<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 11:00 Stability and electronic structure of hydrogenated SiC nanostructures, a first principles study** **V.P1.32**  
Luiz Felipe Kremer<sup>1</sup>, Rogério José Baierle<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Maria
- 11:00 Surface functionalization and band gap engineering of Silicene** **V.P1.33**  
Pedro Gabriel Vieira Silva<sup>1</sup>, Andreia Luisa da Rosa<sup>1</sup>, Flávio Bento de Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 11:00 Ab-initio prediction of a novel 2D phosphorene allotrope** **V.P1.34**  
Pedro G. Demingos<sup>1</sup>, André R. Muniz<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

- 11:00 Electronic and optical properties of Janus hexagonal monolayer materials of group IV-VI** **V.P1.35**  
Rafael Rodrigues Barbosa<sup>1</sup>, Gabriel Henrique Perin<sup>1</sup>, Rafael da Silva<sup>1</sup>, José Eduardo Padilha de Sousa<sup>2</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Federal do Paraná
- 11:00 3-carbophene: a two-dimensional hydrocarbon based on 3-phenylene** **V.P1.36**  
 Chad Junkermeier<sup>1</sup>, Jay Paul Luben<sup>1</sup>, Jordan Dalessandro<sup>1</sup>, Turner M. Reed<sup>2</sup>, Ricardo Paupitz<sup>3</sup>; <sup>1</sup>University of Hawaii, <sup>2</sup>Jacksonville High School, <sup>3</sup>Institute of Geosciences and Exact Sciences/UNESP
- 11:00 Strain effects on ultra-thin hexagonal NiI<sub>2</sub> Single layer** **V.P1.37**  
 Douglas Duarte de Vargas<sup>1</sup>, Rogério José Baierle<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Maria
- 11:00 Structural and thermal properties of a nanostructured Cr<sub>2</sub>Se<sub>3</sub> alloy** **V.P1.38**  
Sthevan Klingel<sup>1</sup>, Camila Candinho<sup>1</sup>, Claudio Michel Poffo<sup>1</sup>, Zeane Vieira Borges<sup>1</sup>, João Cardoso de Lima<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Disorder Effects on the Energy Gap of Armchair Graphene Nanoribbons** **V.P1.39**  
Tharles Antônio Ribeiro<sup>1</sup>, Ana Luiza C Pereira<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 11:00 Description of charge transport for an industrially scalable graphene nanoribbon** **V.P1.40**  
Tiago de Sousa Araújo Cassiano<sup>1</sup>, Laura Simonassi Raso de Paiva<sup>1</sup>, Leonardo Evaristo de Sousa<sup>2</sup>, Pedro Henrique de Oliveira Neto<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Estadual de Goiás
- 11:00 Surface Silanization of Graphene Oxide with 3-aminopropyl triethoxysilane** **V.P1.41**  
Tiago Serodre<sup>1</sup>, Norma Oliveira<sup>1</sup>, Max Passos Ferreira<sup>1</sup>, Adelina Pinheiro Santos<sup>1</sup>, Valdirene Resende<sup>2</sup>, Clascídia A. Furtado<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Vale SA
- 11:00 Effects of shear and uniaxial strains on the electronic properties of Lieb and Kagome lattices** **V.P1.42**  
Wellisson Pires Lima<sup>1</sup>, Diego Rabelo da Costa<sup>1</sup>, Silvia Helena Roberto de Sena<sup>2</sup>, João Milton Pereira Júnior<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Universidade da Integração Internacional da Lusofonia Afro-Brasileira

# **SYMPOSIUM X - Materials for Additive Manufacturing**

## **Symposium organizers:**

Piter Gargarella (Department of Materials Engineering - Federal University of São Carlos/Brazil)  
Lidiane Cristina Costa (Department of Materials Engineering - Federal University of São Carlos/Brazil)  
Murilo C. Crovace (Department of Materials Engineering - Federal University of São Carlos/Brazil)  
Marcos Akira d'Ávila (Universidade Estadual de Campinas - UNICAMP/Brazil)  
Edvani Curti Muniz (Universidade Estadual de Maringá - UEM/Brazil)  
Guilherme Mariz de Oliveira Barra (Universidade Federal de Santa Catarina - UFSC/Brazil)  
Varlei Rodrigues (Universidade Estadual de Campinas - UNICAMP/Brazil)



# MONDAY , SEPTEMBER 23

\* Invited Lecture

## *SESSION X.01.D1 (09:30 - 10:30) - Room Índico*

- 09:30 Additive Manufacturing (3D Printing): Challenges and opportunities for materials science** X.O1.D1.1\*  
Jorge Vicente Lopes da Silva<sup>1</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer
- 10:00 Macroporous scaffolds obtained by 3D printing using a new bioactive glass composition (F18)** X.O1.D1.2  
Murilo C. Crovace<sup>1</sup>, Edgar Dutra Zanotto<sup>2</sup>, Carlos Alberto Fortulan<sup>3</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>3</sup>Escola de Engenharia de São Carlos - Universidade de São Paulo (USP)
- 10:15 Obtainment of the alumina polyamide coated particles** X.O1.D1.3  
Isaías Oliveira<sup>1</sup>, Ricardo Vieira<sup>1</sup>, Fernando Vernilli Júnior<sup>2</sup>, Jorge Vicente Lopes da Silva<sup>3</sup>, Marcelo Fernandes Oliveira<sup>3</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Escola de Engenharia de Lorena - USP, <sup>3</sup>Centro de Tecnologia da Informação Renato Archer

## *SESSION X.02.D1 (11:00 - 12:00) - Room Índico*

- 11:00 Polymeric materials for Additive Manufacturing** X.O2.D1.1\*  
Eduardo Henrique Backes<sup>1</sup>, Cesar Augusto Gonçalves Beatrice<sup>2,3</sup>, Juliano Marini<sup>2</sup>, Silvia Helena Prado Bettini<sup>2</sup>, Lidiane Cristina Costa<sup>2</sup>, Luiz Antonio Pessan<sup>3</sup>; <sup>1</sup>Programa de Pós-Graduação em Ciência e Engenharia de Materiais (UFSCar), <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Departamento de Engenharia de Materiais - UFSCar (São Carlos)
- 11:30 3D Extrusion-based printing of Cellulose Nanocrystals/Alginate hydrogels** X.O2.D1.2  
Eronildo Alves Pinto Junior<sup>1</sup>, Franckson Jhonhe Torres<sup>2</sup>, Aline Mara dos Santos<sup>2</sup>, Marcos Akira d'Ávila<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Mecânica, Unicamp, <sup>2</sup>Institute of Biology-Unicamp
- 11:45 Additive manufacturing of PLA/HNT bionanocomposites: Influence of rheological behavior on printing quality** X.O2.D1.3  
Pedro Henrique da Silva Vieira<sup>1</sup>, Lidiane Cristina Costa<sup>1</sup>, Juliano Marini<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos

## *SESSION X.03.D1 (14:00 - 16:15) - Room Índico*

- 14:00 Selective laser melting of Cu-based shape memory alloys** X.O3.D1.1\*  
Simon Pauly<sup>1,2</sup>, Tobias Gustmann<sup>1,3</sup>, Uta Kühn<sup>1</sup>; <sup>1</sup>Leibniz Institute for Solid State and Materials Research (IFW) Dresden, <sup>2</sup>University of Applied Sciences Aschaffenburg, <sup>3</sup>Fraunhofer Institute for Machine Tools and Forming Technology Dresden

- 14:30 Influence of Laser Power on Magnetic Properties of Nd-Fe-B Bonded Magnets Obtained by Powder Bed Fusion** X.O3.D1.2\*  
Rafael Gitti Tortoretto Fim<sup>1</sup>, Juliano Assis Baron Engeroff<sup>1</sup>, Arthur Alvarez Mascheroni<sup>1</sup>, Leonardo Ulian Lopes<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>, Carlos Henrique Ahrens<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 15:00 Materials design/selection for Additive Manufacturing** X.O3.D1.3\*  
Prashanth Konda Gokuldoss<sup>1</sup>; <sup>1</sup>Tallinn University of Technology
- 15:30 Microstructure and Texture Formation of Ti53Nb Alloy Fabricated by Selective Laser Melting** X.O3.D1.4  
Rafael de Moura Nobre<sup>1,2</sup>, Fernando José Gomes Landgraf<sup>1</sup>, Jhoan Sebastian Guzman Hernández<sup>1,2</sup>, Enzo Rozenti Nunes<sup>1</sup>, Daniel Leal Bayerlein<sup>2</sup>, Edwin Sallica Leva<sup>2</sup>, Railson Bolsoni Falcão<sup>2</sup>, Henrique Rodrigues Oliveira<sup>3</sup>, Victor Lira Chastinet<sup>3</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo, <sup>2</sup>Instituto de Pesquisas Tecnológicas, <sup>3</sup>Instituto SENAI de Inovação em Processamento a Laser
- 15:45 Bamboo-like structure in a beta Ti alloy processed by selective laser melting** X.O3.D1.5  
Rodolfo Lisboa Batalha<sup>1,2</sup>, Simon Pauly<sup>2,3</sup>, Piter Gargarella<sup>1</sup>, Claudio S. Kiminami<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Leibniz Institute for Solid State and Materials Research (IFW) Dresden, <sup>3</sup>University of Applied Sciences Aschaffenburg
- 16:00 Evaluation of the microstructural evolution of AISI 316 steel layers deposited on AISI 347 steel substrate by direct energy deposition** X.O3.D1.6  
Isabela Atilio<sup>1,2</sup>, Milton Sergio Fernandes de Lima<sup>3</sup>, Rafael Humberto Mota de Siqueira<sup>3</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Estudos Avançados, <sup>3</sup>Institute for Advanced Studies

## WEDNESDAY, SEPTEMBER 25

### Poster presentations

#### *SESSION X.P5 (11:00 - 12:30)*

- 11:00 Additive Manufacturing of functionalized carbon nanotubes based nanocomposites with PLA matrix by FDM process** X.P5.1  
Letícia Silva De Bortoli<sup>1</sup>, Roberta de Farias<sup>1</sup>, Daniela Zambelli Mezalira<sup>1</sup>, Luciana Maccarini Schabbach<sup>1</sup>, Marcio Celso Fredel<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Application of Alginate and Gelatin in Bioprinting** X.P5.2  
Erika Marques Takase<sup>1</sup>, Ana Luiza Garcia Millás<sup>2</sup>, Adriano Gomes Paixão da Silva<sup>1</sup>, Mariana Lopes<sup>1</sup>, João Caldi<sup>1</sup>, Harrison Santana<sup>1</sup>, Oswaldir Taranto<sup>1</sup>, Elias Tambourgi<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>3D Biotechnology Solutions
- 11:00 Investigating the initial and intermediate stages of sintering of YSZ 8% mol aiming the development of methods of additive manufacturing** X.P5.3  
Bruna Passos Da silva<sup>1</sup>, huyra estevão araujo<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo

- 11:00 Polylactic acid (PLA)/bioactive glass/graphene nanocomposite scaffolds manufactured by fused deposition modelling (FDM) for bone tissue engineering** **X.P5.4**  
Benjamin Hamilton Stafford<sup>1</sup>, Marcio Celso Fredel<sup>1</sup>, Bruno Henriques<sup>1</sup>, Dachamir Hotza<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Comparative study on mechanical properties of additive manufacturing polymers and common engineering plastics used in industry** **X.P5.5**  
Kalyude Diógenes de Sousa<sup>1</sup>, Mayla Alencar Medeiros<sup>1</sup>, Ramsés Otto Cunha Lima<sup>1</sup>, Samuel de Oliveira Martins<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Semi-árido
- 11:00 Influence of ATH and functionalized silica (R202) on the dielectric properties of Poly(ethylene-co-vinyl acetate).** **X.P5.6**  
ADRIANE DA SILVA SENA<sup>1</sup>, Arthur de Castro Ribeiro<sup>2</sup>, Luiz Alberto Ferreira Silva<sup>2</sup>, Vivian Dias de Araújo de Mattos<sup>3</sup>, Bluma Guenther Soares<sup>4</sup>; <sup>1</sup>Instituto de Macromoléculas "Eloisa Mano", <sup>2</sup>Centro de Pesquisas de Energia Elétrica, <sup>3</sup>Universidade do Grande Rio Professor José de Souza Herdy, <sup>4</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ
- 11:00 Effect of processing parameters on the microstructure and mechanical properties of additive manufactured H13 steel** **X.P5.7**  
Adriel Pugliesi de Oliveira<sup>1</sup>, Luiz Henrique Quinquilo Ribeiro de Lima<sup>1</sup>, Bianca Caroline Arantes Felipe<sup>1</sup>, Claudemiro Bolfarini<sup>1</sup>, Nelson Guedes Alcântara<sup>1</sup>, Piter Gargarella<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 11:00 Synthesis of NiTiO<sub>3</sub> by the chemical combustion method** **X.P5.8**  
Anderson Lira Dias<sup>1</sup>, Gleison Neres Marques<sup>1</sup>, Cleane Sales Costa<sup>1</sup>, emilio azevedo<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão
- 11:00 Correlation Between Primary Dendritic Arm Spacing And thermal parameters and influence of iron alloying to Directionally Solidified Al-Si-Mg Alloy** **X.P5.9**  
Angela de Jesus Vasconcelos<sup>1</sup>, Camila Negrão Konno<sup>2</sup>, André dos Santos Barros<sup>2</sup>, José Augusto França Rodrigues<sup>3</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>, Otávio Fernandes Lima da Rocha<sup>4</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Universidade Federal do Pará, <sup>4</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 11:00 Consolidation of the Cu46Zr42Al7Y5 (wt%) Atomized Amorphous Powder Alloy by Powder Metallurgy** **X.P5.10**  
Antonio Amandio da Costa Neto<sup>1</sup>, Régis Daniel Cava<sup>1</sup>, Cesar Edil Costa<sup>2</sup>, Claudemiro Bolfarini<sup>3</sup>, João Victor Mesadri<sup>1</sup>; <sup>1</sup>Universidade da Região de Joinville, <sup>2</sup>Fundação Universidade do Estado de Santa Catarina, <sup>3</sup>Universidade Federal de São Carlos
- 11:00 Mechanical anisotropy of ABS specimens 3D printed by FDM** **X.P5.11**  
Arnaldo Homobono Paes de Andrade<sup>1</sup>, Raquel de Moraes Lobo<sup>1</sup>, Francisco José Breda<sup>1</sup>, Mariano Castagnet<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energeticas e Nucleares
- 11:00 Effect of Ba co-doping in PZT-based ferroelectric ceramics and thin films** **X.P5.12**  
Atair Carvalho da Silva<sup>1</sup>, José de los Santos Guerra<sup>2</sup>; <sup>1</sup>Federal University of Uberlândia, <sup>2</sup>Universidade Federal de Uberlândia
- 11:00 Synthesis and characterization of praseodymium acetate for use in nanotechnology** **X.P5.13**  
Carlos Alberto Da Silva Queiroz<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energeticas e Nucleares

- 11:00 Mechanical characterization of different colors of PLA filaments for 3D-printing** **X.P5.14**  
Douglas Miranda Perez<sup>1</sup>, Carolina Saraiva Lima<sup>1</sup>, Edson Godoy<sup>1</sup>, Vanessa Motta Chad<sup>1</sup>, Silmara Bispo Dos Santos<sup>1</sup>, Marcia Moreira Medeiros<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso
- 11:00 Electromagnetic shielding efficiency of ABS with carbonaceous fillers manufactured via FFF** **X.P5.15**  
Débora Pereira Schmitz<sup>1</sup>, Sílvia D. A. S. Ramôa<sup>1</sup>, Guilherme Mariz de Oliveira Barra<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Synthesis by combustion method of iron titanate for application as ceramic pigments** **X.P5.16**  
Deyse Gaspar de Sousa<sup>1</sup>, Gleison Neres Marques<sup>1</sup>, emilio azevedo<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão
- 11:00 Development of low cost three-dimensional benchtop bioprinter for biomedical applications.** **X.P5.17**  
Diego Silva Batista<sup>1</sup>, Igor Tadeu Silva Batista<sup>2</sup>, Molíria Vieira dos Santos<sup>3</sup>, Hernane da Silva Barud<sup>1,4</sup>; <sup>1</sup>Centro Universitário de Araraquara, <sup>2</sup>MedTechLab Solutions, <sup>3</sup>Tufts University, <sup>4</sup>Universidade de Araraquara
- 11:00 Flammability of polyurethane-cement composites and industrial residues** **X.P5.18**  
Gabriel Oscar Cremona Parma<sup>1</sup>, Diego Valdevino Marques<sup>1</sup>, Polyana Baungarten<sup>1</sup>, Bruno Afonso Büchele Mendonça<sup>1</sup>, Marcielly Melo Freitas<sup>1</sup>, José Gabriel da Silva<sup>1</sup>, Ricardo Luis Barcelos<sup>1</sup>, Rachel Faverzani Magnago<sup>1</sup>; <sup>1</sup>Universidade do Sul de Santa Catarina
- 11:00 Rheology and extrusion 3D printing of nanocomposite hydrogels based on cellulose nanocrystals** **X.P5.19**  
Eronildo Alves Pinto Junior<sup>1</sup>, Jéssica Heline Lopes Fonseca<sup>1</sup>, Marcos Akira d'Ávila<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Mecânica, Unicamp
- 11:00 Characterization of External Pipeline Cladding with Inconel 625 Via Laser Process** **X.P5.20**  
Francisco Ratusznei Ratusznei<sup>1</sup>, Rafael Gomes Nunes Silva<sup>2,3</sup>, Jurandir Marcos Sousa<sup>2</sup>, João Victor El-Hage Meyer Osorio<sup>2</sup>, Milton Pereira<sup>2</sup>; <sup>1</sup>Instituto SENAI de Inovação em Processamento a Laser, <sup>2</sup>Universidade Federal de Santa Catarina, <sup>3</sup>Precision Mechanics Laboratory - Laser
- 11:00 Analysis of the influence of tempering parameters in the surface hardness in high speed steel M2 for application in cut tools** **X.P5.21**  
Francisco Sávio do Livramento Vale<sup>1</sup>, Yago Pablo Rodrigues Bueno<sup>1</sup>, Francisco das Chagas Pereira Júnior<sup>1</sup>, Armystron Gonçalves Ferreira de Araújo<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Piauí
- 11:00 Synthesis and characterization of ceramic pigments based on YAl(1-x)Cr(x)O<sub>3</sub> obtained by the chemical combustion method** **X.P5.22**  
Gleison Neres Marques<sup>1</sup>, Marcelo Moizinho Oliveira<sup>1</sup>, emilio azevedo<sup>1</sup>, Rayssa Cristina Viana Costa<sup>1</sup>, Thayane Portela Oliveira<sup>1</sup>, José Hilton Gomes Rangel<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão
- 11:00 3D printed poly(vinylidene)/thermoplastic polyurethane composites containing carbonaceous fillers for flexible multifunctional sensors** **X.P5.23**  
Mayara Cristina Bertolini<sup>1</sup>, Alessandro Pegoretti<sup>2</sup>, Guilherme Mariz de Oliveira Barra<sup>3</sup>; <sup>1</sup>Università degli Studi di Trento, <sup>2</sup>Università di Trento, <sup>3</sup>Universidade Federal de Santa Catarina



- 11:00 316L stainless steel powder characterization for laser-based AM processes** X.P5.24  
Thiago Pacagnan Cataldi<sup>1</sup>, Gustavo Figueira<sup>1,2</sup>, Piter Gargarella<sup>1,2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Programa de Pós-Graduação em Ciência e Engenharia de Materiais (UFSCar)
- 11:00 Production of 3D printer supplies loaded with Neomycin** X.P5.25  
Hellen Regina Oliveira Almeida<sup>1</sup>, Talita Goulart Silva<sup>1</sup>, Debora Baptista Pereira<sup>1</sup>, Yasmim dos Santos Garcia<sup>1</sup>, Matheus Santos Cunha<sup>1</sup>, Cristiane Evelise Ribeiro da Silva<sup>2</sup>, Maurício de Jesus Monteiro<sup>2</sup>, Claudio Teodoro dos Santos<sup>2</sup>, Roberta Helena Mendonça<sup>1</sup>; <sup>1</sup>Universidade Federal Rural do Rio de Janeiro, <sup>2</sup>Instituto Nacional de Tecnologia
- 11:00 Investigating the initial and intermediate stages of sintering gdc 20% MOL, focus on the development of methods of additive manufacturing** X.P5.26  
BEATRIZ PEREZ<sup>1</sup>, Huyra Estevao Araujo<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 11:00 Process parameters optimization for additive manufacturing of Sm-Fe-N bonded magnets** X.P5.27  
Juliano Assis Baron Engeroff<sup>1</sup>, Rafael Gitti Tortoretto Fim<sup>1</sup>, Marcelo Demetrio Magalhães<sup>1</sup>, Arthur Alvarez Mascheroni<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>, Carlos Henrique Ahrens<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Analysis of rare earth-based feedstocks with different morphologies for Powder Bed Fusion processes** X.P5.28  
Leonardo Fernandes Antunes<sup>1</sup>, Juliano Assis Baron Engeroff<sup>1</sup>, Rafael Gitti Tortoretto Fim<sup>1</sup>, Paulo Antônio Pereira Wendhausen<sup>1</sup>, Carlos Henrique Ahrens<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:00 Microstructural Evaluation of AISI 410 Steel and AWS ER 410 NiMo Wire using GMAW based Additive Manufacturing Processes** X.P5.29  
Leandro Bruno Alves Caio<sup>1</sup>, Alysson Martins Almeida Silva<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 11:00 Polymer additive manufacturing: Rheological approach** X.P5.30  
Larissa Cristina Sanchez<sup>1</sup>, Cesar Augusto Gonçalves Beatrice<sup>1</sup>, Cybele Lotti<sup>2</sup>, Juliano Marini<sup>1</sup>, Silvia Helena Prado Bettini<sup>1</sup>, Lidiane Cristina Costa<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Shawnee State University
- 11:00 Hydrogel Composites Based on Carboxymethylcellulose and Laponite Clay Applied for 3D Printing** X.P5.31  
Lucas Noboru Fatori Trevisan<sup>1</sup>, Mayté Paredes Zaldivar<sup>1,2</sup>, Diego Silva Batista<sup>1</sup>, Andréia Bagliotti Meneguín<sup>3</sup>, Hernane da Silva Barud<sup>1</sup>; <sup>1</sup>Universidade de Araraquara, <sup>2</sup>Biosmart Nanotechnology Ltda, <sup>3</sup>Instituto de Física de São Carlos (IFSC) - Universidade de São Paulo (USP)
- 11:00 Characterization of strain-induced martensitic transformation in biomedical Co-based alloy produced by additive manufacturing** X.P5.32  
Luiz Henrique Martinez Antunes<sup>1</sup>, Miloslav Beres<sup>2</sup>, John Jairo Hoyos<sup>3</sup>, André Luiz Jardim<sup>4,5</sup>, Cecília Amélia de Carvalho Zavaglia<sup>4,5</sup>, Paula Fernanda da Silva Farina<sup>4</sup>; <sup>1</sup>Faculdade de Engenharia Mecânica, Unicamp, <sup>2</sup>Universidade Federal do Ceará, <sup>3</sup>Universidade Estadual de Ponta Grossa, <sup>4</sup>Universidade Estadual de Campinas, <sup>5</sup>National Institute of Biofabrication
- 11:00 Evaluation of the thermal properties of linear low density polyethylene composites with green coconut fiber obtained by rotomolding** X.P5.33  
Lumirca Del Valle Espinoza<sup>1</sup>, Elen Beatriz Pacheco<sup>1</sup>, Leila Yuan Visconte<sup>1</sup>, Viviane Alves Escócio<sup>1</sup>, Julio Cesar Jandorno<sup>1</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, UFRJ

- 11:00 Rheology and extrusion printing of cellulose nanocrystals/CMC nanocomposite hydrogels** **X.P5.34**  
 Jéssica Heline Lopes Fonseca<sup>1</sup>, Marcos Akira d'Ávila<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Mecânica, Unicamp
- 11:00 Acrylic acid/F127 gel for 3D printing** **X.P5.35**  
 Thiago Nunes Viana<sup>1</sup>, Daniel Alves Heinze<sup>1</sup>, Silvia Lenyra Meirelles Campos Titotto<sup>1</sup>, Mathilde Julienne Gisèle Champeau Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Analysis of 3D filaments (PLA and ABS) processed in a homemade 3D filament extruder** **X.P5.36**  
Maurício Oliveira Filho<sup>1</sup>, Luis Felipe de Paula Santos<sup>1</sup>, Ismael Correia Junior<sup>1</sup>, Edson Cocchieri Botelho<sup>2</sup>, Luis Rogerio de Oliveira Hein<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", Faculdade de Engenharia de Guaratinguetá
- 11:00 Rheological and thermal evaluation of gellam gum/laponite clay hydrogels as potential inks for additive manufacturing** **X.P5.37**  
 Mayté Paredes Zaldivar<sup>1,2</sup>, Lucas Noboru Fatori Trevizan<sup>1</sup>, Diego Silva Batista<sup>1</sup>, Andréia Bagliotti Meneguim<sup>3</sup>, Hernane da Silva Barud<sup>1</sup>; <sup>1</sup>Universidade de Araraquara, <sup>2</sup>Biosmart Nanotechnology Ltda, <sup>3</sup>Universidade de São Paulo
- 11:00 Recycling of the residual laser sintered Polyamide 12 by Carbon Nanotubes addition** **X.P5.38**  
Michelle Sostag Meruvia<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Paraná
- 11:00 Preparation and Characterization of AlCoCrFeNi powder produced by gas atomization** **X.P5.39**  
Pamela Karina dos Santos Bomfim<sup>1</sup>, Gustavo Figueira<sup>1</sup>, Piter Gargarella<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos
- 11:00 Microstructure and properties of a recycled AlFeCrTi quasicrystalline phase former alloy produced by gas atomization** **X.P5.40**  
 Aylanna Priscila Marques de Araújo<sup>1</sup>, Leandro César Michelotti<sup>1</sup>, Claudio S. Kiminami<sup>1</sup>, Piter Gargarella<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 11:00 Fracture surface analysis of ABS samples printed by the FDM method** **X.P5.41**  
Raquel de Moraes Lobo<sup>1</sup>, Aparecido Edilson Morcelli<sup>2</sup>, Francisco José Breda<sup>1</sup>, Mariano Castagnet<sup>1</sup>, Arnaldo Homobono Paes de Andrade<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energeticas e Nucleares, <sup>2</sup>Instituto de Criminalística da Polícia Científica de São Paulo
- 11:00 Desenvolvimento de estruturas poliméricas porosas para uso em catálise de reações de transesterificação na produção de biodiesel** **X.P5.42**  
Roberta Gaidzinski<sup>1</sup>, Maria Iaponeide Fernandes Macedo<sup>1</sup>, Neyda de la Caridad Om Tapanes<sup>1</sup>, rodrigo França Pacheco<sup>1</sup>, Thiene Couto<sup>1</sup>, laerte soares filho<sup>1</sup>; <sup>1</sup>Centro Universitário Estadual da Zona Oeste
- 11:00 Molecular Dynamics Simulations of Advanced Materials Consolidated by Cold Spray Additive Manufacturing** **X.P5.43**  
Roberto Gomes de Aguiar Veiga<sup>1</sup>, Saeed Rahmati<sup>2</sup>, Alejandro Zuniga<sup>1</sup>, Bertrand Jodoin<sup>2</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Université d'Ottawa University of Ottawa
- 11:00 Novel and promising synthesis of Pd-decorated Sb<sub>2</sub>O<sub>3</sub> nanoparticles** **X.P5.44**  
Rosana Alves Gonçalves<sup>1</sup>, Maurício Ribeiro Baldan<sup>2</sup>, Eduardo Gonçalves Ciapina<sup>1</sup>, Olivia Maria Berengue<sup>1</sup>; <sup>1</sup>São Paulo State University, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais

- 11:00 The investigation of shape memory effect of Cu-11.3Al-3.2Ni-3.0Mn-0.5Zr alloy produced by spray forming process and rolling** **X.P5.45**  
Sandra dos Santos Vales<sup>1</sup>, Régis Daniel Cava<sup>2</sup>, Piter Gargarella<sup>1</sup>, Claudio S. Kiminami<sup>1</sup>, Alberto Moreira Jorge Junior<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade da Região de Joinville
- 11:00 Origami-inspired structures built via 4D-printed multimaterials** **X.P5.46**  
Silvia Lenyra Meirelles Campos Titotto<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 11:00 Characterization of a Ti-Nb-Zr-Ta Alloy Processed by Selective Laser Melting** **X.P5.47**  
 Weverson Capute Batalha<sup>1</sup>, Rodolfo Lisboa Batalha<sup>2,3</sup>, Piter Gargarella<sup>2</sup>, Simon Pauly<sup>3,4</sup>, Claudio S. Kiminami<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus São Carlos, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Leibniz Institute for Solid State and Materials Research (IFW) Dresden, <sup>4</sup>University of Applied Sciences Aschaffenburg
- 11:00 Mechanical properties of composites filaments of polymer blends and iron powders for application in 3D printing** **X.P5.48**  
 Bruno Venâncio Morato<sup>1</sup>, Tamires de Souza Nossa<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 11:00 Synthesis of Ceramic pigments ZnO doped with Co and Ni.** **X.P5.49**  
Tiago Dos Santos Aragão<sup>1</sup>, Gleison Neres Marques<sup>1</sup>, emilio azevedo<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão
- 11:00 3D printed geometry for zero Poisson's ratio structure** **X.P5.50**  
 Vladimir Gaál<sup>1</sup>, Alexandre Fontes da Fonseca<sup>1</sup>, Sócrates de Oliveira Dantas<sup>2</sup>, Douglas Soares Galvão<sup>1</sup>, VARLEI RODRIGUES<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal de Juiz de Fora



# AUTHOR INDEX

## A

Abad Roger Castillo Hinojosa	G.P2.5		
Abd. Rashid bin Mohd Yusoff	G.P4.18, U.P6.36		
Abdulkarim Amirov	K.O2.D3.3		
Abhay Gusain	F.O2.D2.2		
Abhinav Poozhikunnath	E.O1.D4.2		
Abner de Siervo	V.O3.D2.6		
Abraham Méndez-Albores	A.P5.10, F.P2.48		
Abrão Chiaranda Merij	R.P7.4		
Acacio Silveira de Melo	M.P6.13, M.P7.37, M.P7.8		
Acelino Cardoso de Sá	F.P2.33, F.P2.5, U.P7.12, U.P7.21		
Adailton João Bortoluzzi	A.P5.48		
Adalberto Bono Maurizio Sacchi Bassi	U.O3.D1.5		
Adalberto Enumo Junior	B.P4.46		
Adalberto Fazzio	V.O1.D3.3		
Adam Duong	H.O2.D1.1, N.O3.D1.1		
Adam Robinson	K.O1.D3.3		
Adelina Pinheiro Santos	C.O2.D1.4, C.P6.26, C.P6.63, U.O2.D2.4, U.P7.18, U.P7.43, V.P1.41, V.P1.5		
Adelvam Pereira Júnior	C.P6.42		
Ademir dos Anjos	G.P2.64, G.P4.66, G.P4.79, G.P6.22, G.P6.23, G.P6.81		
Ademir José Zattera	U.P7.38		
Ademir Neves	U.O3.D2.2		
Adenilda Cristina Honório França	B.P2.79		
		Adenilson Oliveira dos Santos	A.P5.65, A.P5.67, B.P4.39, C.P2.34, C.P2.35, C.P6.38, C.P6.4, C.P6.51, C.P6.52, C.P6.7, F.P4.16, F.P4.40, G.P2.46, G.P2.55, G.P6.13, K.P7.12, K.P7.13, K.P7.2, K.P7.3, M.P6.6, P.P1.50, P.P1.59, T.P3.32
		Aderbal Carlos Oliveira	M.P7.58
		Adhimar Flávio Oliveira	F.P6.33, F.P6.34
		Adilson Cláudio Quizunda	C.P6.40
		Adilson da Silva Mello	E.P3.58
		Adilson David da Silva	F.P2.56
		Adilson J A de Oliveira	C.P2.50, M.P6.33, M.P6.8, M.P7.20
		Adilson Luiz Chinelatto	C.P6.50
		Adilson Oliveira	Q.P3.44, Q.P3.45
		ADILSON RIBEIRO PRADO	L.P3.70
		Adilson Rodrigues Costa	L.P3.64
		Adjaci Fernandes Uchoa	A.P5.64
		Adonay Bruno Oliveira da Silva	E.P3.6
		Adonay Rodrigues Loiola	D.P5.19, N.O3.D1.3, N.P5.28, N.P5.37, N.P5.9
		Adriana.D. Sa	B.P2.3
		Adriana Fontes	A.O3.D1.4, G.P2.74, G.P4.27, G.P4.52
		Adriana Guirao Presotto	M.P6.4
		Adriana Marques	T.O2.D1.2
		Adriana Nieto-Munoz	J.O2.D2.1
		Adriana Oliveira Delgado-Silva	B.P2.73, B.P4.49, R.P7.5, R.P7.6
		Adriana Pavinatto	B.P2.33, B.P2.6, B.P2.7, B.P4.30
		Adriana Raffin Pohlmann	A.P5.14
		Adriana Santinom	G.P4.10
		Adriana Scoton Chinelatto	C.P6.50
		Adriana Silva de Albuquerque	D.P5.36, D.P5.9
		ADRIANE DA SILVA SENA	X.P5.6

Adriane M. M. Brito	E.P3.46	Alane Vermelho	A.P5.51
Adriano Alex Almeida	M.P7.44	Alan Fernando Ney Boss	P.P1.11, P.P1.64, P.P1.7, V.P1.12
Adriano Alves Passos	I.P7.13, I.P7.14	Alan Ícaro Sousa Morais	D.P4.19
Adriano Alves Rabelo	L.P3.7, L.P3.8	Alan Massayuki Perdizio Sakita	V.O1.D4.2
Adriano Cesar Rabelo	D.P4.50	Alan Rocha Baggio	U.O2.D3.2
Adriano de Souza Carolino	E.P3.71	Alan Rodrigues Teixeira Machado	D.P4.28
Adriano de Vasconcellos	C.P6.10, E.O1.D4.5	Alan sala Bourguignon	Q.P3.64
Adriano Gomes Paixão da Silva	X.P5.2	Alan Silva de Menezes	A.P4.37, F.P4.16, M.P7.4
Adriano Gonçalves Reis	C.O2.D2.2	Alan Silva Santos	P.P1.8
Adriano J.G. Otuka	F.P2.6, G.P4.11	Alan Taub	PL.8.D4.1
Adriano L Souza	D.P5.58, J.P5.25	Alberthmeiry Teixeira de Figueiredo	A.P4.25, D.P5.30
Adriano Scheid	L.P3.10, L.P3.9	Alberto Baruj	H.P3.6
Adriel Jardim de Santana	F.P2.7	Alberto Lima Santos	P.O1.D2.3
Adrielli Aparecida Westerlon	D.P5.61	Alberto Moreira Jorge Junior	H.O1.D1.1, H.O1.D1.3, H.O1.D1.4, X.P5.45
Adrielli Cristina Silva	D.P5.23	Alberto Zanesco Fatichi	C.P2.6
Adriel Pugliesi de Oliveira	X.P5.7	Albert Santos Silva	A.P4.43, B.P2.8, B.P2.9, G.P2.97, G.P4.76
Adriely Tura Carvalho	P.P1.18	Aldebarã Fausto Ferreira	M.O2.D3.3, O.O1.D3.3, V.O2.D2.3
Adrislaine da Silva Mansano	A.P5.4, A.P5.5	Aldo Eloizo Job	A.P5.3, D.P4.1, D.P4.2, D.P4.39, D.P4.44, D.P4.46, D.P5.14, D.P5.34, D.P5.46, E.P3.33, E.P3.34, T.O3.D1.3
Afonso Guilherme Norberto	G.P2.14, G.P2.6, G.P6.21	Aldo Felix Craievich	J.O3.D2.4, J.P5.1
Agata Blacha-Grzechnik	G.O3.D2.4, G.P2.7	Aldo J.G. Zarbin	U.O1.D1.2, U.O1.D3.1, U.O1.D3.3, U.O2.D1.2, U.O2.D3.3, U.O3.D2.3, U.O3.D3.2, U.P7.19, U.P7.42, V.O3.D2.5
Ágata Pontes	P.P1.6	Aldo Jose Gorgatti Zarbin	U.P7.57
Agda Oliveira	J.P5.2	Aldo Matthaheus Cutrim Gomes	F.P2.23, F.P2.24
Agnes Batista Meireles	B.P2.67		
Agnes Chacor de Figueiredo	C.O3.D1.5		
Agnieszka Pawlicka	B.O3.D1.3, B.P4.56, G.P2.48, G.P6.85		
Águedo Aragones	B.O3.D3.6, B.P4.48		
Agustin Silvio Picco	A.O3.D1.2		
ahmad Rafsanjani	B.O1.D4.1		
Ahmed Hamouda	A.O3.D2.2		
Ahmed Koubaa	P.P1.7		
AHMET HIKMET UCISIK	P.O2.D2.4, P.O2.D3.4		
Aila Cossovan Alves	Q.P3.4		
Ailton Sousa-Junior	A.O1.D1.1		
Airton Germano Bispo-Jr	G.O1.D4.4		
Airton Germano Bispo Junior	G.P6.76		
Akidauana Dandara Brito de Oliveira	L.P3.37		
Alan A Chequim	S.O3.D2.3		
Alane Stephanye Andrade Batista	M.P6.36		

Aleffe Bruno Schura	F.O3.D1.5, F.P2.8	Alexandre de Oliveira	D.P5.23
Alejandra Hortencia González González	M.P6.5	Alexandre Flacker	A.P5.7
Alejandro Espinoza	T.P3.57	Alexandre Fontes da Fonseca	X.P5.50
Alejandro Pérez Paz	V.O3.D2.6	Alexandre Guimarães Brolo	G.P2.28, G.P4.10
Alejandro Zuniga	J.P5.13, L.P3.46, S.P5.3, X.P5.43	Alexandre Jorge Cruz	H.P3.7
Aleksandra Nyga	G.O3.D2.4, G.P2.7	Alexandre José de Castro Lanfredi	M.P6.24
Alem-Mar Bernardes Gonçalves	U.P6.45	Alexandre José Gualdi	M.P6.30, M.P7.20
Alesandro Bail	D.P5.48, M.P6.18	Alexandre Luis Parize	B.P4.46, M.P6.39
Alessandra Braga Ribeiro	B.P2.48, B.P2.9	Alexandre Magnus Gomes Carvalho	K.O3.D3.4, K.P7.1, K.P7.10, K.P7.4, K.P7.7, K.P7.8, K.P7.9, Q.P3.13
Alessandra Cremasco	C.P2.6, C.P6.35	Alexandre Malta Rossi	T.P3.43
Alessandra Jaeger	L.P3.10	Alexandre Marletta	A.P5.68, B.P4.29, C.P2.47, F.O3.D1.5, F.P2.16, F.P2.43, F.P6.1, G.P2.39, T.O3.D1.2, T.P3.7, T.P3.8
Alessandra Mara Garbosa Mutti	A.P5.3	Alexandre Mello	B.P2.65, U.O3.D3.4
Alessandra Pereira	F.P2.9	Alexandre Mendes de Almeida Junior	B.O3.D3.2, B.P2.10, B.P2.77
Alessandra Ruyz Medeiros	T.P3.24, T.P3.5	Alexandre Mesquita	S.O2.D1.1, S.P5.2, S.P5.26, S.P5.27
Alessandra Stacchini Menandro	F.O3.D1.4, F.P4.30	Alexandre Olivieri Kraus	S.P5.4
Alessandra Stevanato	D.P4.10, N.P5.6	Alexandre Reily Rocha	V.O3.D3.1
ALESSANDRO BORSAGLI	B.O1.D1.2	Alexandre Ricalde Rodrigues	M.O2.D3.3
Alessandro Bruno Silva Garcia	G.P4.15	Alexandre Saraiva Costa	F.P4.19
Alessandro Henrique Lima	F.O3.D3.2, F.P2.53, F.P2.56, F.P2.9, F.P6.15	Alexandre Sucro Moraes Galvão Carvalho	E.O2.D3.4
Alessandro Lamarca Urzedo	A.O1.D1.4, D.O1.D2.2	Alexandre Urbano	E.O3.D3.5, E.P3.63
Alessandro Pegoretti	X.P5.23	Alexandre Zirpoli Simões	A.P5.21
Alessandro Saia Moreno	E.P3.24	Alexandre Z. Simões	D.P5.15, D.P5.41, G.P2.8, S.P5.30, S.P7.31, S.P7.8
Alessandro Zaguini Queiroz	C.O3.D2.1	Alexandro Amorim Linhares	S.P5.5, S.P7.22
Alex Alavarse	A.P4.27, B.P2.5	Alexandro de Sousa Sá	B.P4.41, G.P4.60, N.P5.33
Alexandra Alves	C.P2.16	Alexandro Silva Abreu	A.P5.15, A.P5.16
Alexandre Alberto Chaves Cotta	M.O3.D2.2	Alex Braga Silva	M.P6.6
Alexandre Alborghetti Londero	U.P7.27	Alex da Cunha Campos	G.P4.25, M.P6.17, M.P7.55
Alexandre Antunes Ribeiro	C.P2.48	Alex de Meireles Neris	D.P4.3
Alexandre Barbosa da Silva	G.P4.12		
Alexandre Cândido Teixeira	G.P4.14		
Alexandre Cunha	O.O1.D3.2, O.O1.D3.4, O.O1.D3.5, O.P7.10, O.P7.11, O.P7.9		

Alex dos Santos	T.P3.6	Aline Grein Iankovski	B.O1.D3.2
Alex Fabiano Cortez Campos	D.O2.D2.3, D.P4.18, D.P4.5, D.P5.43, M.O1.D3.1, U.O3.D2.6, U.P7.55	ALINE KROLOW SOARES	B.P2.11
Alex Henrique Miller	C.P6.10	Aline Luiza Machado Carlos	C.O3.D1.6
Alexia da Costa Feliciano	D.P4.11	Aline Macedo Faria	A.P4.46, A.P5.7
Alexia V. A. Mattos	B.P2.7, B.P4.30	Aline Magalhaes Santos	F.P2.10
Alex Otávio Sanches	A.P5.36	Aline Mara dos Santos	X.O2.D1.2
Alex Pifer Coleone	S.P5.8	Aline Maria Pascon	U.P6.32
Alex Pizzatto	L.P3.10, L.P3.9	Aline Medeiros Moraes	J.P5.3
Alex Rodrigues Praça	A.P5.6	ALINE ORVALHO PEREIRA	A.P5.68, B.P2.41, B.P2.60, T.O3.D1.2, T.P3.7, T.P3.8
Alexsander Lourenço Pessoa	M.P7.39	Aline Resende Dória	O.P7.7
Alexsander Ramos Duarte	F.P2.7	Aline Ribeiro	F.P2.40
Alexsandro Bayestorff da Cunha	L.P3.34	Aline Rossetto Luz	C.O3.D2.5
Alexsandro dos Santos Evangelista da Cruz	M.O2.D3.1, T.P3.48	Aline Simone Ferreira de Oliveira	Q.P3.40
Alexsandro Kirch	S.P5.20, U.P7.52	Aline Varella Rodrigues	E.O3.D3.2, E.P3.7
Alex Silva Paula	E.O1.D4.5	Alioscka Augusto Sousa	A.O1.D1.2
Alex Viana Alves	B.P2.37	Alison Caio Dantas Pereira	P.P1.53
Alex Vieira Pedroso	U.P7.15	ALISSON CARLOS KROHLING	M.P6.7
Alexys Bruno-Alfonso	G.O2.D3.3	Alisson Ceccato dos Santos	V.O3.D2.6
Alfredo Gontijo de Oliveira	G.P2.59	Alisson de Jesus Santana	F.P2.15, G.P4.24, M.P6.8
Alfredo Leithold Neto	F.P2.1, T.P3.40	Alisson Henrique Ferreira Marques	F.P2.54
Alfredo Luis Pereira Elias	L.P3.31	Alisson Lima Martins	F.P2.11, U.P6.35
Alice Gonçalves Osório	T.P3.51, T.P3.52, U.P7.51	Alisson Ronieri Cadore	V.O2.D3.2, V.O3.D3.2
Alice Laura Rodrigues	G.O3.D1.7	ALLANA CHRISTINA FROS	D.P5.20, D.P5.24
Alice Pistori Sales	E.P3.56	Allancer D Nunes	A.O1.D1.1
Alicja Duda	G.O3.D2.4, G.P2.7	Allan Döring	P.P1.31
Ali Nawaz	F.O2.D1.3	Allan Kardec D. B. Filho	M.P7.40, S.P5.28
Aline Barrios Trench	D.O2.D1.3, D.O3.D1.3, G.P4.13, G.P6.1, N.P5.26, S.P7.43	Allan Polidoro	D.P4.34
Aline Capella de Oliveira	O.P7.17	Allan Seeber	B.P4.5, R.P7.48
Aline Castilho Rodrigues	U.P6.40, U.P6.5	Allan Victor Ribeiro	C.P6.45, G.O2.D3.3
Aline Cristine Nanuh da Silva	R.P7.3	Alma Guadalupe Vázquez-Durán	A.P5.10, F.P2.48
Aline Evangelista Aguiar	C.P2.20	Almir Spinelli	U.P6.26
Aline Fátima Santos Bugarin	P.P1.19, P.P1.66, P.P1.9	Aloir Antonio Merlo	F.P2.12, F.P4.31
Aline Fontana Batista	S.P7.20, S.P7.21, U.P6.5		



Aloisio Nelmo Klein	L.O3.D3.3, Q.O3.D3.3, Q.O3.D3.4, Q.P3.38, Q.P3.47, R.P7.13, R.P7.14, U.P6.4	Amanda Santos de Lima	D.P4.4
Alp Karakoc	B.O1.D4.5	Amanda S Giroto	B.P4.55
Aluizio Jose Salvador	M.O3.D2.3	Amanda Tenório Costa	E.P3.41
Alvaro Torrez	D.O2.D2.2	Amanda Ventura Castilho	H.O2.D1.3
Alvernes Carneiro Cruz	U.O1.D1.3	Amandine Ganzin	S.O2.D2.3
Alysson Alves Pinto	V.P1.2	Amauri Garcia	C.P2.25, C.P6.59, P.P1.23
Alysson Ferreira Moraes	G.P4.14	Amedea Barozzi Seabra	A.O1.D1.4, A.P4.3, C.O3.D1.3, D.O1.D2.2
Alysson Martins Almeida Silva	C.O2.D1.3, G.P2.3, G.P6.68, M.P7.29, Q.P3.48, X.P5.29	Amélia Severino Ferreira e Santos	B.P2.13, B.P2.40, T.P3.9
Alysson Stefan Martins	E.P3.30	Américo Cruz Jr	T.P3.57
Alysson Steimacher	B.P4.4, J.P5.19	Américo Tristão Bernardes	D.P5.18
Alzir Azevedo Batista	F.O3.D1.3	Amilton Martins Santos	A.P4.44, B.P4.45
Alzir Batista	F.P4.15	Amilton Sinatora	Q.P3.51
Amanda Alvarenga Coutinho Silva	P.P1.10	Ana Alice Andrade Meireles Guerra	D.P4.5
AMANDA ARAUJO SILVA	D.P5.51	Ana Alice Oliveira Barros	B.P2.71
Amanda Beatriz Nascimento	I.O1.D3.5, I.P7.10	Ana Amelia Aragao Seixas	B.P2.40
Amanda Bombassaro	A.O1.D2.2	Ana Angélica Mathias Macêdo	B.P4.39, F.P4.40, G.P2.46, G.P2.55, G.P6.13, M.P6.6, P.P1.35, P.P1.50, P.P1.59
Amanda Carolina Candido Silva	M.P6.9, M.P7.15	Ana Barbara Batista	C.P2.59
Amanda Dayane da Costa Martins	R.P7.27	Ana Barboza	V.P1.21
Amanda de S. M. de Freitas	R.P7.6	Ana Beatriz Gombio Rocha	Q.P3.24, Q.P3.25
Amanda Evelyn da Silva	A.P5.45	Ana Beatriz Rocha dos Santos	U.P6.9
Amanda Fernandes Gouveia	D.P5.50, S.O2.D1.4, S.P5.34, S.P7.2, S.P7.7	Ana Candida Martins Rodrigues	J.O2.D2.1
Amanda Filizzola Filizzola	G.P2.44	Ana Carla Camoos do Nascimento	M.P6.28
Amanda Gaddi Gasparoni	L.P3.12, L.P3.13	Ana Carolina Alves da Rocha Vale	D.P4.6, D.P5.31
Amanda Kesley Cardozo Cancio	N.O1.D1.2	Ana Carolina Alves de Paula e Silva	C.P2.44
Amanda Leite	L.P3.27	Ana Carolina Carvalho	F.P2.5
Amanda Luizetto dos Santos	A.P5.53	Ana Carolina Cauz	A.P5.11
Amanda Neres de Carvalho	N.O1.D1.2	Ana Carolina Cortez Lemos	E.P3.43
Amanda Pasquoto Perissinotto	J.P5.4	Ana Carolina Cugler Moreira	L.O3.D3.7, R.P7.6
Amanda Pereira dos Santos da Costa	A.P5.8, B.P2.12	Ana Carolina de Carvalho	F.P2.33
Amanda Ramos Aragão Melo	E.P3.8	Ana Carolina de Oliveira	B.P4.7
		Ana Carolina Ferreira de Brito	F.P6.44, V.P1.3
		Ana Carolina Maranni	B.O3.D3.4, B.P2.14

Ana Carolina Mendes Hacke	A.P5.9	Ana Livya Moreira Rodrigues	B.O3.D3.5
Ana Carolina Passos	E.P3.9	Ana Liz Garcia Alves	C.P6.34
Ana Carolina Pinheiro Faria	V.P1.19	Ana Lúcia do Amaral Escada	C.P2.8, C.P2.9
Ana Carolina Santos de Souza	A.P4.3, C.O3.D1.3	Ana Lúcia Lima	N.P5.12
Ana Caroline Alves de Moura	J.P5.5	Ana Luisa Farias Rocha	B.P2.16
Ana Caroline Silva	E.P3.10	Ana Luiza André	E.P3.11
Ana Champi	U.O2.D3.4	Ana Luiza C Pereira	V.P1.39
Ana Claudia Fingolo	U.O2.D2.3	Ana Luiza de Castro	C.P2.10
Ana Cláudia Granato Malpass	B.P2.7, B.P4.30	Ana Luiza Einloft Petter da Silva	L.P3.44
Ana Cláudia Muniz Renno	B.P2.7	Ana Luiza Garcia Millás	B.O2.D1.1, X.P5.2
Ana Claudia Sene	R.P7.33	Ana Luiza Lourenço Manginelli	B.O1.D3.2
Ana Cláudia Vaz de Araújo	M.O2.D3.3	Ana Luiza Silva	C.P6.13
Ana Clécia Santos de Alcântara	T.P3.36	Ana Maria Blanco Martinez	C.P2.13
Ana Conde	C.O3.D2.2, C.P2.54	Ana Maria de Guzzi Plepis	C.P2.33
ANA CRISTI BASILE DIAS	D.P4.20, D.P4.37, D.P4.38, S.P5.11	ANA MARIA DO ESPIRITO SANTO	E.P3.12, Q.P3.58
Ana Cristina de Paula	F.P2.13	Ana Maria Ferrari Lima	G.P6.72
Ana Cristina Figueiredo de Melo Costa	M.P6.28, M.P7.12, M.P7.9	Ana Maria Matildes dos Santos	D.P4.49, D.P5.62
Ana Cristina F.M. Costa	D.P5.7	Ana Maria Percebom	M.P6.2
Ana Cristina Monteiro Moreira	C.P6.11	Ana Maria Pinto	C.P2.16
Ana Cristina Mora	M.P6.10, S.P5.30, S.P7.43	Ana Maria Pires	A.P5.3, G.O1.D4.4, G.P4.15, G.P4.6, G.P6.58, G.P6.64, G.P6.76
Ana Elisa Dotta Maddalozzo	B.P4.19	Ana Maria Rocco	E.O2.D3.4, E.P3.45
Ana Flávia Nogueira	F.P2.42, F.P2.43, F.P2.8, G.O1.D1.3, G.O3.D1.6, G.O3.D3.5, G.P2.12, G.P2.66, G.P4.36	Ana Maria Zemanate	Q.P3.5
Ana Gabriella Conceição dos Santos	Q.O1.D3.3, S.P5.18	Ananda Ramires das Neves Stigger	G.O1.D2.2, G.P2.9
Ana Gabrielli Lemos	B.P2.15	Ananda Velloso Lara Guapyassu	L.P3.58
Ana Isa Perez Cordoves	D.P4.40	Ana Paula Andrade Barbosa	G.P2.27, G.P4.16
Anai Zavala-Franco	A.P5.10	Ana Paula Arcanjo	M.P6.28, M.P7.12
Ana Júlia de Oliveira Tertuliano	Q.O3.D3.2	Ana Paula da Silva	E.P3.47
Ana Júlia Martins Souza	B.P2.45	Ana Paula de Azevedo Marques	G.P2.10, G.P2.30, G.P6.69
Ana Karenina de Oliveira Paiva	C.P2.7	Ana Paula de Melo Monteiro Modesto	A.P5.11, N.O3.D1.4
ANA KARINA PEREIRA LEITE	D.P5.20	Ana Paula de Moura	A.P5.8, B.P2.12, B.P2.17, E.P3.13, G.O2.D3.2, S.P7.27
Ana Kely R Souza	G.P4.34	Ana Paula dos Reis Weitzel	C.P2.11
Ana Leticia Letícia Soares	F.O3.D3.6	Ana Paula Glislere	G.P4.17
		Ana Paula Immich	T.O3.D1.1

Ana Paula Lemes	E.P3.47	Anderson Lira Dias	X.P5.8
Ana Paula Mello Rocha	G.P2.50	Anderson Maida Siqueira Oliveira	N.P5.4
Ana Paula Moreira Barboza	C.P2.59, F.P6.37, G.O3.D1.7, G.P2.44, V.P1.3, V.P1.4	Anderson Moreira	Q.O3.D3.4
Ana Paula Munaro	L.P3.14	Anderson Nogueira de Carvalho	E.P3.15
Ana Paula Petinati Petinati	U.P6.6	Anderson Oliveira Lobo	A.P4.7, A.P5.31, B.O3.D3.3, B.P2.35, B.P2.58, B.P2.59, C.O1.D1.2, C.P2.19, C.P6.12, M.P7.48, V.O1.D2.3
Ana Paula Romani	B.O2.D3.3	Anderson Parodia	N.O3.D1.7, N.P5.2, N.P5.34, N.P5.5
Ana Paula Rosifini Alves Claro	C.O1.D1.3, C.P2.8, C.P2.9, C.P6.18, C.P6.19, C.P6.42, C.P6.46, C.P6.8	Anderson Pedrosa da Silva	C.P6.52
Ana Paula Silva Oliveira	P.P1.11, P.P1.64, P.P1.65, S.P7.20, S.P7.21	Anderson Rech	Q.P3.6
Ana Pimentel	V.O3.D2.4	Anderson Reis Albuquerque	S.P7.3
Ana Pires	K.O2.D3.3, K.O3.D3.1	Anderson Rodrigo Fornelli	A.P4.45, L.P3.68
Ana Rita Damasceno Costa	D.P4.7	ANDERSON SANTOS PASCHOA	M.P6.7
Ana Rita Ferreira Alves Teixeira	D.O3.D1.5	Andrea Boldarini Couto	U.P6.21
Ana Rita Pereira	M.P7.5	Andrea C. K. Bierhalz	B.P4.36, I.P7.12
Ana Sofia Clímaco Monteiro D'Oliveira	P.O2.D3.2	André Alexandre Vieira	F.P2.14, F.P2.25, F.P6.12, F.P6.17, G.P2.5
Ana Sofia Clímaco Monteiro D'Oliveira	R.P7.23	Andrea Madeira Kliauga	P.O3.D2.7
Ana Teresa Harada	O.O1.D3.8	Andre Amaral Oliveira	D.P5.42, E.P3.65
ANDERSAN DOS SANTOS PAULA	Q.O1.D4.5, Q.P3.36	André Andrade Ferreira	F.P2.15
Anders Bergman	M.O3.D1.5	André Antunes da Silva	F.O2.D2.3, T.P3.10, T.P3.14, T.P3.46, T.P3.54, T.P3.60
Anderson André Felix	E.P3.14	Andréa Renata Malagutti	G.P6.6
Anderson Azevedo Gomes Santiago	G.P2.11, G.P4.82, G.P6.10	Andréa Santos Pinheiro de Melo	C.P2.7
Anderson Borges da Silva	D.P5.26, D.P5.6	Andrea Simone Stucchi de Camargo	A.O2.D2.2, A.P5.60, G.P4.73, G.P6.53, G.P6.79, J.O1.D2.2, J.P5.22, J.P5.26, J.P5.35, J.P5.39
Anderson Carlos Lima Pereira	T.P3.9	Andreas Opitz	F.O1.D1.3
Anderson Damasceno Gomes	L.P3.15	André Augusto Gutierres Fernandes Beati	D.P4.8, E.P3.16
Anderson Emanuel Ximim Gavim	U.P6.38		
Anderson Emanuel Ximim Gavim	F.P2.11, U.P6.35		
Anderson E. X. Gavim	F.P2.39, F.P6.45, G.P4.18, U.P6.36		
Anderson Fiamingo	B.P2.18, B.P2.20, F.P2.5		
Anderson Fuzer Mesquita	U.P6.20		
Anderson Joel Schwanke	N.O3.D1.6		

André Avelino Pasa	A.O3.D2.4, E.P3.17, G.P6.41, M.P6.11, M.P6.31, M.P7.31, S.P5.5, S.P7.11, S.P7.22	André Lopes Carvalho	F.P2.33, F.P2.5, F.P6.18, F.P6.46
André Balogh Carvalho	J.P5.6	André Lopes Ferreira	F.P2.30
André Campos Machado	A.P5.12	ANDRÉ LOPES RUIZ TALHARI	G.O1.D4.5
André Christian Keinert	D.P5.32	Andre LS Oliveira	A.O1.D1.1
André Concer	Q.P3.8	André Luis Boaventura	E.P3.25
André Correia Oliveira	B.P4.21	André Luis de Jesus Pereira	G.O2.D3.3, G.P2.14, G.P2.23, G.P2.24, G.P2.6, G.P6.21
André Cruz da Costa Maciel	C.P2.38	André Luís Lira da Silva	A.O1.D1.2
André De Carvalho Machado	D.P4.15, D.P5.4	André Luís Silveira Fraga	G.P2.20
André dos Santos Barros	P.P1.13, P.P1.14, X.P5.9	André Luiz Amorim	U.O3.D2.2
André Fay	A.P5.35	André Luiz Carvalho de Rezende Silva	C.O2.D2.3, C.O2.D3.2
André Felipe Vale da Fonseca	G.P2.37	Andre Luiz Da Silva	G.P2.15, G.P4.19
ANDRÉ FERREIRA SARDINHA	U.P6.7	André Luiz de Aguiar Marques	Q.P3.27
André Giudici Táboas	U.O2.D2.1	André Luiz de Oliveira Chaves	D.P4.9
Andre Gundel	G.P2.48	André Luiz Gilioli	D.P4.10, N.P5.6
André Gundel	B.P4.5, R.P7.48	André Luiz Jardim	C.O2.D3.4, C.O3.D2.2, C.P2.54, X.P5.32
André H. Azevedo	D.O1.D2.1	André Luiz Menezes de Oliveira	D.O1.D1.2, D.O3.D2.1, R.P7.28
André H de Oliveira	F.P2.45	André Luiz Vidilli	Q.P3.7
Andréia Bagliotti Meneguim	B.P2.19, B.P2.56, B.P4.33, X.P5.31, X.P5.37	André Marino Gonçalves	G.O3.D1.4, M.P6.30
Andreia Borre	M.P7.54	André Massahiro Teramoto Kriek	C.P6.34
Andreia de Morais	G.O1.D1.3, G.P2.12	André M. Daltrini	A.O3.D2.4
Andreia Gerniski Macedo	F.P2.1, G.P4.18, G.P4.53	André M Neves	H.P3.2, H.P3.4
Andréia G. Macedo	F.P6.45, G.P6.75, T.P3.40, U.P7.22, U.P7.23	André Monteiro	L.P3.52
ANDRÉIA GROSSI SANTOS DE LAIA	C.P2.12	Andre N Barbosa	U.P7.54
Andreia Luisa da Rosa	G.P2.13, S.O3.D1.1, S.P5.19, S.P5.6, S.P7.23, V.P1.33	André Olean-Oliveira	F.P4.41
Andréia Souza M. Cardoso	P.P1.61, P.P1.62, P.P1.82	ANDRÉ PAULO TSCIPTSCHIN	L.O2.D3.3, L.O3.D3.1, Q.O1.D4.1, Q.O2.D3.2
Andreij Gadelha	V.O3.D3.2, V.O3.D3.3	Andre Pereira	K.O2.D3.3, K.O3.D3.1
Andrei Khodakov	N.P5.31	André Renato Mello Sanches	G.P2.16, G.P2.83
André Linhares Rossi	A.P5.51	Andre R. Muniz	S.P5.16, U.O3.D2.5
Andre L Martinotto	U.O3.D2.5		

André R. Muniz	K.O3.D3.4, K.P7.5, S.O3.D1.2, S.O3.D2.3, S.P5.9, U.O3.D2.7, V.P1.34	Andreza Ribeiro Simioni	A.P5.15, A.P5.16
André Rocha Pimenta	L.P3.58	Andriele Lange da Rosa	G.P2.17, G.P2.81, G.P4.81, G.P6.88
André Rodrigues Pinheiro	S.P5.7, S.P7.24	Andrielen Vanzetto	L.P3.36, L.P3.37, U.P7.38
André Santarosa Ferlauto	E.P3.61, R.P7.25	Andris Figueiroa Bakuzis	A.O1.D1.1, A.O3.D2.3, M.O2.D1.1
Andrés BIASETTI	H.P3.6	Ane Cheila Rovani	R.O3.D3.5
Andres Cantarero	S.P5.26	Anelise Schmidt	C.P2.14
Andres David Pardo Perdomo	G.P2.53	Anerise de Barros	F.O2.D3.1, G.P4.50
Andre S Ferlauto	V.O3.D3.2	Angela Alidia Bernal Cárdenas	G.P2.18
André Souza Araújo	G.P4.67	Angela A. Vieira	L.O3.D3.2, R.P7.22, R.P7.32, R.P7.42, R.P7.43
Andres Pérez	D.O3.D1.6	Angela Barrera de Brito	A.P5.2
Andressa Cristiana Fröhlich	N.P5.41, N.P5.7	Angela Beatriz Coelho Arnt	P.P1.31, Q.P3.44, Q.P3.45
Andressa Cristina de Almeida Nascimento	D.P4.11	Angela Burlamaqui Klautau	M.O3.D1.5, M.P6.1
Andressa da Cruz Schneid	A.O1.D1.3	Angela de Jesus Vasconcelos	P.P1.33, X.P5.9
Andressa de Aguiar Oliveira	U.P7.30	Angela Elisa Crespi	U.O3.D1.4
Andressa dos Santos	D.P4.42, E.P3.36, E.P3.38, K.P7.6, K.P7.8	Angela Kinoshita	A.P5.17, D.P4.12, D.P5.22, D.P5.46
Andressa Dos Santos Correa	G.O3.D2.5	Ángel Alberto Hidalgo	F.O2.D1.1, F.P4.20, F.P6.10
ANDRESSA GIOMBELLI ROSENBERGER	T.P3.21, T.P3.24	Angela Ortiz de Zevallos	S.O2.D1.1
Andressa Ribeiro Pereira	B.P2.20	Angélica Denardi de Barros	G.P2.19
Andressa Rodrigues	C.O1.D3.2, C.P2.45, C.P2.46, C.P6.37, R.O3.D3.4, R.P7.5	Angélica Farias Aroche	F.P6.20
Andressa Sousa da Silva	M.P6.12	Angelo Luiz Gobbi	C.O3.D2.6, C.P2.10, F.O3.D3.1, F.P2.30, F.P4.42
Andressa Trentin	L.O1.D4.1	Angelo Malachias	V.O3.D3.2
André Studart	B.O1.D1.3, B.O1.D4.1, B.O3.D2.7, T.O1.D1.1	Angelo Marcio Gomes	K.P7.9
Andrés Vercik	A.P4.14, A.P5.13, C.P2.32, U.P6.8	Angelo Roncalli-Alves e Silva	C.P6.11
Andre Vitor Santos Simois	F.P2.28	Ângelo Roncalli Oliveira Guerra	C.P2.7
Andrew Danos	F.O1.D1.1	Angsula Ghosh	V.P1.27
Andrew Paul Monkman	F.O1.D1.1	Anibal Mendes	C.P6.64, L.P3.17, Q.O2.D3.1, Q.P3.2, Q.P3.20
Andrey Coatrini Soares	F.O2.D3.4, F.P2.5, F.P4.29, F.P6.46	Anielle Christine Almeida Silva	A.P5.43, A.P5.44, A.P5.45, J.P5.28
Andrey Mello dos Santos	R.P7.7	Anike Hübner Virgili	B.O1.D3.3, B.P2.21
Andrey Silva Morawski	A.P5.14	Anna Flávia Almeida	D.P4.13, M.P6.40
Andreza Leite Dias	K.P7.12, K.P7.13, K.P7.2, K.P7.3		

Anna Flávia de Freitas Valiante Peluso	M.P7.24	Antonio Jorge Abdalla	O.O1.D3.8, O.P7.3, O.P7.4, P.P1.12, P.P1.30
Anna Flavia Ravanelli	F.P6.6		B.P2.57, B.P4.32, F.P4.18,
Anna Gabriella Tempesta	G.P2.2, G.P2.80, L.P3.3	Antonio Jose Felix Carvalho	T.O1.D1.2, T.P3.15, T.P3.23, T.P3.41
Anna Laurenzana	C.O2.D3.1	Antonio Luciano Seabra Moreira	P.P1.13, P.P1.14
Anna L. M. C. Malthez	G.P6.8	Antonio Luiz Martins Maia Filho	A.P5.31
Anna Paulla Simon	C.O1.D3.2, C.P6.37	Antônio Manesco	S.O1.D1.2, S.O3.D1.3
Anna Toledo	C.P2.13	Antonio Márcio Scatolini	A.P4.14, A.P5.13, C.P2.32
Anne Gabriella Dias Santos	N.P5.40	ANTÔNIO MARCOS URBANO DE ARAÚJO	L.P3.55
Anne Helene Fostier	D.O3.D2.7	ANTONIO OTAVIO T PATROCINIO	G.P4.63, S.P7.35, U.O2.D3.2
Anne Michele Garrido Pedrosa de Souza	D.P4.54	Antonio Ricardo Zanatta	F.P2.6, G.O2.D3.3, G.P6.39
Anselmo Alves do Nascimento	D.P4.32		F.O1.D4.6, F.O3.D2.8, F.O3.D3.1, F.P4.42, F.P4.43, F.P6.42
Anselmo Eduardo Diniz	P.P1.67	Antonio Riul Jr.	
Antero Silva Ribeiro de Andrade	C.O2.D1.4	Antônio Roque Da Silva	PL.3.D2.1
Anthony Lucas	S.O2.D2.4	Antônio Silva Oliveira	L.P3.57
Antonio Amandio da Costa Neto	X.P5.10	Anurodh Tripathi	B.O1.D2.3
Antonio Augusto Couto	C.O2.D2.1	Aparecido Edilson Morcelli	X.P5.41
Antonio Carlos Bento	B.P2.37	Aparecido Junior de Menezes	B.P4.49
Antonio Carlos Doriguetto	S.O2.D1.1	Aparecido Ribeiro Souza	G.P4.31
Antonio Carlos Guastaldi	B.O2.D3.2, B.P2.23	Aquiles Silva Nascimento	G.P4.27
Antonio Carlos Hernandez	J.P5.32	Aramys Silva Reis	A.P5.67
Antônio Carlos Hernandez	C.O2.D3.3	Arandi Ginane Bezerra-Jr	A.O1.D2.2, G.P4.18
Antonio Carlos Silva da Costa	M.P7.3	Arcelina Pacheco Cunha	B.O3.D3.5
Antonio Casares	EXP.3.D2.1	Argemiro Soares da Silva Sobrinho	G.P2.14, G.P2.23, G.P2.24, G.P2.6, G.P6.21, P.P1.44, R.P7.4, U.P7.30
Antonio Cícero de Sousa	D.P4.14	Ariadne Gonçalves de Leão	N.P5.8
	A.P4.22, A.P4.8, A.P5.39, A.P5.50, B.P2.36, M.P7.19	Ariadne Köche	G.P2.20, G.P2.21
Antonio Claudio Tedesco		Ariadne Missoni Brondi	N.P5.4, T.P3.42
Antonio D'Ammaro	K.O1.D3.3	Ariana Aragão Foratini de Oliveira	G.P2.64
Antônio Eduardo Hora Machado	G.P4.63, G.P6.87		
Antonio Gomes Souza Filho	D.P5.25, T.P3.31, T.P3.32, T.P3.33, V.O1.D2.3		
Antônio Helgueira de Andrade	M.O3.D1.1		
Antônio Hortêncio Munhoz Jr.	A.P5.18, C.P6.21		
Antonio Joaquim Bastos da Silva Filho	D.P4.15, D.P5.4		

Ariana Cristina Santos Almeida	V.P1.4	Arthur Alvarez Mascheroni	X.O3.D1.2, X.P5.27
Ariana de Freitas Azevedo	P.P1.13, P.P1.14	Arthur Carneiro Chaves dos Santos	V.P1.4
Ariana Freire Andrade	O.P7.1	Arthur Da Rocha Albertini	A.P5.19
Ariane Aparecida Teixeira Souza	P.P1.11, P.P1.64, P.P1.7	Arthur de Castro Ribeiro	N.P5.8, X.P5.6
Ariane Caroline Ribicki	C.P2.4	Arthur Ernandes Torres da Silva	F.P2.7
Ariane De Jesus Sousa Batista	C.O3.D1.4	Arthur Franklin Souza de Oliveira	M.P7.26
Ariane Espindola	A.O2.D1.2	Arthur Gabriel Ferreira de Oliveira	J.P5.21
Ariane Moracci Yoshitake	B.P2.4	Arthur Lanne Ricardo de Souza	M.P6.13
Ariane Schmidt	U.O1.D1.2, V.O3.D2.5	Arthur Lanne Ricardo Souza	M.P7.37
Ariane Tiemi Mitsuahara	D.O3.D1.2	Arthur Martins Gabriel	G.P2.25, T.P3.11
Ariany Bonadio	G.O1.D4.2, G.P2.22	Arthur Matsudo Garcia	B.O1.D4.3
Ariel Capote	R.P7.21	Arthur Santos Espíndola	F.P2.16, F.P6.1
ARIEL SOUZA MEDEIROS	L.P3.16	Artur Mariano de Sousa Malafaia	Q.P3.2, Q.P3.34, Q.P3.35, Q.P3.59, Q.P3.60
Arilza de Oliveira Porto	U.P6.20	Artur Vicente Pfeifer Coelho	A.O3.D2.4
Ariuska Karla Barbosa Amorim	D.P4.5	Artur Wilson Carbonari	M.P6.17, M.P7.55
Arlan da Silva Gonçalves	U.P7.50	Aruã Clayton Da Silva	C.O3.D1.2, F.O3.D3.7
Armandina Lima Lopes	M.P7.36	Aryane Tofanello	E.P3.46
Armandina Maria Lima Lopes	K.O3.D3.1, M.O3.D2.6	Ary da Silva Maia	D.O3.D1.4, D.P4.16, D.P5.45
Armando Biondo	M.P7.16	Asenete Frutuoso Costa	D.P4.17
Armando Diego Lima Freitas	N.O3.D1.3, N.P5.28, N.P5.37, N.P5.9	Assis Vicente Benedetti	C.P2.44
Armando Ítalo Sette Antonialli	H.P3.10, H.P3.3	Atair Carvalho da Silva	A.P5.20, X.P5.12
Armando Santos	M.P7.24	ATILA MICAEL DOS SANTOS SILVA	E.P3.41
Armstrong Godoy Junior	G.P2.14, G.P2.23, G.P2.24, G.P2.6, G.P6.21	A. T. Iram	G.P2.75
Armystron Gonçalves Ferreira de Araújo	X.P5.21	Audrey Marie Bedoch	H.O3.D1.8, H.P3.1, H.P3.7
Arnaldo César Pereira	G.P2.37	Augusto Batagin-Neto	F.P2.17, F.P2.49, F.P2.50, L.P3.35, S.P5.8
Arnaldo Homobono Paes de Andrade	X.P5.11, X.P5.41	Augusto C. H. Da Silva	V.O1.D3.2
Arnaldo Oliveira Lima	L.O1.D3.2	Augusto Dias Melo	J.O1.D4.3, P.P1.17, T.P3.12, T.P3.4
Arnayra Sonayra Brito Silva Carreiro	D.P4.16, D.P5.45	Augusto Dias Siqueira	E.P3.24, F.P2.18, K.P7.4, K.P7.7
Aroldo Geraldo Magdalena	D.P4.57	Augusto Ducati Luchessi	C.O2.D3.4, C.P6.5
Aron Pazzin Andrade	C.P6.55	Augusto Mohr Christmann	K.O3.D3.4, K.P7.5, S.O3.D2.3, S.P5.9
Artemis Marti Ceschin	D.P5.57, E.P3.62, G.P2.85		

Augusto Nazareno Soares Costa	S.P5.10
Augusto Versteeg	C.P2.14
Áureo Evangelista Santana	C.P6.56
Auristela Carla De Miranda	D.P4.17, N.P5.10
Ausdinir Danilo Bortolozo	C.P6.6, L.P3.31, P.P1.18, P.P1.27, P.P1.28, P.P1.36, P.P1.38
Avacir Casanova Andrello	B.P2.81
Ayessa Pires Maciel	D.P4.18
Aylanna Priscila Marques de Araújo	X.P5.40
Aylla Joani Mendonça Oliveira	E.O3.D3.4
Ayrton Bernussi	A.P5.18, C.P6.21
Ayrton de Sá Brandim	B.P2.64

## B

Bacus de Oliveira Nahime	D.P5.16
Barbara Bianca Gerbelli	B.O2.D2.3, B.P2.22
Bárbara Bullhões Cazula	N.P5.29
Bárbara de Oliveira Tessarolli	D.P4.57
Bárbara Hellen de Souza Miranda	F.O3.D2.6
Bárbara Lois Mathias	C.P2.8
Bárbara Margarido Brondino	C.P6.45
Barbara Pinheiro	P.P1.51
Bárbara Rebeca Alves Pereira	B.P2.35
Bárbara Rosa	V.O1.D2.2
Bárbara Sá	E.P3.72
Barbara Salles macena da Cruz	U.P6.9
Barbara Sartorelli Caldeira	A.P5.21
Bárbara Victoria Gonçalves de Viveiros	P.P1.19
Barbara Woinaroviz Ramos	Q.P3.76
Bartolomeu Cruz Viana	C.O1.D1.2, M.P7.25, M.P7.48, V.O1.D2.3
Beate Saegesser Santos	G.P4.27
Beate S Santos	A.O3.D1.4, G.P2.74, G.P4.52
Beatriz Ambrozini	B.O2.D3.2, B.P2.23

Beatriz Antoniassi	D.P5.22
Beatriz Aparecida Pinto	P.O2.D3.2
Beatriz Aparecida Vessalli	A.P4.46, A.P5.22
Beatriz Belotti Carvalho	E.P3.64
Beatriz Botossi de Oliveira	L.P3.61
Beatriz Braidoti	B.P2.24
Beatriz Caetano Benuto	G.P2.26, G.P2.27, G.P2.38, G.P4.16
Beatriz da Silva Batista	C.P2.34, P.P1.50
Beatriz de Vasconcelos	G.P2.49
Beatriz França Pasoti	E.P3.33, E.P3.34
Beatriz Helena Costa	U.P6.10, U.P6.11
Beatriz Machado Silva	F.P2.19
Beatriz Montilha Tirich	F.P2.20
Beatriz Mouriño de Almeida Prado	A.P5.23
Beatriz Palhano de Oliveira	E.P3.21, M.P7.24
BEATRIZ PEREZ	X.P5.26
Beatriz Pinetti Angonese	C.P2.1
Beatriz Rossi Canuto de Menezes	C.P2.5, U.P6.3
BEATRIZ SILVA OLIVEIRA	D.P4.9
Beatriz Steckelberg Watanabe	A.P5.24
Beatriz Tavoni Longhim	P.P1.27, P.P1.28, P.P1.38
Beatriz Vilela de Moura	F.P2.10
Benjamim Sipaúba Gonçalves Rubim	B.P2.25, B.P2.26, D.P4.19
Benjamim Zucolotto	M.P6.11
Benjamin Fragneaud	F.O3.D3.2, F.P2.56, F.P2.9, F.P6.14, F.P6.15, F.P6.30, V.P1.15
Benjamin Hamilton Stafford	X.P5.4
Benjamin Hsiao	T.O3.D1.3
Benjamin Ignacio Constant Mandiola	M.P6.14
Benjamin Winkeljann	B.O3.D3.7
Benoit P. Pichon	J.O2.D2.2
Bento Ferreira	C.O2.D2.3
Bento Pereira Cabral Júnior	B.P2.62
Berenice Dedavid	O.P7.9
Bernardo Almeida Iglesias	F.P4.15
Bernardo Ayres Fabiensi da Silva	J.P5.14



Bernardo de Souza	F.O3.D1.1, F.P2.31, F.P2.52	Brenand Anjos dos Santos Souza	E.P3.44
Bernardo Peressoni Vieira	K.P7.11	Brenda Diane Pereira Martins	P.P1.20
Bernardo Ruegger Almeida Neves	G.O3.D1.7, G.P2.44, V.P1.21, V.P1.3, V.P1.4	Brenda Fernanda Gaspar de Souza	C.P2.18, C.P6.1
Bernard Tougas	H.O3.D1.3	Brenda Juliet Martins Freitas	C.O3.D2.4, C.P6.22
Bertrand Jodoin	X.P5.43	Brendan James Kennedy	D.O1.D1.2
Betina Giehl Zanetti-Ramos	I.O1.D3.7	Breno Aragão Dos Santos	D.P5.19, N.P5.28
Bettina Neumann	H.O3.D1.3	Breno Rabelo Coutinho Saraiva	Q.P3.1
Bianca Alves Marcello	G.P4.83	Breno Rocha Barrioni	A.O2.D1.3, C.P2.12, C.P6.48
Bianca Andrade Campos	B.P2.75	Brian Camilo Noguera Riascos	A.P5.27
Bianca Caroline Arantes Felipe	X.P5.7	Bridget Mutuma	F.P2.26
Bianca de Andrade Feitosa	B.P2.16, T.P3.13	Brina Blinzler	S.O1.D2.2
Bianca de Souza Rocha	D.P4.45	Bruna Almeida Rocha	B.P2.67
Bianca Ferreira da Silva	D.P5.29	Bruna Araujo Lima	C.O3.D1.3
Bianca Gottardo	A.P5.38	Bruna Bandeira do Nascimento	J.O1.D4.3, P.P1.17, T.P3.12, T.P3.4
Bianca Machado Cerrutti	J.O3.D2.5	Bruna Bueno Postacchini	F.P6.36, F.P6.37, G.P2.44, G.P6.65, G.P6.66
Bianca Martins Brito	A.P4.38	Bruna Caldas de Sousa	F.P2.21
Bianca Martins Estevao	A.P4.29, A.P5.25	Bruna Corina Emanuely Schibicheski Kurelo	L.P3.42, R.P7.20, R.P7.8
Bianca Martins Estevão	A.P5.26, A.P5.60	Bruna de Oliveira Criado	E.P3.32
Bianca Nastri Penteado Zaghini	I.O1.D3.4, I.O1.D3.4	Bruna Fernanda Baggio	E.P3.17
Bianca Peres Pinto	U.P7.13	Bruna Gomes Maciel	T.P3.28
Bianca Siqueira Schweigert	A.P5.9	Bruna Gregatti de Carvalho	A.P4.2, B.P2.2
Bianca Vanjura Dias	G.P2.28	Bruna Jacomel	A.O1.D2.2
BIANKA CRISTINA DA SILVA SIQUEIRA	L.P3.55	Bruna Lallo da Silva	A.O3.D2.6
Blaise Leopold Tardy	B.O1.D2.3, B.O1.D4.5, B.O3.D1.2, B.O3.D1.7	Bruna Lemes Silva	C.P2.45, C.P2.46
Bluma Guenther Soares	M.P7.50, N.P5.8, U.P6.27, U.P6.28, U.P7.10, X.P5.6	Bruna Machado	B.P4.15
Boaz de Souza Pereira	Q.P3.37	Bruna Martins	D.P4.12
Boitumelo Matsoso	F.P2.26	Bruna M. Hryniewicz	F.O3.D3.8, F.P6.28
Bojan A. Marinkovic	P.O1.D3.2	Bruna Michelle de Freitas	J.P5.7
Braulio Haruo Kondo Lopes	P.P1.51, S.P7.20, S.P7.21	Bruna Nascimento de Souza	E.P3.18
Bráulio Silva Barros	D.P4.6, D.P5.13, D.P5.20, D.P5.24, D.P5.31, L.P3.55	Bruna Niccoli Ramirez	F.P4.17, T.P3.3
Braulio Soares Archanjo	G.O3.D3.4	Bruna Nunes	Q.P3.8
		Bruna Nunes Teixeira	C.O3.D1.4, C.P6.56
		Bruna Passos Da silva	X.P5.3
		Bruna Pes Nicola	N.O3.D1.6
		Bruna Proença de Albuquerque	G.P4.20

Bruna Rafaela Silva Diniz	U.P6.17		
Bruna Santos Ramalho	C.P2.13		
Bruna Soares Dos Reis Aranha	U.P6.45		
Bruno Afonso Büchele Mendonça	X.P5.18		
Bruno Alessandro Silva Guedes de Lima	T.P3.9		
Bruno Alexandre Henriques	C.P2.43		
Bruno Apolo Miranda Figueira	N.O1.D1.2		
Bruno Aurélio Borges Franscisco	U.P7.1, U.P7.8		
Bruno Bassi Millan Torres	F.O1.D2.2, F.P4.28		
Bruno Bernardi Aggio	B.P4.11		
Bruno Borges Ramos	L.O3.D3.3, L.P3.52		
Bruno Bueno Ipaves Nascimento	V.P1.1		
Bruno Campos da Silva	B.O1.D3.2		
Bruno Carvalho	V.O1.D2.2, V.O3.D2.3		
Bruno César da Silva	G.O3.D3.4		
Bruno César dos Santos	A.P5.3		
Bruno César Noronha Marques de Castilho	R.O3.D3.7		
Bruno Cuchi Bordignon	R.P7.9		
Bruno da Silva Lima	G.P2.29		
Bruno da Silveira Noremberg	E.P3.19, E.P3.28, E.P3.39, E.P3.49, E.P3.50, F.P6.31		
Bruno de Paulo Ferreira	Q.P3.55		
Bruno de Pinho Alho	K.O2.D3.2, K.P7.14, K.P7.18, K.P7.19		
Bruno Dias Ferreira	B.P4.8		
Bruno Diego de Oliveira	H.P3.2, H.P3.4		
Bruno D. Mattos	B.O3.D1.7		
Bruno Dufau Mattos	B.O1.D4.5, B.O3.D1.2, B.P2.50		
Bruno Eduardo Piske	I.P7.7		
Bruno Felipe da Silva	Q.P3.48		
Bruno Ferraz Donati	P.P1.83, P.P1.84		
Bruno Filipe Carmelino Cardoso Sarmento	A.O3.D1.1, A.P5.18, C.P6.21		
Bruno Gabriel Alves Leite Borges	U.O3.D3.2		
Bruno Gomes Silva		M.O1.D2.3, M.O2.D2.2, M.P6.29, M.P7.11, M.P7.2, M.P7.32	
Bruno Henrique de Santana Gois		T.P3.10, T.P3.14, T.P3.46, T.P3.54, T.P3.60	
Bruno Henrique Ristov		U.P7.27	
Bruno Henriques		C.O2.D1.2, C.P2.15, D.P4.27, X.P5.4	
Bruno Kan Ping Lima I		G.P2.44	
Bruno Kenta Sato		Q.P3.73	
Bruno Lemos Batista		D.O1.D2.2	
Bruno Luís Soares de Lima		V.O3.D2.3b	
Bruno Marangoni		A.O3.D2.5, B.O3.D3.4, B.P2.14, B.P2.61	
Bruno Martins Pimentel		M.P6.15, M.P6.16	
Bruno Mattos		B.O1.D2.3	
Bruno Neckel Wesling		E.P3.20, E.P3.22, E.P3.37, F.P2.51	
Bruno Randal de Oliveira		F.P6.15	
Bruno Reis Cardoso		L.P3.58	
Bruno Ribeiro		P.P1.49	
Bruno R. Rossi		T.P3.15	
Bruno Sanches de Lima		D.P5.26, D.P5.60, U.P6.12	
Bruno Santos Corrêa		M.P6.17, M.P7.55	
Bruno Sarmento		B.P2.76	
Bruno Silva Devesa		G.O3.D1.7	
Bruno Thorihara Tomoda		B.O2.D2.2, B.P4.18	
Bruno Toselli		E.P3.20	
Bruno Venâncio Morato		X.P5.48	
Bruno Xavier de Freitas		C.P6.70	
Bryan Alfenas Borges		B.O3.D3.2, B.P2.27	
Bryan Henrique Oliveira Athayde		D.P4.41	
<b>C</b>			
Caetano Rodrigues Miranda		D.O2.D2.2, S.O3.D2.1, S.O3.D2.2, S.P5.20, U.P7.52	
Caio Carvalho Coêlho		C.P2.29	

Caio Castanho Xavier	C.P2.16	Camila Santos Dourado	D.P4.20, D.P4.37, D.P4.38, S.P5.11
Caio Cesar de Paula	G.P6.66	Camila Thomacelli Tavares	F.O3.D3.2
Caio César Ferreira Florindo	U.O3.D1.5, U.P6.13	Camilla Henriques Maia de Camargos	B.O1.D2.2
Caio Cesar Nogueira de Melo	G.O3.D2.1	Camille Eyssartier	C.O2.D3.3
Caio Gomide Otoni	B.O3.D1.5	Camille Vicente	T.P3.22, U.O2.D1.3
Caio Henrique Gomes	N.P5.21	Candido Jorge de Sousa Lobo	C.P6.29
Caio Lewenkopf	V.O1.D3.3	Carina Barros Mello	P.O2.D3.1, R.P7.10, R.P7.19, R.P7.35
Caio Miranda Miliante	K.O3.D3.4	Carina de Souza Teixeira Peraça	U.O3.D2.4
Caio Raphael Vanoni	U.P6.14	Carla Andressa de Almeida Farias	A.P5.30
Caio Rezende Moreira	D.P4.28	Carla Bastos Vidal	D.P5.19, N.P5.28
Camila Aguiar Teixeira	P.O3.D2.4, P.P1.71	Carla Carolina Silva Bandeira	B.P2.30, T.P3.50
Camila Alves Claudino da Silva	B.P2.33	Carla da Silva	R.P7.1, R.P7.35
Camila Alves de Lavor	M.P6.32	Carla de Albuquerque Dias	E.P3.21, M.P7.24
Camila Alves Escanio	D.P4.28, P.O1.D2.2, U.P7.2	Carla Isabel dos Santos Maciel	P.P1.21, Q.P3.10
Camila Alves Rezende	B.O1.D2.2	Carla Marega	T.O2.D1.1
Camila Aparecida Rosiak	P.P1.26	Carla Marina dos Santos Sousa	G.P2.30
Camila Boldrini Nascimento	Q.P3.9	Carla Onara Gonçalves	C.P6.26, V.P1.5
Camila Braga Dornelas	T.P3.55	Carla Regina Albino	C.P6.28
Camila Candinho	V.P1.38	Carla Requena Klimpovuz	F.P2.22, F.P4.6
Camila Cristina de Foggi	S.P5.34, S.P7.1, S.P7.2, S.P7.24	Carla Roberta Tim	C.P2.17
Camila Cristina Stapait	T.P3.16	Carla Rosana Gonzaga da Silva Cardoso	C.P2.32
Camila da Costa Pinto	E.P3.2, E.P3.3	Carla Schmitt Cavalheiro	B.P4.56
Camila da Silva Barros	D.P4.40	Carla Tim	C.O1.D1.2
Camila De Lima Ribeiro	U.P6.15	Carleane Patricia da Silva Reis	F.P2.23, F.P2.24
Camila Dias de Oliveira	J.P5.8	Carliana Rodrigues da Silva	C.P6.7
Camila Felix Vecchi	B.P2.28	Carlise Hannel Ferreira	C.O1.D3.2, C.P6.37
Camila Fernanda Amantino	A.P5.49, A.P5.50	Carlo Requião Cunha	F.P2.51
Camila Horst	B.P4.47	Carlos Alberto Ávila-Herrera	F.P2.48
Camila Laís Vorpapel	I.P7.7	Carlos Alberto Da Silva Queiroz	X.P5.13
Camila Lopes	B.P4.18	Carlos Alberto de Almeida Junior	L.P3.9
Camila Macedo Medeiros	L.P3.21, L.P3.22		
Camila Machado França	V.O3.D2.1		
Camila Mareco Bento Leite Silva	G.P6.76		
Camila Monteiro Cholant	B.O3.D1.3, G.O2.D1.4, G.P2.48		
Camila Negrão Konno	X.P5.9		
Camila Oliveira de Souza	Q.O1.D4.5		
Camila Pereira Giroto	D.P4.35		
Camila Rodrigues Cabreira	B.P2.29		

Carlos Alberto Della Rovere	L.P3.17, L.P3.19, L.P3.2, P.P1.43, Q.O3.D3.5, Q.O3.D3.6, Q.P3.2, Q.P3.23, Q.P3.32, Q.P3.35	Carlos Eduardo Cava	G.P2.32, S.P5.13, T.P3.22, U.O1.D1.2, U.O2.D1.3, U.P6.6, U.P7.53
Carlos Alberto de Oliveira Nunes	L.P3.69	Carlos Eduardo Guedes Catunda	C.P6.54
Carlos Alberto Flavio Correa	E.P3.55	Carlos Eduardo M. Campos	E.P3.26, M.P7.14
Carlos Alberto Fortulan	X.O1.D1.2	Carlos Eduardo Silva	S.P5.12, S.P7.1
Carlos Alberto Paskocimas	G.P2.11, G.P4.82, G.P6.10	Carlos Eduardo Vergani	C.P2.44, S.P7.1
Carlos Alberto Ramos	A.O3.D2.5	Carlos Enrique Niño	O.P7.11
Carlos Alberto Scapim	B.P2.37	Carlos Fioroni	B.P2.3
Carlos Alberto Senna	G.O3.D3.4	Carlos FO Graeff	F.P2.49, G.O3.D1.1, G.P6.78, R.P7.11, S.P7.22
Carlos Alberto Stochi Junior	C.P6.32	CARLOS FRAJUCA	G.O1.D4.1, G.P2.33
Carlos Angelo Nunes	C.P6.70, P.P1.26, P.P1.55, P.P1.57	Carlos Henrique Ahrens	X.O3.D1.2, X.P5.27, X.P5.28
Carlos Augusto de Souza Oliveira	E.P3.11	Carlos Henrique Alves de França	B.P2.13
Carlos Augusto Escanhoela Jr	G.P2.31	Carlos Henrique Castro	A.O1.D1.1
Carlos Augusto Moraes Iglesias	M.O2.D1.2, M.P7.49, M.P7.6, M.P7.7	Carlos Henrique Domingues dos Santos	G.P2.34
Carlos Basílio Pinheiro	M.P7.35	Carlos Henrique Gomes Sampaio	Q.P3.53
Carlos Cesar Bof Bufon	F.O2.D1.3, F.O2.D1.4, F.O2.D3.1, F.O3.D1.8, F.O3.D3.1, F.P2.36, F.P4.37, G.P4.50, U.O1.D2.3, U.O2.D2.3	CARLOS HENRIQUE SANTOS VERBENO	M.P6.7
Carlos Chesman de Araújo Feitosa	M.P7.47	Carlos Henrique Stadlober	F.P2.19, F.P4.23, F.P4.3
Carlos Daniel Gessi Caneppele	V.P1.9	Carlos Henrique Zanini Martins	A.P5.11
Carlos Daniel Pantoja da Conceição	M.P6.17	Carlos Jacinto	A.P5.43, A.P5.44, A.P5.45, J.O3.D2.2
Carlos Eduardo Bezerra Moura	R.O1.D3.2	Carlos Jose de Mesquita Siqueira	L.P3.9
Carlos Eduardo Borba	E.O1.D3.1	Carlos José Leopoldo Constantino	A.P4.17, A.P4.50, B.P2.34, B.P2.53, C.P6.23, D.P4.21, D.P5.21, F.P4.25
Carlos Eduardo Bruzeguini	M.P7.35	Carlos K. Suzuki	G.P4.65
		Carlos Landauro	U.O2.D3.4
		CARLOS LARICA	M.P6.7
		Carlos Mauricio Lepiensi	C.O3.D2.5
		Carlos Maurício Lepiensi	R.P7.8
		CARLOS MERA	S.P5.14

Carlos Moreira Netto	Q.P3.64	Caroline Mayrinck	F.P6.30, G.P2.36, G.P2.37
Carlos Renato Rambo	B.P2.31, E.P3.20, E.P3.22, E.P3.37, F.P2.51, G.P2.47, G.P4.21, G.P4.57, G.P4.58, G.P6.11	Caroline Menti	A.P4.19, A.P4.20
Carlos Roberto Ferreira Junior	B.P2.43	Caroline Moraes	B.P2.80
Carlos Roberto Grandini	C.O2.D2.4, C.O3.D2.5, C.O3.D2.8, C.P2.16, C.P2.2, C.P2.39, C.P2.40, C.P2.41, C.P2.51, C.P2.58, C.P6.33, C.P6.36, C.P6.62	Caroline Moraes Cruz	Q.P3.41
Carlos Stefano Ragusa	M.O2.D1.3	Caroline Paganucci Malère	P.P1.83, P.P1.84
Carlos Toloza	U.P7.54	caroline pauletti	D.P4.26
Carlos Triveño Rios	L.P3.46, M.P7.56, Q.O1.D4.4, Q.P3.11, Q.P3.74, Q.P3.9	Caroline Raquel Bender	A.P5.30
Carlos Yago Pereira Batista	V.P1.6	Caroline Rodrigues	L.P3.27
Carmem Torres Guedes	L.P3.28	Caroline Rodrigues Pereira de Paula	E.P3.13
Carolina Comin Tegon	U.P7.30	CAROLINE SANTANA SANTOS	G.P2.27, G.P2.38, M.P6.18
Carolina Croceta Bombazar	U.P6.16	Caroline Schmechel Schiavon	G.P2.87, J.P5.9
Carolina Cruz Ferreira	C.P2.18, C.P6.1	Caroline Shirley murphy	A.P4.20
Carolina Ferreira Matos	U.O3.D3.2	Caroline Sousa Pereira	V.O1.D4.3, V.P1.8
Carolina Francener Junkes	F.P2.25	Caroline Yuri Aoki	D.P4.22
Carolina Grosso	G.P2.35	CAROLLINE SERAFIM SILVA	Q.O1.D4.5
Carolina Lilibeth Carvalho de Pinho	B.P2.78, B.P2.79, B.P4.6	Cary Joseph Davies	G.O3.D3.2
Carolina Melo da Silva	A.P5.58	Cassiano Batesttin Costa	F.P6.37
Carolina Ramos Hurtado	A.P5.28, A.P5.32, U.P7.3	Cassiano Ferreira Bernardes	L.O1.D3.2
Carolina Saraiva Lima	X.P5.14	Cassiano Heitor Medeiros	B.P2.73
Carolina Simão Albano	C.O3.D1.8	Cassia Rejane Brito Leal	B.P2.14
Caroline Araújo	U.O2.D1.1, U.O2.D1.4	Cássio Araújo Nascimento	G.P2.39
Caroline Cristine de Andrade Ferreira	O.O1.D3.8, O.O1.D3.9	Cássio Augusto Pinto Silva	C.P6.59, P.P1.23
Caroline Eloisa Apolinário Botteon	A.P5.29	Cassio Salomão Andrade	S.P5.28
Caroline Jaskulski Rupp	V.P1.7	Cassius Olivio Figueiredo Terra Ruchert	P.O3.D2.1
Caroline Jordão	B.P2.47	Cassius Olivo Figueiredo Terra Ruchert	P.P1.21, Q.P3.10
Caroline Mariano Ferreira	U.O3.D2.3	Caterine Yesenia Carrasco Montesdeoca	C.P2.19
Caroline Martins Machado	B.P2.32, B.P2.69	Cátia Crispilho Corrêa	F.O2.D1.4, F.O2.D3.1, U.O1.D2.3, U.P7.40
			G.O2.D2.3, G.O3.D2.1, G.P2.17, G.P2.40, G.P2.41, G.P2.42, G.P2.65, G.P2.78, G.P2.81, G.P2.82, G.P2.86, G.P6.88, L.P3.34
		Cátia Liane Ücker	
		Catia Rosana Lange de Aguiar	I.P7.12

Catiúcia Rodrigues Marcelino Oliveira Matos	M.P6.23	César Antonio Oropesa Avellaneda	B.O3.D1.3, B.P2.42, G.O2.D1.4, G.P2.48, G.P6.85
Cauê Ribeiro Oliveira	B.P4.20, B.P4.37, B.P4.38, B.P4.40, B.P4.55, D.P4.43, G.P6.6	César Augusto Antônio	P.P1.22
Cécile Autret	S.O2.D2.4	César Augusto Antônio Júnior	R.P7.12
cecile autret-lambert	S.O2.D2.2	Cesar Augusto Gonçalves Beatrice	H.O3.D1.1, H.O3.D1.2, X.O2.D1.1, X.P5.30
Cecília Amélia de Carvalho Zavaglia	C.O3.D2.2, C.P2.54, X.P5.32	Cesar Augusto Machado Moraes	G.O1.D2.1
Cecilia Chaves Guedes e Silva	C.P2.22	César Augusto Marasco Júnior	D.P5.29
Cecilia de Almeida Zito	C.P6.61	César Augusto Souza de Andrade	A.P4.10, A.P4.5
Cecilia de Carvalho Castro e Silva	U.O3.D3.1, U.P7.6, V.P1.14	Cesar Edil Costa	Q.P3.6, X.P5.10
Cedric Boissiere	A.P4.23	Cesar Enrique Perez Villegas	V.O3.D3.1
Cédric-Olivier Turrin	A.P4.22	Cesar Koppe Grisolia	D.O3.D2.3, D.P4.56
Cedric Seignez	B.O3.D3.7	Cesar L. Petzhold	D.P5.1
Célia Machado Ronconi	A.P4.49, M.P6.23, S.P5.29, U.O1.D3.2, U.P6.22	César Renato Foschini	C.P2.30, F.P4.1
Célia Regina Tomachuk	C.P6.70	César Ricardo Teixeira Tarley	G.P4.16, M.P6.18, U.P6.11, U.P7.31, U.P7.32
Celina Massumi Miyazaki	F.P6.6	César Viseras Iborra	L.P3.39
CELSO APARECIDO BERTRAN	C.P2.20, C.P2.21	Cezar Augusto Didó	V.P1.9
Celso Araújo Duarte	B.P2.46, F.P2.46	Chad Junkermeier	V.P1.36
Celso de Amorim Camara	A.P5.45	Chaiane Messa Caneda	O.P7.2
Celso de Araujo Duarte	U.P7.9	Chanchal Hazra	J.O3.D2.1
Celso de Melo	T.P3.28, T.P3.29	Chaolei Hu	A.O3.D2.2
Celso Manuel Aldao	S.P7.8	Charlene Silvestrin Celi Garcia	B.P4.19
Celso Molina	A.O2.D1.2, G.P2.43	Charles Ballage	U.O3.D1.4
Celso Peres Fernandes	Q.O3.D3.4	Charlie Salvador Gonçalves	M.P7.47
Celso Renato Peter	F.P6.20	Chase B Thompson	B.O3.D2.1
Celso Ricardo Sona Filho	C.P2.22	CHIARA VALSECCHI	U.P6.25, V.P1.24
Celso Sant'Anna	A.P5.48	Christiana Andrade Pessoa	A.P5.9, C.P2.4, G.P6.70, U.P7.14, U.P7.15
Celso Valentim Santilli	L.O1.D4.1, N.P5.27, Q.P3.49	Christian Alexander Calvache Maya	M.P6.19
Celso Vataru Nakamura	C.P6.2	Christian Diniz Carvalho	S.P5.28
Celso Xavier Cardoso	F.P4.41		
Ceridório Lucinéia	B.P2.33		
César A Antonio	R.P7.37		
Cesar Adolfo Escobar Claros	C.O3.D2.4, C.P6.22		
Cesar Aguzzoli	A.P4.19, B.P4.19		
Cesar A. Heck	U.O3.D1.2		

Christiane Bertachini Lombello	A.O1.D1.4, B.O2.D3.3, B.O3.D2.2, C.O3.D1.3, C.P2.52	Clauber Alex Melo Vieira	M.O1.D3.1
Christianeq Lago Ojaimi	C.P6.50		C.O3.D2.4, C.P6.22, H.O1.D1.1, H.O1.D1.4, P.O3.D2.8,
Christian Frederico de Avila Von Dollinger	P.P1.4	Claudemiro Bolfarini	P.P1.70, P.P1.72, P.P1.78, P.P1.79, Q.P3.16, Q.P3.6, Q.P3.61, Q.P3.7, Q.P3.72, X.P5.10, X.P5.7
Christian Fuentes	R.O1.D3.2	Claudete Fernandes Pereira	G.P2.74, G.P4.52
Christian Gauss	B.O2.D1.3, B.P2.3	Cláudia E. B. Marino	L.P3.20, L.P3.42
Christian Müller	M.P7.51	Cláudia Eliana Bruno Marino	C.P6.27, E.O3.D3.7
Christian Serre	A.P4.23		A.P5.2, C.P2.59, D.P4.23,
Christina Papenfuss	U.O3.D1.5	Cláudia Karina Barbosa de Vasconcelos	G.O3.D1.7, G.P2.44, U.P6.17, V.P1.3
Chrystopher Allan Miranda Pereira	G.P4.22		B.O3.D3.6, B.P4.48, F.P2.21, T.P3.14, T.P3.16, T.P3.17, T.P3.58, T.P3.6, U.P6.16, U.P7.17
Chuanfei Wang	E.O1.D4.4		
Cibele Carneiro Pessan	B.O3.D1.6	Claudia Regina Elias Mansur	A.P4.28, A.P5.51
Cibele Vieira Arão da Silva	C.P2.38	Cláudia Regina Klauck	D.P4.1
Cibely Silva Martin	A.P4.17, B.P2.34	Cláudia Santos Salim	A.P5.24
Cicero Rafael Cena	A.O3.D2.5, B.O3.D3.4, B.P2.14, B.P2.61	Claudia Zlotea	H.O3.D1.5
Cilene Labre	A.P4.19, M.O2.D2.2, M.P7.2	Claudilene Ribeiro Chaves	B.P4.44
Cínthia Caetano Bonatto	C.P2.3, E.O3.D3.6	Claudio A. González-Fuentes	L.P3.65, V.P1.16
Cinthia Cristina Calchi Kleiner	G.O3.D2.3, G.O3.D2.6	Cláudio Backes	J.P5.10
Cintia Andreia Alves Pereira	G.P6.73	Claudio Cazorla	L.O1.D4.4
Cintia Cristina Santi Martignago	C.P2.17	Claudio J. A. Mota	N.P5.12, U.P7.13
Cintia Lima Pereira	V.O3.D3.2	Cláudio José Rocha	H.O1.D1.2
Cintia Queiroz	P.O2.D3.2	Claudio Luis Santos	O.P7.16
Cipriano Benedito Gozzo	S.P5.15	Claudio Luiz Carvalho	M.P7.39
Clara Ines Garcia	F.P2.26	Claudio Martin Pereira de Pereira	T.P3.52
Clara Monteiro Marinho	V.P1.19, V.P1.28	Claudio Michel Poffo	E.P3.80, V.P1.38
Clara Muniz Almeida	V.O2.D3.3, V.O3.D2.1	Cláudio M.R. Remédios	B.P4.35
Clarissa Almeida Olivati	F.O2.D2.3, F.P4.18	Cláudio Perottoni	U.O3.D2.5
Clarissa Cruz	C.P6.59	Claudio Pistidda	H.O2.D1.4
Clarissa de Almeida Olivati	F.P2.27, F.P2.28	Cláudio Radtke	R.P7.25
Clarissa Piccinin Frizzo	A.P5.30	Claudio Romero Rodrigues de Almeida	G.P4.82
Clascídia A. Furtado	C.O2.D1.4, C.P6.26, C.P6.63, U.O2.D2.4, U.P7.18, U.P7.43, V.P1.41, V.P1.5		
Classius Ferreira da Silva	B.P2.38		

Claudio S. Kiminami	H.O1.D1.1, H.O1.D1.2, H.O1.D1.4, L.P3.19, O.P7.2, P.O3.D2.8, Q.P3.16, Q.P3.61, X.O3.D1.5, X.P5.40, X.P5.45, X.P5.47	Conceição de Maria Vaz Elias	A.P4.7, A.P5.31, B.O3.D3.3, B.P2.35
Claudio Teodoro dos Santos	X.P5.25	Conceição Regina Fernandes Alves	N.O3.D1.3
Claudio Vinicius Da Silva Zampieri	J.P5.8	Conrado Ramos Moreira Afonso	C.O3.D2.3, C.O3.D2.6, C.P2.10, H.P3.10, L.P3.19, O.P7.2, Q.O1.D3.2
Cleane Sales Costa	X.P5.8	Crislaine Sandri	I.P7.18
Cleânio Luz Lima	F.P6.10, T.P3.32, T.P3.33	Cristal Santos Cerqueira Pinto	A.P4.28, A.P5.51
Clea Peter	F.O1.D1.3	Cristan Huck-Iriart	J.P5.1
Cleber Alexandre de Amorim	F.P2.29	Cristhian Ricardo Loayza	Q.P3.37
cleber antonio lindino	D.P4.26	Cristhian Silva Carvalho	O.O1.D3.4
Cléber Cândido Silva	G.P6.13	Cristiana Maria Pedroso Yoshida	B.P2.38
Cleber Caramatti Machado	Q.P3.11	Cristian de Souza Pinto	U.P7.42
Cleber Faller Bauer	I.P7.5	Cristian Dias Fernandes	G.P2.45, G.P2.87, G.P2.92
Cleber Lima Rodrigues	R.P7.5	Cristiane Alves Paiva	B.P2.49
Cléber Mendonça	G.P6.15, G.P6.16, G.P6.3, G.P6.79	Cristiane Aparecida Pereira	C.P2.9
Cleber R. Mendonça	F.P2.6, G.P4.11, J.P5.32, O.P7.8	Cristiane Barbieri Rodella	E.P3.16
Cleber Santiago Alves	K.O3.D3.5, K.P7.4, K.P7.6, K.P7.7, K.P7.8, K.P7.9	Cristiane Battesini Adamo	A.P5.7
Cleberson Cipriano de Paula	D.P4.10	Cristiane Campos Plá Cid	M.P6.31
Cleice Lins Machado	L.P3.18	Cristiane Carvalho Araújo	G.P2.46
Cleidilane Sena Costa	G.P4.25, M.P6.17, M.P7.55	Cristiane Costa Wachesk	A.P5.28, A.P5.32, U.O3.D1.6, U.P7.3
Clemilda Cunha	F.O3.D3.2	Cristiane Evelise Ribeiro da Silva	X.P5.25
Clenildo de Longe	N.P5.11	Cristiane Ferraz de Azevedo	U.P6.19, U.P7.51
Clenilton Costa dos Santos	A.P4.37, F.P4.16, V.O1.D2.3	Cristiane Kelly de Oliveira	G.P6.74
Cleocir José Dalmaschio	A.P5.1	Cristiane Koga Ito	C.P6.53, D.P4.24
Clever Gomes Cardoso	A.O1.D1.1	Cristiane Krause Santin	F.P4.2, F.P4.33, F.P6.20
Cleverson Alves Silva Moura	F.P2.34	Cristiane Luisa Jost	B.P2.66, D.P5.28, J.P5.23, U.P6.14, U.P7.11, U.P7.33
Cleverson Siqueira Santos	U.P7.14	Cristiane Margarete Daikuzono	F.P2.30
Cleyton Castro da Silva	L.P3.10	Cristiane Maria Basto Bacaltchuk	Q.P3.26
Clodomiro Alves-Junior	R.O1.D3.2, R.O2.D3.3, R.P7.28	cristiane Pilissão	C.P2.23, C.P2.24
Clóvis Augusto Ribeiro	A.P4.4, A.P4.9		
Clóvis Lúcio da Silva	D.P4.32		
Colin O'Callaghan	U.O1.D1.2		



	G.O2.D2.3, G.P2.1, G.P2.17, G.P2.4, G.P2.40, G.P2.41, G.P2.42, G.P2.45, G.P2.60, G.P2.65, G.P2.78, G.P2.81, G.P2.82, G.P2.86, G.P2.87, G.P2.92, G.P4.81, G.P6.60, G.P6.88, L.P3.34	Cristian Stanhaus	G.O2.D3.1
Cristiane Raubach Ratmann		Cristie Luis Kugelmeier	L.P3.17, L.P3.2, Q.O3.D3.5, Q.O3.D3.6, Q.P3.32
Cristiane Sanchez Farinas	B.P4.40, B.P4.55, D.P4.43	Cristie luiz kugelmeir	Q.P3.23
Cristiane Schwartz Venzke	G.P2.1	Cristina Bormio Nunes	Q.P3.19
Cristiane Stegemann	P.P1.44, R.P7.38, U.P7.30	Cristina Chies Bianco	A.P4.19
Cristiane Wienke Raubach Ratmann	G.O3.D2.1	Cristina Henriques Gaspar	V.O3.D2.4
Cristián Ferretti	U.P7.20	Cristina Moniz Araujo Lopes	P.O2.D2.3
Cristiani Campos Plá Cid	E.P3.17, M.P6.11	Crystopher Cardoso Brito	C.P2.25, C.P6.59, P.P1.23
Cristian Momoli Salla	F.O3.D1.1, F.P2.31, F.P2.52, F.P4.4, F.P6.3, F.P6.35, F.P6.48	Custódio Leolpodino de Brito Guerra Neto	C.P2.7
	L.O3.D3.3, Q.O3.D3.3, Q.P3.38, Q.P3.46, Q.P3.47, R.P7.13, R.P7.46, U.P6.4	Cybele Lotti	X.P5.30
Cristiano Binder		Cynara Caroline Kern Barreto	D.P4.18, D.P4.5, D.P5.43, M.O1.D3.4, M.P7.46
Cristiano Carrareto Caliman	U.P6.20	Cynthia Marina Rivaldo Gómez	G.O2.D1.3, G.P2.71, G.P4.45
Cristiano Ceron Jayme	B.P2.36	Cyrile Deranlot	M.P7.33
Cristiano da Silva Teixeira	K.O1.D3.2, M.O2.D3.2, M.P6.26, M.P6.31	<b>D</b>	
Cristiano Francisco Woellner	U.P7.24, V.O3.D3.7	Dachamir Hotza	A.O2.D2.3, B.P2.31, D.O1.D1.3, E.P3.18, E.P3.22, G.P2.54, G.P4.12, I.P7.11, X.P5.4
Cristiano Legnani	F.O3.D3.2, F.P2.56, F.P2.9, F.P6.14, F.P6.15, F.P6.30	Daiana Ferreira Silva	B.O3.D3.3
Cristiano Luís Pinto de Oliveira	S.P7.28	Daiana Galvão da Silva	F.P2.32
Cristiano Morita Barrado	A.P4.25, D.P5.30	Daiane Batista Silva	B.O3.D1.5
Cristiano Ramos Cunha	J.P5.30, Q.P3.28	Daiane Damasceno Borges	V.O3.D3.7
Cristiano Santos Lopes	G.P6.71	Daiany Wagner	U.P6.4
Cristiano Vicente	E.P3.17	Dairo Hernan Mesa	Q.O1.D4.1
Cristiano Zanlorenzi	G.P2.58, G.P4.17, G.P6.47, G.P6.48, M.P6.8	Daliana Muller	B.P2.31, E.P3.20, E.P3.22, E.P3.37, G.P2.47, G.P4.21, G.P4.57, G.P4.58
Cristian Pohl Meinhardt	Q.P3.23	Dalita G. S. M. Cavalcante	A.P5.3
		Dalmir dos Santos Matos	Q.P3.12
		DALVA ALVES DE LIMA ALMEIDA	U.P6.21, U.P6.7
		Damien Mertz	J.O2.D2.2

Danay Manzo Jaime	T.P3.17	Daniel De Martini Rivera Ferreira	L.P3.5
Dandara Martins Ferreira	T.P3.18	Daniel Diehl	P.P1.25
DANIAN Alexandre DUGATO	M.O3.D1.6, M.P6.20	Daniele Alves Fagundes	A.P5.33, D.P5.36, D.P5.8
Daniela Batista de Oliveira Gaspar	D.P4.41	Daniele Amato Moreira Nazar	A.P5.34
Daniela Becker	R.P7.30	Daniele Cristina Tita Granzotto	D.P4.42
Daniela Bianchini	E.P3.23, L.P3.6		C.P2.26, F.P2.34, G.P4.41, J.P5.10, L.P3.66
Daniela Comparsi Laranja	B.P2.21	Daniel Eduardo Weibel	
Daniela Cordeiro Leite Vasconcelos	N.P5.13, N.P5.20, N.P5.25, N.P5.3, N.P5.30	Daniel Edward Lippross	V.O1.D4.2
Daniela Cristina Manfroi Rodrigues	G.P2.64, G.P4.66, G.P4.79, G.P6.22, G.P6.23, G.P6.81	Daniele Schaab Boff Junges	R.P7.33
Daniela Estácio	A.P5.35	Daniele Simão	A.P4.22
Daniela Gadens Zanetti	D.O3.D2.8	Daniele Smanhotto Malvessi	M.P6.21
Daniel Alves Bezerra	P.P1.24, Q.P3.39	Daniele Toniolo Dias	G.P6.57
Daniel Alves Heinze	I.O1.D3.3, X.P5.35	Daniel Fernandes Cipriano	U.P7.50
Daniela Maria do Amaral Ferraz Navarro	E.P3.44	Daniel Francisco Scalabrini Machado	S.P5.11
Daniela Marques do Nascimento	D.P4.41	Daniel Gustavo Allasia	N.P5.7
Daniela Menegon Trichês	J.P5.31	Daniel Hachiya de Oliveira	G.P6.59
daniela Neasca	S.O2.D2.2		C.O2.D2.2, L.O1.D3.3, P.P1.23, P.P1.61, P.P1.82, R.P7.4
Daniela Neves Placido	G.O2.D1.4, G.P2.48	Danieli Born Guerra	A.P5.35
Daniela Nunes	V.O3.D2.4	Daniel Kioshi Kawasaki Cavalvanti	B.P2.68
Daniela Oreggioni	D.O3.D1.6, V.P1.10	Daniella Stepheny Carvalho Andrade	A.P4.43, C.P6.69, E.P3.74, G.P2.97, P.P1.81, P.P1.85
Daniel Araújo Macedo	E.P3.40, E.P3.67, T.P3.59		C.P6.34, X.O3.D1.4
Daniela Ribeiro Alves	B.O3.D3.5	Danielle Benigno Andrade	B.P2.26
Daniela Sachs	C.P2.18, C.P6.1, C.P6.19, C.P6.27	Danielle Cristina Camilo Magalhães	L.P3.2, P.O3.D2.7
Daniel A Solis	V.O3.D3.7	Danielle Gomes Passos Silva	K.O3.D3.2
Daniela Steffens	B.P4.19	Danielle Ramos Mota	G.P2.52
Daniel Auri Schaefer	R.P7.13, R.P7.14	Daniel Lucas Costa Rodrigues	U.P6.19
Daniela Zambelli Mezalira	F.P2.19, F.P4.23, F.P4.3, G.P4.2, U.P6.14, U.P7.11, X.P5.1	Daniel Lundin	U.O3.D1.4
Daniela Zanchet	U.O3.D3.3	Daniel Navarro da Rocha	C.P6.40
Daniel Brito de Araújo	V.O3.D3.3	Daniel Nilson Nunes Nicomedes	C.P2.59
Daniel Castello	Q.P3.64	Daniel Rocco	K.P7.14, M.P6.16
Daniel Cesar Braz	F.P2.33, F.P2.5		

Daniel Rodrigo Leiva	H.O1.D1.1, H.O1.D1.2, H.O1.D1.3, H.O1.D1.4, H.O3.D1.1, H.O3.D1.2, H.O3.D1.6, H.O3.D1.8, H.P3.10, H.P3.14, H.P3.16, H.P3.2, H.P3.3, H.P3.4, H.P3.7, H.P3.9	Danilo Mustafa	G.P4.14
Daniel Roger Amorim	F.O1.D2.2, F.P6.2	Danilo Paula Kuritza	B.P2.37
Daniel Roger Bezerra Amorim	F.O2.D2.1	Danilo Roque Huanca	F.P6.33, F.P6.34
Daniel Santos Francisco	J.P5.11, J.P5.36	Danilo Ruy	P.P1.78
Daniel Silva Costa	J.P5.1	Danilo Santos	F.P2.35, F.P2.54, F.P4.35
Daniel Souza Corrêa	A.P4.47, B.P4.3, G.P6.3, T.P3.25, T.P3.45	Danilo Waismann Losito	N.O1.D1.3
Daniel Souza Costa	M.P7.33	Dante Homero Mosca	M.O1.D3.2, M.O3.D1.8, M.O3.D2.3, M.O3.D2.4, M.P7.33, M.P7.51
Daniel Vasconcelos Pazzini Massote Massote	V.P1.11	Danusa do Carmo	M.O3.D1.1
Daniel Walter da Silva Dalmagro	P.P1.26	Danyela Cardoso Carvalho	V.P1.12
Daniely Ferreira Queiróz	M.P6.5	Danyella Crystyane Silva cardoso	Q.P3.37
Daniel Yukio Kakizaki	R.P7.41	Dany Michell Andrade Centeno	Q.P3.3
Daniel Zanetti de Florio	E.P3.51, E.P3.66, E.P3.76	Daolun Chen	O.O1.D3.7
Danilo Alfonso Piña Velasquez	G.P4.23	Daphiny Pottmaier	D.O3.D2.8, H.O2.D1.4
Danilo Alves Oliveira	F.O3.D3.3, F.P4.27	Darci Alberto Gatto	B.P2.11
Danilo Antonio da Silva	N.O3.D1.2	Dario Machado Júnior	P.P1.68
Danilo Cebrian Scarpelini Kaminski	E.P3.24, K.P7.6	Darley Carrijo de Melo	N.P5.14
Danilo Da Silva Vendramini	D.P4.25	David Arsenio Landinez	M.P7.10
Danilo Froes Batista	M.P6.22	David Da Mata Lopes	G.P2.73, T.O3.D1.2
Danilo Hisse Miranda	U.P6.22	David da S. Simeão	F.O3.D1.1
Danilo Justino Carastan	C.P6.41, I.O1.D3.3, S.O1.D2.2, U.O2.D2.1, U.P6.24, U.P7.34	David de Souza Machado	R.P7.39
Danilo Maciel Barquete	L.P3.38, U.P7.46	David Lewis Hughes	A.P5.52
Danilo Manzani	G.P2.26, G.P4.38, J.O1.D4.2, J.P5.11, J.P5.12, J.P5.29, J.P5.36, J.P5.5	David Macedo Dias	C.P2.27
Danilo Martins dos Santos	B.P4.3, T.P3.25	David Martinez	D.P5.35
		David Mendez Soares	F.P6.23
		David Prendergast	S.O2.D2.1
		David Shapiro	M.O3.D2.8
		David Silva Moura	T.P3.12
		David Sousa Brandão	M.P7.1
		David Ventura-Espinosa	S.O3.D2.6
		David Vinicios Dos Santos Baldon	L.P3.68
		David Zambrano	K.O3.D3.6
		Davi Henrique Starnini de Camargo	F.O2.D1.3, F.P2.36, F.P4.37, G.P4.50
		Davi Neves	P.O3.D2.3, R.O3.D3.6

Davinson Mariano da Silva	C.P6.15, G.O3.D1.8, G.P2.29, G.P2.49, G.P2.50, G.P4.59	Demétrius William Lima	N.P5.26
Davi Rubinho Ratero	N.O3.D1.2	Denilson de Vasconcelos Freitas	G.P4.23
Davi S Vieira	A.P5.48	Denilson José Marcolino de Aguiar	K.P7.1, Q.P3.13
Dawid Nastula	F.O1.D1.2	Denilson Toneto da silva Toneto	M.O2.D2.1
Dayane Batista Tada	A.P5.28, A.P5.32, A.P5.6, A.P5.64, U.P7.3	Denis Augusto Turchetti	F.P2.15, F.P2.22, F.P4.6, G.P2.58, G.P4.17, G.P4.24, G.P6.24, M.P6.8
Dayane de Sousa Carvalho	Q.P3.43	Denise Criado	G.P2.73, J.P5.13, L.P3.46
Dayane de Souza Chaves	M.O3.D1.3	Denise Oliveira Lino	D.P4.31
Dayanne Evelyn Firmo de Oliveira	N.P5.12	Denise Stolle da Luz Weiss	J.P5.14, J.P5.7
Dayenny Louise D'Amato Leite	M.P6.23	Denise Villela Barcza Stockler Pinto	P.P1.54
De Almeida Sonia	S.O2.D2.4	Denison Angelotti Moraes	A.P5.18
Débora Abrantes Nunes Leal	L.P3.20	Denner Felipe Silva Ferreira	U.P6.29
Débora Ariana Corrêa da Silva	U.P6.32	Dennis Cabrera García	F.P4.24
Debora Baptista Pereira	X.P5.25	Dennis Franke	S.P5.6
Débora França	T.P3.49	Departamento de Física de Física	C.P6.2
Débora Gonçalves	D.P4.22, D.P5.33	Detlef W. Bahnemann	U.O2.D3.2
Débora Guimarães da Silva	N.P5.13, N.P5.20	Deuber Lincon da Silva Agostini	F.P2.28
Deborah Dibbern Brunelli	D.P5.11	Deuber L. S. Agostini	F.O2.D2.3, T.O3.D1.3, T.P3.10, T.P3.14, T.P3.19, T.P3.20, T.P3.46, T.P3.54, T.P3.60
Deborah Liguori	D.O2.D2.3	Devaney Ribeiro do Carmo	U.P7.56
Débora Liliane de Souza Renó	C.O3.D1.3	Deyse Gaspar de Sousa	X.P5.16
Debora Paulus Soares	F.O3.D3.6	Deyvid Souza Porto	A.P5.25
Débora Pereira Schmitz	X.P5.15	Dhara Beatriz de Amorim Pryston	G.P2.67
Débora Ribeiro Antunes	A.P5.36	Dheniffer oliveira Buffon	D.P4.26
Debora Terezia Balogh	B.P2.6, B.P2.7, B.P4.30, F.P2.6, F.P4.18, V.P1.18	Dhésmon Lima	A.P5.9, C.P2.4, G.P6.70
Débora Vieira Way	C.P2.48	Diana D. Porcellinis	F.P2.57
Declan M. Devine	B.P4.12	Diana Lermen	U.P6.2
Deise B. froelich	U.O3.D2.5	Diana Pinto	B.P2.76
Deise Ochi Ochi	B.P2.38	Dibir Yusupov	K.O2.D3.3
Deise Schafer	K.O1.D3.2, M.P6.31	Diego Alexandre Duarte	R.P7.7
Deivy Wilson Wilson	F.P2.20	Diego Anísio Modesto	M.P6.24
Deize Basilio dos Santos Aguiar	P.P1.66		
Deize Corradi grodniski	A.P5.37		
Delia do Carmo Vieira	D.P4.10, N.P5.6		
Demetrio A da Silva Filho	G.P6.42		

Diego Augusto Batista Barbosa	G.P2.55	Dilson Cardoso	N.O1.D1.1, N.P5.14, N.P5.15, N.P5.16
Diego Bagnis	F.O2.D2.4, F.O3.D2.6, G.O3.D1.3, G.P2.68	Dilson Silva Santos	H.O2.D1.3, H.O3.D1.7
Diego Cardoso de Souza	G.P2.72, U.P7.35, V.P1.19, V.P1.28	Diógenes dos Santos Dias	D.P5.29
Diego C. B. Alves	U.P6.45	Diogo M Vidal	E.P3.15
Diego da Silva Manoel	G.P4.11	Diogo Paschoalini Volanti	A.P5.38, C.P6.60, C.P6.61, G.P2.61
Diego de Holanda S. Souza	T.P3.47	Diogo Silva Pellosi	A.P5.39, G.P2.52
Diego Ernesto González-Chávez	M.O1.D2.3, M.O2.D2.2, M.P6.29, M.P7.32	Dionathan Alves Campanelli	U.P6.25, V.O1.D4.5, V.P1.24
Diego Félix Dias	T.P3.33	Dison Stracke Pffingsten Franco	N.P5.7
Diego Fernandes da Cruz	B.P4.38	Divinomar Severino	EXP.1.D2.1
Diêgo Fernandes Mudesto	C.P2.36	Djalma Lucas de Sousa Maia	A.P5.40
Diego Fernando Coral	A.P5.27, M.P6.19	Djoille Denner Damm	D.P5.51, O.P7.16, U.P7.46, U.P7.7
Diego Fernando Silva Sousa	F.O3.D2.4, F.P2.37	Dominik Weh	F.O3.D2.1
diego jorge alves borges	Q.P3.37	Donald E. Macphee	D.O3.D2.1
Diego Lomonaco Vasconcelos de Oliveira	B.O3.D1.4	Donato Alexandre Aranda	C.P6.10, E.O1.D4.5
Diego Morais da Silva	C.P2.5	Douglas Cardoso Dragunski	D.P4.13, T.P3.21, T.P3.24, T.P3.27, T.P3.5
Diego N. David-Parra	F.P4.41, T.P3.19, T.P3.20	Douglas Duarte de Vargas	V.O3.D3.5, V.P1.37
Diego Osorio Rivera	G.P2.51	Douglas Fabris	C.P2.15, D.P4.27
Diego Peña-Lara	S.P7.4	Douglas Faza Franco	J.O1.D4.4
Diego Pereira dos Santos	G.P4.10	Douglas Gouvea	G.P2.15, G.P4.19, M.P7.23
Diego Piazza	U.P7.38	Douglas Henrique Pereira	S.P5.24
Diego Rabelo da Costa	V.P1.42	Douglas Henrique Vieira	F.O1.D4.1, F.O1.D4.2, F.P4.34, F.P4.39, F.P6.16
Diego Rafael Nespeque Correa	C.O2.D2.4, C.P2.2, R.P7.15, R.P7.16, R.P7.3	Douglas José Coutinho	F.O1.D2.2, F.P2.38
Diego Saldanha	M.O2.D2.1	Douglas José Ribeiro Baquião	S.O3.D1.4
Diego Silva Batista	X.P5.17, X.P5.31, X.P5.37	Douglas Langie da Silva	G.P2.48
Diego Silva Melo	U.P7.39	Douglas Marcel Gonçalves Leite	G.P2.14, G.P2.23, G.P2.24, G.P2.6, G.P6.21, P.P1.44, R.P7.38, U.P7.30
Diego Sousa Moura	D.O3.D2.3	Douglas Mendes da Silva Del Duque	D.P5.40, G.P6.40, G.P6.49
Diego Stefani Teodoro Martinez	A.P5.40	Douglas Mendes Duque	G.P4.20
Diego Valdevino Marques	X.P5.18	Douglas Miranda Perez	X.P5.14
Diéricon Sousa Cordeiro	C.P2.28, G.P6.12		
Dihego Lima Damacena	D.P5.42, E.P3.65		
Dilermardo Nagle Travessa	H.O1.D1.3, P.P1.1, P.P1.34		
Dilermardo Travessa	H.P3.4		

Douglas Morais Morais	Q.P3.14, Q.P3.18, Q.P3.57
Douglas Rafael Costa Barduco	P.P1.56
Douglas Santana Charqueiro	V.P1.9
Douglas Santos	P.P1.12
Douglas Silva Machado	D.P4.11
Douglas Soares Galvão	U.P7.24, V.O1.D3.1, V.O3.D3.7, X.P5.50
Douglas Washington da Silva	M.P6.25
Drielle Viana Vieira	B.P2.1
Duany Pires Aguiar	U.P6.17
Ducinei Garcia	G.P4.7, M.O3.D2.7, M.P7.45
Duc Pham	F.O1.D1.3
Dulce Maria de Araújo Melo	D.P4.17
Duncan John Mowbray	V.O3.D2.6
Dunieskys Roberto González Larrude	V.O3.D3.1, V.P1.26
Dunwei Wang	D.O3.D2.4
Durcilene Alves Silva	B.P2.25, B.P2.26, G.P4.61
Durval Rodrigues Jr.	C.O2.D2.3, C.O2.D3.2, S.O3.D1.3

## E

Éder Alves Pereira	G.P2.98
Éder Cláudio Lima	U.O3.D1.2
Eder Henrique Coelho Ferreira	U.O1.D2.2
Éder José Guidelli	A.P5.17
Eder Lopes Ortiz	L.P3.31, P.P1.27, P.P1.28, P.P1.38
Eder Socrates Najar Lopes	C.O2.D3.4, C.P6.5
Ederson Carlos Aguiar	E.P3.10
ÉDER TADEU GOMES CAVALHEIRO	C.P2.33

Edésia Martins Barros Sousa	A.O1.D2.1, A.O2.D2.1, A.O3.D1.3, A.P4.34, A.P5.34, A.P5.59, A.P5.66
Edgar Aparecido Sanches	A.P5.62, B.P2.16, B.P4.21, B.P4.57, E.P3.71, F.P2.2, F.P2.3, T.P3.13
Edgar Dutra Zanotto	C.P2.50, J.O3.D2.5, X.O1.D1.2
Edgar Henrique de Souza	F.P2.39
Edielen França Santos	F.P4.13, V.P1.22
Edilaine Ferreira da Silva	D.P4.28, M.P7.24
Ediléia Duarte Oliveira	U.P7.58
EDILEIDE ALVES DOS SANTOS	K.P7.3
Edilene Deise Silva Ferracine	N.P5.14
Edilson Sergio Silveira	A.O1.D2.2
Edilson Valmir Benvenuti	B.O1.D3.3, B.P4.23, C.P2.33, N.O2.D1.2, V.P1.9
Edilson V Benvenuti	D.P4.34
Edison Zacarias da Silva	S.P5.12, S.P5.21, S.P5.7
Edisson Morgado Jr	N.P5.23
Edivandro Giroto	F.P4.8
Edmilson Felix Silva	M.O1.D2.2, M.P7.37
Edna Maria Mendes Aroucha	B.P2.39, B.P2.49
Edna Regina Spada	G.P4.18, G.P4.53, T.P3.53
Ednelson da Silva Costa	Q.P3.12
Edrian Mania	V.O2.D3.2
Edson A. Ticianelli	L.P3.43
Edson Cavalcanti da Silva Filho	A.P4.7, B.P2.19, B.P2.26, B.P2.48, B.P2.56, B.P2.8, B.P2.9, B.P4.41, C.P2.29, C.P6.12, D.O3.D2.1, D.P4.19, D.P5.42, E.P3.5, E.P3.65, G.P4.60, G.P4.61, G.P4.76, G.P4.77, L.P3.39, N.P5.33

Edson Cocchieri Botelho	P.O1.D2.3, P.O2.D2.2, P.P1.49, U.P7.44, U.P7.49, X.P5.36	Eduardo Aurélio Barros Aguiar	E.O2.D3.1, E.O2.D3.2
Edson Ednaldo Silva	F.P6.29	Eduardo Azzolini Volnistem	C.P6.2, M.O1.D3.3, M.O3.D2.7, M.P7.22, M.P7.45
Edson Ferreira Chagas	G.P2.39	Eduardo Bedê Barros	V.O3.D3.3
Edson Godoy	P.P1.48, P.P1.86, X.P5.14	Eduardo Bellini Ferreira	J.P5.5, J.P5.6
Edson Jansen Pedrosa de Miranda Jr.	P.P1.29	Eduardo Bertoni da Fonseca	P.P1.66
Edson José Comparetti	A.P5.26, A.P5.41	Eduardo Carlos Bianchi	P.P1.32, Q.P3.73
Edson Laureto	F.P4.26, M.P6.8	Eduardo Costa Estambasse	C.P2.30
Edson Laureto Laureto	G.P2.53, V.O3.D2.4	Eduardo da Cruz Teixeira	L.P3.21, L.P3.22
Edson Leite	G.O2.D2.1	Eduardo da Silva Gomes	G.P2.55, G.P2.56
Edson Luiz Foletto	D.P5.55, G.P2.54, N.P5.41	Eduardo de Souza Cardoso	M.P6.26
Edson Miranda	P.O2.D3.3	Eduardo Festozo Vicente	D.P4.29
Edson Nossol	S.P7.35	Eduardo Giangrossi Machado	F.P2.42
EDSON PASSAMANI CAETANO	M.P6.7	Eduardo Gonçalves Ciapina	X.P5.44
Edson Reis	T.P3.29	Eduardo Guilherme Cividini Neiva	F.P2.55, I.P7.1, I.P7.2
Edson Roberto Leite	B.O3.D1.6, E.O3.D3.3, G.P4.46, G.P4.54, G.P6.35, M.P6.33, S.P5.15, S.P7.14, V.P1.23	Eduardo Guy Perpétuo Bock	C.P6.55
Edson Roberto Santana	U.P6.26	Eduardo Henrique Backes	X.O2.D1.1
Edson Santos	O.P7.11, S.P7.34	Eduardo Henrique Martins Nunes	C.P2.11, L.P3.15
Edson Sardella	M.P6.4	Eduardo H G Evaristo	K.O3.D3.5
Edson Sena Pereira	G.P2.43	Eduardo José Nassar	C.P2.31, C.P6.3, D.P4.33
Eduarda Ballmann	T.P3.21	Eduardo Lemos de Sá	A.P5.52
Eduarda Bezerra Pereira	B.O3.D3.3	Eduardo Lima Costa	S.P5.13, T.P3.22
Eduarda de Castro Flach	F.P2.40	Eduardo Lins	M.P6.18
Eduarda Medran Rangel	D.P5.56, G.O2.D2.3, G.O3.D2.1, G.P2.41, G.P4.81, G.P6.60	Eduardo Lucas Subtil	D.P4.36
Eduarda Santos Lima	O.P7.3, O.P7.4	Eduardo Luis Schneider	P.P1.25
Eduarda Souto	F.P4.23	Eduardo Luzia França	B.P2.78, B.P2.79, B.P4.6
Eduardo Acedo Barbosa	G.O1.D4.1	Eduardo Maffud Cilli	F.O2.D3.4, T.P3.35
Eduardo Albuquerque Brocchi	M.P6.42	EDUARDO MAGALHÃES BRAGA	Q.P3.12, Q.P3.37
Eduardo Antonelli	E.P3.25	Eduardo Nóbrega	K.O2.D3.2, K.P7.14
		Eduardo Padrón Hernández	M.P7.25
		Eduardo Pilad Nóbrega	K.P7.18, K.P7.19
		EDUARDO PIRES BONHIN	P.O1.D2.3, P.O2.D2.2
		EDUARDO RADOVANOVIC	E.O1.D3.2, E.P3.36, K.P7.4, K.P7.7, K.P7.8, T.O2.D1.3

Eduardo Rezende Triboni	G.P6.14, G.P6.56, S.O1.D1.2	Elaine Yoshiko Matsubara	D.O3.D2.3
Eduardo Ribeiro de Azevedo	L.P3.14	Elder Augusto Viana Mota	U.P6.29
Eduardo Ricci Júnior	A.P5.51	Elder Wagner Lobo Ribeiro	G.P4.25
Eduardo Rigoti	N.P5.17, N.P5.22, N.P5.5	Elena Rosemarie Ulate- Kolitsky	H.O3.D1.3
Eduardo Ruben do Nascimento	A.P5.42	Elen Beatriz Pacheco	X.P5.33
Eduardo Saito	H.P3.13	Elenice Deffune	F.P6.4, T.P3.35
Eduardo Sampaio	E.P3.9	Elenice Hass Caetano Lacerda	D.P4.30
Eduardo Santos Carvalho	V.P1.13	Elen Poliani Arlindo Fuzari	E.P3.78
Eduardo Sousa Silva	J.O1.D2.1, J.P5.15	Elen Rute Lira Gomes	F.P6.4
Eduardo Szpoganicz da Silva	M.O2.D3.4	Eliana Cristina da Rigo Rigo	A.P4.14, A.P5.13, C.P2.32, U.P6.8
Eduardo tavares Galvani	P.P1.87	Eliana Martins Lima	A.O1.D1.1
EDUARDO THADEU RODRIGUES	C.O2.D1.1	Eliana Paola Marín Castaño	M.P6.42
Eduardo Trevisan	C.P2.17	Eliana Weber de Menezes	B.O1.D3.3, B.P2.21
Eduard Westphal	F.O3.D2.2, F.O3.D2.3, F.O3.D2.5, F.P2.25, F.P6.7	Eliane Lazzari	D.P4.34
Edvaldo Rodrigues da Rocha Jr.	R.P7.27	Eliane Soares da Silva	B.P4.15
Edvaldo Rosa	J.P5.14	Elias Barros Santos	D.O3.D2.7, D.P4.31
Edvaldo Trindade	A.O1.D2.2	Elias de Souza Monteiro Filho	G.P4.22
Edvani Curti Muniz	S.P5.13	Elias Fagury Neto	L.P3.7, L.P3.8
Edwan Anderson Ariza	Q.O1.D4.1, Q.O2.D3.2	Elias Paiva Ferreira Neto	D.O3.D1.2, J.P5.11, J.P5.4
Edward Giovanni Rodriguez	Q.P3.15	Elias Regi	F.P6.12, G.P2.5
Edwilde Yoplac	D.P5.35	Elias Tambourgi	X.P5.2
Edwin Sallica Leva	X.O3.D1.4	Elibe Silva Souza Negreiros	B.O3.D2.3, B.O3.D2.6
Edycleyson Carlos de Souza	M.P6.27	Elidiane Cipriano Rangel	B.P2.73, R.P7.12, R.P7.15, R.P7.16, R.P7.31, R.P7.44, R.P7.6
Efracio Mamani Flores	G.P2.57	Elidiane C Rangel	R.P7.37
Eiripedes Alves da Silva Filho	A.P5.43, A.P5.44	Elidiane C. Rangel	C.O2.D2.4, G.P6.72, R.O3.D3.3, R.P7.3
Eisabeth Pizoni	C.O3.D2.1	Elidio Angioletto	L.P3.32
E. Jr. Marega	G.P2.75	Elí Emanuel Esparza Flores	B.P4.23
Elaine Cavalcanti Rodrigues Vaz	U.O3.D1.7	Eliete Almeida Alvin	A.P5.43, A.P5.44, A.P5.45
Elaine Cristina Azevedo	L.P3.27	Eliezer Costa Silva	G.P4.26, G.P4.46
ELAINE CRISTINA LOPES PEREIRA	U.P6.27, U.P6.28	Elíria Maria de Jesus Agnolon Pallone	C.P6.50, D.P5.17, J.P5.20
Elaine Cristina Paris	N.P5.4	Elisa Baggio Saitovitch	M.P6.34, M.P7.16, M.P7.5
Elaine F. R. de Oliveira	B.P4.13	Elisabete Alves Pereira	F.P4.32
Elaine Regina Lopes Tiburtius	D.P4.30		



Elisabete Pereira dos Santos	A.P4.28, A.P5.51	Elson dos Santos	F.P2.35, F.P2.54
Elisabeth Andreoli de Oliveira	B.P2.22, D.O2.D2.3		A.P5.21, A.P5.7, D.O2.D1.3, D.O3.D1.1, D.O3.D1.3, D.P5.15, D.P5.2, D.P5.41, D.P5.44, D.P5.47, D.P5.50, G.O2.D2.1, G.O3.D2.8, G.P2.62, G.P2.8, G.P4.1, G.P4.13, G.P4.82, G.P6.1, G.P6.44, G.P6.62, G.P6.78, G.P6.89, M.P6.10, N.P5.26, O.P7.15, S.O1.D1.1, S.O2.D1.4, S.O3.D2.6, S.P5.12, S.P5.17, S.P5.24, S.P5.30, S.P5.32, S.P5.34, S.P5.7, S.P7.1, S.P7.10, S.P7.15, S.P7.2, S.P7.24, S.P7.3, S.P7.31, S.P7.32, S.P7.38, S.P7.42, S.P7.43, S.P7.44, S.P7.7, S.P7.8, V.P1.23
Elisabeth Mateus Yoshimura	G.P2.10		
Elisabeth M Yoshimura	G.O3.D3.6, G.P6.69, G.P6.7, G.P6.8, G.P6.9		
Elisa Magno Nunes Oliveira	A.P5.35		
Elisa Marchezini Rodrigues	C.P2.11, C.P2.42		
Elisa Maria da Cunha Mercês	A.O1.D2.1, A.P5.66		
Elisa Mauro Peixoto Prado	A.P5.7		
Elisângela N. Santos	B.P2.6		
Elisângela Pereira Cordeiro	U.P6.27		
Elisângela P. Silveira-Lacerda	A.O1.D1.1	Elson Longo	
Elisângela Silva Pinto	V.P1.4		
Elisa Soares Leite	G.P4.27		
Elisa S Orth	B.O1.D3.2, U.O1.D3.3, U.P7.57		
Elisa Souza Orth	U.O2.D1.2		
Elisiane Maria Berton	R.O3.D3.5, R.P7.40		
Eliton S. Medeiros	B.P2.13, B.P2.40, D.O1.D2.1, T.O3.D1.5, T.P3.59		
Eliton Souto Medeiros	T.P3.9		
Elizabete Campos de Lima	D.P4.32		
Elizabete Yoshie Kawachi	P.P1.10, P.P1.20, P.P1.54, P.P1.69, P.P1.75, P.P1.8	Elton Aparecido Prado Reis	E.P3.34
Elizabeth Carmen Pastrana Alta	D.O3.D2.4	Elton Faria de Souza Lima	C.P2.33
Elizabeth Norris	A.O2.D1.3	Elton Franceschi	N.O2.D1.2, N.P5.1
Ellen Caroline Moraes Gonçalves	A.P4.1	Elton José Figueiredo de Carvalho	S.O1.D1.2, S.O3.D2.4
Ellen Rodrigues dos Santos	Q.P3.16	Elton Marks de Araujo Braz	L.P3.39
Eloah Latocheski	G.P4.21, G.P4.57, G.P4.58	Elton Ogoshi de Melo	S.P5.14
Eloah Martins	E.P3.33	Elton Ribeiro da Silva	G.P4.28, G.P6.67
Eloá Lopes Maia	O.P7.1	Elver Juan de Dios Mitma Pillaca	L.P3.23, L.P3.69
Eloana Patrícia Ribeiro	C.O2.D2.1	Elvia Leal	D.P5.7, M.P6.28, M.P7.12, M.P7.9
Eloi Alves da Silva	B.P4.2	Elvio Antonio de Campos	D.P4.35, J.P5.8, V.O2.D2.2
Eloi Lazarin Jr.	C.P6.21	Elvira Maria Correia Fortunato	F.P4.9, V.O3.D2.4
Eloisa Cordoncillo	O.P7.15	Elvis Lopes Brito	C.P6.24
Eloísa Cordoncillo	S.P7.24	Elvis Luan Alves	U.P7.15
Elsa Maria Materón	F.P4.5	Elvis Naoto Nishida	E.P3.26

Elvo Calixto Burini Junior	G.P4.29	Emily Kerr	F.P2.57
Elwis Carlos Sartorelli Duarte	M.P6.4	Emily Menegon Gatto	L.P3.56
Emanoele Maria Santos Chiromito	T.P3.15, T.P3.23	Emmanuela Sternberg	E.P3.70, I.P7.3, R.P7.17
Emanoel José Ferreira da Conceição	A.P5.46	Emmanuel Pacheco Rocha Lima	C.P2.37, E.P3.27, P.P1.71
Emanuel Gomes Bertizzolo	E.P3.23	Emmanuel Santos Moraes	F.P2.41
EMANUELLA CARVALHO DOS SANTOS	C.P2.34, C.P2.35	Emnha Helal	U.O3.D1.1
Emanuella Vieira Ribeiro	U.P7.13	Enelise Scapin	D.P4.34
Emanuelly Francescon Belusso	C.P2.45, C.P2.46	Enio Darci Silveira da Rocha Loraci Manke Loraci Manke	G.P2.60
Emanuel Santos Jr.	C.P2.36, C.P6.17, L.P3.41, U.P6.43	Ênio Henrique Pires da Silva	B.P2.17, E.P3.13
Emanuelly José Souza	D.P5.13	Enric Stern-Taulats	K.O1.D3.3
E. Marega Jr.	G.P4.37, G.P4.47	Enzo José Baptista Junior Junior	B.P2.41, B.P2.60
Emerson Augusto Raymundo	Q.P3.31	Enzo Menna	T.O2.D1.1
Emerson Camargo	M.P6.5	Enzo Rozenti Nunes	X.O3.D1.4
Emerson C de Oliveira	V.O3.D3.1	Eralci Moreira Therézio	F.O3.D1.5, F.P2.42, F.P2.43, F.P2.8, G.P2.39
Emerson Cortez Gallego Campos	G.P2.58	Erasmo Cardoso de Faria Morais	R.O3.D3.6
Emerson Henrique de Faria	C.P2.31, D.P4.33	Erenilda Ferreira Macedo	A.P5.28, A.P5.32, U.P7.3
EMERSON Kohlrausch	B.P2.42, G.P2.89, G.P2.90	Erenilton Pereira Silva	H.O3.D1.2, H.P3.9, P.O3.D2.5, P.P1.76, R.O3.D3.7
Emerson Marcelo Giroto	B.P2.62	Erica da Costa Campos	E.P3.28, E.P3.49, E.P3.50, E.P3.59, E.P3.75
Emerson Roberto Santos	G.P4.29	Érica Fernanda Poruczinski	D.P4.35, V.O2.D2.2
Emerson Rodrigo Silva	B.P2.22	Erica Freire Antunes	P.O1.D2.2, P.O2.D3.3, U.P7.2
Emerson Rodrigues dos Prazeres	Q.P3.12	Erica Gervasoni Chaves	L.P3.30, U.P6.44, U.P6.9
Emico Okuno	G.P2.10, G.P6.69	Érica Signori Romagnoli	U.P6.30, U.P6.31
Emiliane Advíncula Malheiros	A.P5.47, Q.P3.62	Eric Cardona Romani	V.O3.D3.1
Emiliane Gerbasi Ricci	D.P4.33	Eric David	U.O3.D1.1
Emiliano Manque BORZONE	H.P3.6	Eric Fujiwara	G.P4.65
Emilia Tejeria	A.O3.D1.7	Eric Hermann	M.P6.29
emilio azevedo	X.P5.16, X.P5.22, X.P5.49, X.P5.8	Erick Cardoso Costa	L.P3.63
Emilio Ramos Cintra	A.O1.D1.1	Erick Gabriel Ribeiro dos Anjos	U.P6.33
Emil J.W. List-Kratochvil	F.O1.D3.3, F.O2.D1.2	Erick Piovesan	C.P2.47, F.P2.16
Emilse Maria Agostini Martini	L.P3.43, N.P5.26	Erick Piovesan	F.P6.1
Emilson Ribeiro Viana Junior	A.O1.D2.4, F.P2.39, G.P2.59, G.P4.53, T.P3.61, U.P7.37, U.P7.59		

Eric Marchezini Mazzer	P.P1.63	Eustáquio De Souza Baêta Júnior	Q.P3.36
Eric Mazzer	P.O3.D2.8		D.P5.51, L.O1.D3.3, P.O1.D2.2, P.O2.D3.3, U.O3.D1.6, U.P6.1, U.P6.37, U.P7.2, U.P7.7
Eric Reyes-Cervantes	C.P2.49	Evaldo José Corat	
Erika Biral Baptistella	H.P3.2, H.P3.4		B.P2.46, F.P2.46, U.P7.9
Érika Bomfim dos Santos	E.P3.48	Evaldo Toniolo Kubaski	G.P2.61, G.P6.45, G.P6.46, G.P6.57
Érika Costa de Alvarenga	C.P2.59	Eva Miriam Buhl	A.O3.D2.2
	L.O2.D3.1, L.O2.D3.4, Q.O3.D3.2	Evandro Guilherme de Souza Zanni	O.O1.D3.8, P.P1.30
Erika Fernanda Prados		Evandro Menassi Siqueira	P.O3.D2.1
Érika Gomes Yamamoto	G.P2.32, U.P7.53	Evandro Porto dos Santos	G.P6.72
Érika Lorena Fonseca Costa de Alvarenga	V.P1.3	Eveline Turatti	C.P6.11
Erika Marques Takase	X.P5.2	Evelyn Alves Nunes Simonetti	U.P6.3
	G.P2.13, S.O3.D1.1, S.P5.19, S.P7.23	Evelyn Christyan da Silva Santos	A.P4.49, U.O1.D3.2
Erika Nascimento Lima			B.O2.D3.3, B.O3.D2.2, C.P2.52, D.P4.36, F.P6.41, I.P7.5, U.P7.58
Erika Peterson Gonçalves	L.P3.24, Q.P3.17	Everaldo Carlos Venancio	
Erika Soares Bronze-Uhle	C.O3.D1.8	EVERTON PINTO	A.P4.1
Erika Toneth Ponce Ayala	G.P4.30	Éverton Tiago dos Santos Torres	G.P2.88
Erik de Souza Lago	L.P3.38	Ezayne Sanaely da Silva Frihani Roni	C.P2.38, L.P3.33, P.P1.37
ERIK Oda USUDA	K.O3.D3.4, K.P7.1, K.P7.10, K.P7.4, K.P7.8, K.P7.9		
ERISLENE SILVA ALMEIDA	D.P4.38		
Eriton Rodrigo Botero	G.P4.7		
Erlanny Sousa Araújo	B.P2.58		
Ernani Dias da Silva Filho	C.P6.24		
Ernesto Chaves Pereira	D.O2.D1.3, G.O2.D2.1		
Ernesto David Gonzalez	C.O3.D2.6, C.P2.10		
Ernesto Osvaldo Wrasse	F.P2.38		
Eronildo Alves Pinto Junior	X.O2.D1.2, X.P5.19		
Estefânia Mara do Nascimento Martins	C.O2.D1.4		
Estefania Vangelie Ramos Campos	A.P4.12, A.P4.13, A.P5.36		
Ester Schmidt Rieder	G.P6.26		
Estreir Vázquez	V.O2.D2.1		
E. Thizay Magnavita	S.P5.27		
Eudes Eterno Fileti	U.P6.32		
Eudes Souza	U.P7.55		
Eurico Felix Pieretti	L.P3.25, O.P7.5		
Euripedes Silva Junior	G.O3.D2.8		

## F

Fabia Cassanjes	J.P5.17, J.P5.18
Fábia Karine Andrade	B.O3.D3.5, C.O1.D2.3
Fabiana Andresa da Silva	E.O2.D3.3
FABIANA CASARIN	D.P4.20, D.P4.37, D.P4.38, S.P5.11
FABIANA COSTA MUNHOZ FERRAZ	D.P4.9, D.P5.49
Fabiana de Brito	L.P3.3
Fabiana Grasielle Penido Andrade Silva	D.P4.49

Fabiana Navas Reis	A.P5.17		
Fabiana Perrechil Bonsanto	B.O2.D2.2	Fabio Furlan Ferreira	B.O1.D4.2, G.O1.D4.2, G.P2.31, N.O1.D1.3
Fabiana Silva Lima	T.P3.24, T.P3.5	Fabio Godoy	EXP.3.D2.2
FABIANA THAYSE DOS SANTOS SILVA	L.P3.55	Fabio Herbst Florenzano	A.P5.58
Fabiana Vieira Silva	G.P4.31	Fábio Herbst Florenzano	A.P5.24
Fabiana Villela Motta	G.P2.11, G.P4.82, G.P6.10	Fábio Jesus Moreira de Almeida	V.O3.D2.3b
Fabiane Caxico de Abreu Galdino	A.P5.45	Fabio Kurt Schneider	F.P2.11, U.P6.35
Fabiane dos Santos Carlos	G.P6.47, G.P6.48	FABÍOLA DA SILVEIRA MARANHÃO	D.P4.40, D.P4.41
Fabiane Hiratsuka Veiga de Souza	G.O1.D4.5, U.O2.D3.2	Fabiola Pineda	R.O3.D3.7
Fabiano Bisinella Scheufele	E.O1.D3.1	Fabio Luis de Oliveira Paula	U.O3.D2.6
Fabiano Colauto	M.O3.D1.1, M.O3.D2.1	Fabio Luis Zabotto	M.P6.30, M.P7.20, M.P7.41
Fabiano Mesquita Rosa	F.P2.40	Fábio Martins Cardoso	Q.P3.19
Fabiano Moreno Peres	B.P2.81	Fabio Muchenski	E.P3.29
Fabiano Rafael Praxedes	G.P4.3, N.O3.D1.8	Fábio Ofredi Maia	V.P1.15
Fabiele Collovini Tavares	B.O3.D1.3, B.P2.42	Fabio Roberto Passador	E.P3.48, U.P6.33, U.P6.34
Fabien Durola	F.O3.D1.1	Fábio Ruiz Simões	C.P2.25, F.O1.D4.3
fabio antonio scholl	F.P2.44	Fabio Santos da Silva	P.O1.D2.1
Fabio Antonio Xavier	L.P3.63	Fabio Seiti Hadano	F.P2.11, F.P2.39, U.P6.35, U.P6.36
Fabio Augusto Pires	G.P2.62	Fabio Simões de Vicente	G.P4.11, G.P6.53, J.P5.4
Fábio Baum	E.P3.73, G.O3.D3.7, G.P2.63, G.P6.25, G.P6.26, G.P6.5, G.P6.80	Fábio Souza Nunes	G.P6.47, G.P6.48
Fábio Bossoi Vicente	C.P2.39	Fabília Castro Silva	C.P2.29
Fabio Calcagno Riemke	D.P5.56, G.O2.D2.3, G.O3.D2.1, G.P2.41, G.P2.42, G.P2.78, G.P2.81, G.P2.82, G.P6.60, G.P6.88	Fabília Emanuelli Moreira Dias	G.P2.64, G.P4.66, G.P4.79, G.P6.22, G.P6.23, G.P6.81
Fabio Cavalcante	EXP.1.D2.2	Fabília Sousa Gonzaga	P.P1.13, P.P1.14
Fabio Conte Correia	Q.P3.14, Q.P3.18, Q.P3.57	Fabício A. dos Santos	A.O2.D1.1, A.P4.47, U.P7.41
Fábio Da Silva Lisboa	E.P3.15	Fabício Benedito Destro	S.P5.15
Fabio David Alves Aarão Reis	F.O3.D1.7	Fabício Cerizza Tanaka	B.P2.43
Fabio Edson Mariani	Q.P3.24, Q.P3.25	Fabício César Lobato de Almeida	R.P7.18, R.P7.34
Fabio Elias Jorge	U.P6.44	Fabício de Souza Delite	A.P5.40
Fábio Friol Paiva	D.P4.2, D.P4.39, D.P5.14	Fabício Fasolo	E.P3.24
		Fabício Fernandes Carvalho	L.P3.48, P.P1.79
		Fabício Gava Menezes	A.P5.48, F.P2.45
		Fabricio Hansel	D.P5.32
		Fabricio Iusuti Medeiros	R.P7.10, R.P7.19, R.P7.35

Fabrcio Luiz Faita	G.P6.41, M.P6.11, S.P7.11	Felipe Leonardo de Carvalho Pereira	J.O3.D2.4
Fabricio Vinicius Andrade de Souza	P.P1.74	Felipe Leon Nascimento de Sousa	G.P4.23
Fabrizio Giorgis	U.P6.42	Felipe Lipsky Gonzalez	S.P5.17
Fabrizio Messina	U.O3.D2.6	Felipe Lopes Damasceno	D.P4.5
Fábulo Ribeiro Monteiro	C.P6.50	Felipe Manrique Canisares	G.P4.6
Fallconny Rodrigues Sensato de Oliveira	L.P3.60	Felipe Marques	H.P3.5, H.P3.7, P.O3.D2.5, P.P1.76
Fanny Béron	K.P7.17, M.O2.D3.1, M.O3.D1.6, M.O3.D2.5, M.P6.20, T.P3.48	Felipe Messias Priotto	U.P6.36
Fatih Toptan	C.P2.16	Felipe Michels	M.P6.31
Fátima Nogueira Frota	N.P5.23	Felipe Moessa Bezerra	G.P2.64
Fausthon Fred da Silva	G.P6.52	Felipe Nascimento Araújo da Silva	U.P7.46
Faustino Aqui Romero	G.P4.32	Felipe Nogueira Ambrosio	B.O2.D3.3, C.O3.D1.3, C.P2.52
Fauze Ahmad Aouada	B.P2.24, B.P2.43, B.P2.44, B.P2.55, B.P4.13, B.P4.14, B.P4.54, S.P7.27	Felipe O. Fernandes	R.P7.6
Felipe Azevedo de Carvalho	Q.P3.26	Felipe Oliveira Machado	G.P4.14
Felipe Barbosa Soares	G.P2.32	Felipe Quatroni	A.P5.61
Felipe Bohn	C.P6.24, M.O1.D2.2, M.O2.D1.2, M.P6.13, M.P6.27, M.P7.3, M.P7.37, M.P7.49, M.P7.6, M.P7.7, M.P7.8, Q.P3.22	Felipe Raphael Salgado	L.P3.49
Felipe Da Silva Medeiros	V.O1.D4.2	Felipe Ribeiro Toloczko	Q.P3.65
Felipe da Silva Siqueira	Q.P3.54	Felipe Rocha Silvestre	D.P4.28
Felipe de Almeida La Porta	M.P6.36, M.P6.37, S.P7.12, S.P7.19, S.P7.41, S.P7.42	Felipe Silva dos Santos	L.P3.8
Felipe de Andrade Silva Silva	U.O3.D1.3	Felipe Souza Miranda	G.P2.23
FELIPE Delapria Dos Santos	D.P4.42, E.P3.38	Felix Fachineto Beck	C.P6.16
Felipe dos Santos Vieira	S.P5.2	Felix G. Requejo	J.P5.1
Felipe Eduardo Bueno Silva	B.P4.15	Felix Hermerschmidt	F.O2.D1.2
Felipe Eduardo Manoel	R.P7.41	Fellipe Almeida Alves	A.P5.35
Felipe Fernandes Barbosa	B.P4.51, N.P5.38	Fenelon Martinho Pontes	D.P5.2, D.P5.44, D.P5.47, R.P7.31
Felipe Ferreira de Carvalho	D.P4.41	Fengling Zhang	E.O1.D4.4
Felipe Girondi Denardin	S.P5.16	Fernanda Andrade Tigre da Costa	L.P3.47
Felipe Hermenegildo de Souza	L.P3.27	Fernanda Costa Romeiro	E.P3.30
		Fernanda de Freitas Quadros	C.P2.40, C.P2.41
		Fernanda de Paula Oliveira	C.P2.11, C.P2.42
		Fernanda Dias da Silva	C.P2.52
		Fernanda Fabbri Gondim	U.O2.D2.2, U.P6.44
			A.P4.40, B.O1.D4.3, B.P2.29, G.P2.43
		Fernanda Fogagnoli Simas Tosin	B.O1.D3.2
		Fernanda G L Medeiros Borsagli	B.O1.D1.2, B.P2.45

Fernanda Haverroth Schünemann 14255	C.P2.43	Fernando Josepatti Fonseca	T.P3.25
Fernanda Hellen de Souza Santos	D.P5.39	Fernando Lázaro Freire Jr.	U.P6.39
Fernanda Machado Crespo	L.P3.12	Fernando Lázaro Freire Júnior	U.P7.54
Fernanda Martinato	C.P6.56	Fernando Lucas Primo	A.P5.49, A.P5.50
Fernanda Martins Queiroz	P.P1.66	Fernando Machado	D.P5.56, G.O3.D2.1, G.P4.81, G.P6.60, U.P6.19, U.P7.51
Fernanda Migliorini Migliorini	T.P3.25	Fernando Marques Carvalho	G.O1.D4.3
Fernanda Morrone	A.P5.35	Fernando Mendes	B.P4.39, F.P4.40, G.P2.46, G.P2.55, M.P6.6, P.P1.35, P.P1.50, P.P1.59
Fernanda Nascimento Moreira	Q.O1.D3.3, S.P5.18	Fernando Mendonça Vieira	P.P1.31
Fernanda Regina Francisco	J.P5.27, R.P7.41	Fernando Molin	F.O3.D2.3
Fernanda Resende Locatelli	C.O3.D1.4	Fernando Pelegrini	M.P7.16, M.P7.5
Fernanda Roberta Marciano	A.P4.7, A.P5.31, B.O3.D3.3, B.P2.35, B.P2.58, B.P2.59, C.O1.D1.2, C.P2.19	Fernando Rey	N.O2.D1.1, N.P5.26
Fernanda Steffens	T.P3.16	Fernando Ribeiro Oliveira	T.P3.16
Fernando Alexandre Fucci	J.P5.14	Fernando Rodrigo Moro	K.P7.7
Fernando Alvarez	F.O3.D2.8	Fernando Rogério de Paula	D.P5.5, G.P2.98, G.P4.43, T.P3.53
Fernando Andrés Londoño Badillo	G.P4.7	fernando sabino fonteque ribeiro	P.P1.32
Fernando Aparecido Dias Radomski	B.P2.46, F.P2.46	Fernando Santos da Silva	C.P2.44
Fernando Carlos Messias Freire	F.P2.7	Fernando Sato	F.P6.15
Fernando Carvalho Silva	A.P4.37, M.P7.4, M.P7.40	Fernando Sergio Okimoto	D.P5.14, E.P3.32, E.P3.33, E.P3.34
Fernando C. Giacomelli	A.P4.27	Fernando Soares Lameiras	D.O2.D2.1, D.P4.49, D.P5.62
Fernando Ely	F.P6.48, I.O1.D3.6	Fernando Sousa da Rocha	P.P1.33
Fernando Ferreira Fernandez	P.P1.43	Fernando Teixeira Bueno	F.O3.D3.5, F.P4.12, G.O1.D4.3, G.P6.42
Fernando Galembeck	U.P6.2	Fernando Vernilli Júnior	X.O1.D1.3
Fernando Gasi	R.P7.29	Fernando Wypych	D.P4.43, L.P3.20, T.P3.39
Fernando Gomes de Sousa Jr	D.P4.40	Fiammetta Nigro	A.P5.51
Fernando Gomes de Souza Junior	D.P4.41, M.P7.50	Fidel Guerrero Zayas	T.P3.12
Fernando Henrique Cristovan	C.P2.47, C.P6.9, F.P2.16, F.P6.1, F.P6.27, T.P3.11	Filiberto Gonzalez García	A.P5.21
Fernando Henrique Oliveira Maia	E.P3.31	Filipe Amaral	P.P1.35
Fernando Iikawa	G.O3.D3.4	Filipe Barra de Almeida	M.P6.23
Fernando José Gomes Landgraf	M.O2.D1.3, X.O3.D1.4	Filipe Caldatto Dalan	P.P1.1, P.P1.34
Fernando Josepatti Fonseca	F.P4.24, U.P7.55	Filipe Dione Souza Gorza	T.P3.28, T.P3.29
		Filipe Ferrari Galan Déo	H.P3.3

Filipe Gabriel Martinez Maurício	G.O1.D4.5	Flavio C Vicentin	V.O3.D3.1
Filipe Leoncio Braga	E.P3.70, I.P7.3, R.P7.17	Flavio Franchello	G.P2.53
Filipe Menezes Rosa	D.P5.51, U.P6.37, U.P7.46	Flávio Garcia	A.P4.49, M.P6.23
Filipe Samuel Silva	C.O2.D1.2, C.P2.15, C.P2.43	Flavio Henrique Almeida de Meira	B.P2.67
Filipe Vargas Ferreira	T.P3.2	Flavio Jose Antikeira	H.O3.D1.6
Filipe Viana Ferreira	R.P7.2	Flavio Leandro Souza	G.O3.D2.5
Filippe de Bernardino Bernardino	G.P4.33	Flávio Makoto Shimizu	F.P2.30, F.P2.33, F.P2.5, F.P6.18
Filippe de Carvalho Bernardino	L.P3.48	Flavio Moura e Silva Junior	M.P6.12, M.P6.3
Filipy Gobbo Maranhã	U.O3.D2.2	Flávio Paulo Milton	G.P4.7
Flaminio Cesar Pereira Sales	A.P5.8, B.P2.12, B.P2.17	Flávio Sampaio de Campos Rodrigues	L.O3.D3.7
Flávia Aparecida Resende	B.P4.33	Flávio Soares Silva	E.P3.35, I.O1.D3.5, I.P7.10, J.P5.16
Flávia Assumpção Heine	N.O3.D1.5	Flavio Soldera	P.O3.D2.5
Flávia Cristina Camilo Moura	G.P4.49	Flavio Souza da Silva	M.P6.9
Flávia de Medeiros Aquino	D.P4.53	Florian Meneau	C.P6.41, N.O2.D1.3
Flávia Elisa Galdino	A.O1.D1.3, A.O3.D1.2	Florian Steffen Günther	F.P2.47
Flávia Estrada	M.P7.18	Florival Rodrigues Carvalho	G.P4.27
Flavia Lega Braghiroli	P.P1.7	Francesca Arcudi	G.P4.65
Flaviane Teixeira Silva	U.P6.38	Francesca Baletto	S.O3.D2.1
Flavia Paulino de Souza Santos	J.O3.D2.3	Francesco Amato	G.P4.65
Flávia Rafaella Xavier Silva	F.P6.29	Franchescoli D Velazquez-Herrera	C.P2.49
Flavia Rocha Drummond	C.P6.57	Franciana Pedrochi	B.P4.4, C.P2.34, J.P5.19
Flávio Anutnes Ferreira	C.P2.30	Franciani Sentanin	B.P4.56
Flavio Augusto Cavadas Andrade	B.P4.37	Franciele Carlesso	P.O2.D3.3
Flávio Augusto de Freitas	E.P3.69	Franciele de Matos Morawski	B.P2.66, D.P5.28, U.P7.33
Flávio Augusto de Melo Marques	E.P3.43	Franciele Flores Vit	A.P4.2
Flávio Bento de Oliveira	S.O3.D1.1, S.P5.19, S.P7.23, V.P1.33	Francielen Paola Sá	B.P4.22
Flavio Camargo Cabrera	D.P4.1, D.P4.2, D.P4.44, D.P4.46, D.P5.14, T.O3.D1.3	Francielen San Martins Rodrigues	G.P2.17, G.P2.65, G.P6.60, L.P3.34
Flávio Camargo Cabrera	D.P4.39, D.P5.34	franciele silva maciel	L.P3.28, L.P3.59
Flavio C Colman	E.O1.D3.2, K.O3.D3.5, K.P7.8	Francielle Girardi-Alves	B.P4.7
Flavio Colmati	D.P4.51, G.O3.D2.8	Francielle Schmitz	L.P3.44
		Francielli Sousa Santana	A.P5.52
		FRANCILIO OLIVEIRA	C.P6.12
		Francine Bettio Costa	G.P4.34
		Francine Ceccon Claro	B.P2.47
		francine coa	A.P5.40

Francineide Lopes de Araújo	F.O1.D2.2, F.P6.2, G.P2.66	Francisco José Breda	X.P5.11, X.P5.41
Francine Machado Nunes	D.P5.56, G.O2.D2.3, G.O3.D2.1	Francisco José da Cruz Neto	P.P1.17
Francine Perri Venturini	A.P5.4, A.P5.5	Francisco José dos Santos Oliveira	M.P6.32
Francini Aline Belz Hesse	G.O3.D2.7, G.P2.84	Francisco José Moura	C.P6.40
Francisca Marin	L.P3.65, V.P1.16	Francisco José Peña Recabarren	K.O3.D3.6, K.O3.D3.7, K.P7.15
Francisca Pereira de Araújo	C.P6.12	Francisco Klebson Gomes Santos	B.P2.39, B.P2.49
Franciscarlos Gomes da Silva	M.O1.D3.1	Francisco Leonardo Gomes de Menezes	B.P2.39, B.P2.49
Francisca Rodrigues	B.P2.76	Francisco Mateus Cirilo da Silva	G.O3.D3.5, G.P4.36
Francisco Alberto Alberto Alencar Miranda	B.P2.48	Francisco Murilo Tavares de Luna	T.P3.18
Francisco Alves Vicente	L.O3.D3.3	Francisco Odolberto de Araújo	R.P7.27
Francisco Anderson de Sousa Lima	G.P2.96, G.P6.32	Francisco Ratusznei Ratusznei	X.P5.20
Francisco Antônio Rocco Lahr	D.P4.22	Francisco Sávio do Livramento Vale	X.P5.21
Francisco Carlos Lavarda	F.P2.17	Francisco Trivinho Strixino	C.O1.D3.2, C.P2.45, C.P2.46, C.P6.25, C.P6.37, C.P6.47, R.O3.D3.4, R.P7.49, R.P7.5
Francisco Carlos Serbena	R.P7.20, R.P7.8	Francisco van Riel Neto	C.P2.47, T.O3.D1.2
Francisco Chagas Marques	G.O1.D3.1	Francisco Vieira dos Santos	C.P6.58
Francisco das Chagas de Melo Brito	E.P3.65	Francisco Xavier Nobre	G.P4.28, G.P6.67, J.O1.D4.3, J.P5.24, T.P3.34
Francisco das Chagas Pereira Júnior	X.P5.21	Francis Faria Goulart	C.P2.48, T.P3.26
Francisco Edmilson Rodrigues-Junior	R.O2.D3.3	Francis Ndi	V.O1.D4.4
Francisco Edson Nogueira Fraga	Q.P3.39	Franckson Jhonne Torres	X.O2.D1.2
Francisco E.G. Guimaraes	A.P4.6	Franco Dani Rico Amado	D.P4.15, D.P4.45, D.P5.4
Francisco Emanuel Da Silva	N.P5.17	François Brisset	P.O3.D2.1
Francisco Eroni Paz dos Santos	M.P7.25, M.P7.48	François Chevire	D.P4.16
Francisco Evaristo Uchoa Reis	P.P1.24	François Cheviré	D.P5.45
Francisco Ferreira Barbosa Junior	Q.P3.12	Françoise Toledo Reis	F.P2.23, F.P2.24
Francisco Ferreira Sousa	A.P5.67, T.P3.18, T.P3.32, T.P3.33	François Gervais	S.O2.D2.2, S.O2.D2.4
Francisco García-Salinas	F.P2.48	François Pacreau	S.O2.D2.4
Francisco Gilvane Sampaio de Oliveira	G.P2.96, G.P6.32	Franklin Massami Matinaga	M.O2.D2.3
Francisco Gustavo Hayala Silveira Pinto	N.P5.40	Frank Nelson Crespilho	F.P2.57
Francisco Javier Willars Rodriguez	G.P4.32, G.P4.35		



Francisco Ferreira de Sousa	F.P4.44, F.P4.45	Gabriela Martins de Araújo	F.O1.D4.3
Francisco S. M. Sinfrônio	A.P4.37, M.P7.4, M.P7.40, S.P5.28	Gabriela Martins Silva	G.P4.25
Franz Acker Lobianco	C.O3.D1.4	Gabriela Medeiros Marcellino	U.P7.28, U.P7.41
Franz Miller Branco Ferraz	C.P6.70	Gabriela Mendoza	EXP.3.D2.5
Freddy A Grijalba	Q.P3.15	Gabriela Mezetti Vieira	F.P4.33
Frédéric Nallet	S.P7.28	Gabriel Antônio Cunha dos Santos	U.O3.D1.7
Frederico Augusto Pires Fernandes	L.P3.5	Gabriela Pereira Maciel	D.P4.34
Frederico Barros de Sousa	V.O1.D2.2	Gabriela Plautz Ratkovski	T.P3.28, T.P3.29
Frederico José Kolisnek	D.O3.D2.2	Gabriela Ramos Hurtado	A.P5.28, U.P7.3
Frederico Neme Ribeiro	E.P3.12	Gabriel Araujo de Lima	L.O3.D3.3
Frederico Ribeiro Gonçalves Vasconcelos Rosendo	E.P3.5	Gabriela Rosa	B.P2.80
Frederico Vieira Gutierrez	M.P6.2	Gabriela Santos Nascimento	L.P3.50, P.P1.42, R.P7.19
Fred J. Litterst	M.P6.7	Gabriela Silva Goulart	A.P5.2
Fulvia Soares	B.P4.44	Gabriela Souza	S.P7.12
<b>G</b>		Gabriela Taiane Moraes Silva	P.P1.51
Gabriela Albara Lando	F.P2.34	Gabriel Augusto Alemão Monteiro	A.O3.D1.3
Gabriela Alvarenga	F.P4.11	Gabriel Augusto Teixeira da Silveira	B.P2.51
Gabriela Amorim Soares	F.O3.D2.6, G.P2.68	Gabriela Volpini Soffiati	S.P5.21
Gabriela Aparecida Galves Freitas	A.P5.49	Gabriel Barbosa Brasileiro	G.P6.2
Gabriela Bosco Minervino	G.O2.D2.1	Gabriel Barros Baptistella	A.P5.52
Gabriela Byzynski Soares	F.P4.20	Gabriel Batista César	T.O2.D1.3
Gabriela de Moraes Gouvêa Lima Lima	D.P4.24	Gabriel Cabrera Pasca	G.P4.25, M.P6.17
Gabriela Dias da Silva	S.P5.20	Gabriel Cirqueira dos Santos	C.P6.38, C.P6.7
Gabriel Adolfo Pasca	M.P7.55	Gabriel Cirqueira Santos	A.P5.65
Gabriela Escobar Hochmuller da Silva	T.P3.52	Gabriel Costa	C.P6.23
Gabriela Fiori Silva	B.P2.73	Gabriel da Rosa Tasior	R.P7.13
Gabriela Guida	G.O1.D3.2, G.P4.40, G.P4.44, G.P4.74	Gabriel de Souza Veras Fontinele	Q.P3.71
Gabriela Lauer Breitenbach	T.P3.27	Gabriel Dornela Alves da Rocha	M.P6.33, S.P7.14
Gabriela Leila Berto	B.P2.50	Gabriele Ribeiro Gomes	Q.P3.20
Gabriela Maestri	T.O3.D1.1	Gabriel Facheti	E.P3.30
Gabriela Malaspina	C.O2.D2.2	Gabriel Figueredo de Souza	D.P4.45
Gabriel Amaral Crispim Oliveira	G.P4.67	Gabriel F. O. Nascimento	U.O2.D1.4
Gabriela Marques de Albuquerque	A.O3.D1.4	Gabriel Fornazaro	E.P3.36, E.P3.38
		Gabriel Fracalossi Feijó	P.P1.61
		Gabriel Gaál	F.O3.D2.8
		Gabriel Goetten de Lima	B.P4.11, B.P4.12, B.P4.8, B.P4.9
		Gabriel Gomes Baltazar Alves	F.P2.49, F.P2.50

Gabriel Gonem de Lima	U.P7.38	GELMIRES DE ARAÚJO NEVES	D.P4.48, D.P5.37, D.P5.38
Gabriel Gonzaga dos Santos	L.P3.45		G.P6.57, L.P3.42, R.P7.1, R.P7.20, R.P7.8
Gabriel Gray	L.P3.65, V.P1.16	Gelson Biscaia de Souza	
Gabriel Henrique Perez	Q.P3.21	Gelson Tiago dos Santos Tavares Silva	G.P6.6
Gabriel Henrique Perin	V.P1.17, V.P1.35	Gelton G F Guimarães	B.P4.38, B.P4.55
Gabrieli Roefero Tolosa	D.P4.44, D.P4.46	Geneviève Kreibich Pinheiro	E.P3.22, F.P2.51, G.P2.47, G.P4.58
Gabriella Fibbi	C.O2.D3.1	Genivaldo Júlio Perpétuo	F.P6.37
Gabriella Melo Viana Dias	E.P3.37	Geolar Fetter	C.P2.49
	F.O1.D4.1, F.O1.D4.2, F.P4.34, F.P4.39, F.P6.11, F.P6.16, V.O1.D4.3	Geomar Feitosa da Cruz	B.P2.52
Gabriel Leonardo Nogueira		George André Jacob Nogueira	P.P1.36
Gabrielle Weber	S.O1.D1.2, S.O3.D1.3	George Nascimento Almeida	G.P2.3
Gabriel Lima Barros Araujo	B.O1.D4.2	George Silva de Oliveira	P.P1.37
Gabriel MEYER	H.O2.D1.2, H.O3.D1.1, H.P3.6	Geovana Lira Santana	C.P2.50
Gabriel Oscar Cremona Parma	L.P3.29, X.P5.18	Geovana Souza Ferreira Nogueira	A.P4.45
Gabriel Ravanhani Schleder	G.P4.54	Geovane Alves Mendonça	P.P1.39
Gabriel R. B. Costa	U.O2.D1.4	Geovânia Cordeiro de Assis	G.P2.67
Gabriel Roberto Campesan	L.P3.2	Geovanny Broetto Besinella	E.O1.D3.1, N.P5.29
Gabriel Rodrigues Almeida Neto	H.O3.D1.1	Geraldo de Andrade Pacheco Filho	M.P6.28
Gabriel Rodrigues Alvarenga	E.P3.55	Geraldo Eduardo Luz Junior	S.P7.7
Gabriel Sá de Sena	B.P4.39, P.P1.35	Geraldo José da Silva	D.O2.D2.3
Gabriel Salomao Ferreira	G.O1.D4.1	Geraldo Mathias Ribeiro	G.P2.59
Gabriel Schleder	V.O1.D3.3	Gerardo A. Idrobo Pizo	D.P4.55
Gabriel Torres Andreassa	T.P3.40	Gerardo Torres Delgado	G.P2.51
Gabriel Vinicius Alves Silva	E.P3.36, E.P3.38	GERBESON CARLOS BATISTA DANTAS	D.P4.47, D.P4.48, D.P5.37, D.P5.38, N.P5.10
Gabriel Yuji Hata	G.O2.D2.1	GERMANA M M SILVA	G.O2.D2.2
Gabriel Zeplin	F.P2.55, I.P7.1, I.P7.2	Germán Salazar-Alvarez	B.O1.D2.1
Gael Yves Poirier	J.P5.17, J.P5.18, J.P5.26, J.P5.30	Gerónimo Arámbula-Villa	A.P5.10
Gary Critchlow	Q.P3.63	Geronimo Perez	M.P6.34
Gaston Lozano Calderón	G.P4.37	Gerson Nakazato	A.O1.D1.4, A.P4.3
Geanne Alexandra Alves Conserva	A.P4.24	Gerson Pereira de Castro Júnior	G.O3.D3.8
Gean Vitor Salmoria	C.P2.55	Gerson Santos	G.P2.68
Geilza Alves Porto	L.P3.30	Gesivaldo Jesus Alves de Figueiredo	D.P4.14
Geisiane Rosa da Silva	A.P5.53	Géssica de Oliveira Santiago Santos	O.P7.7
Geisiany Maria Queiroz-Fernandes	D.P4.12	Getúlio De Vasconcelos	O.P7.3

Getúlio Vasconcelos	A.P5.32, O.P7.16, P.P1.12, U.O3.D1.6	Giovani Cunha	L.P3.14
Giancarlo Richard Salazar Banda	O.P7.7	Giovani Gozzi	F.O2.D1.1, F.P2.29, F.P2.35, F.P2.54, F.P2.58, F.P4.20, F.P4.22, F.P4.35
Gilbert Banach	D.P4.57	Giovani Teixeira de Carvalho	C.P6.43
Gilberto Alexandre Castello Branco	Q.P3.26	Giovanna de Lima Oliveira	B.P2.55
Gilberto B. A. Filho	S.P5.28	Giovanna Ferreira Bigotto Gonçalves	G.P4.38
Gilberto Campos Fuzari Junior	E.P3.78	Giovanna Machado	C.P2.59, D.P5.13, G.O1.D1.2, G.O2.D2.2, G.P2.69, G.P4.23, G.P4.39, G.P6.61, G.P6.83
Gilberto Carvalho Coelho	P.P1.26, P.P1.55, P.P1.57	Giovanna Picoli Libel	T.O2.D1.3
Gilberto Falk	G.P4.12	Giovanna Tramontin Carneiro	F.P2.55
Gilberto Medeiros Ribeiro	R.P7.25	Giovanna Zuzarte	A.O1.D2.2
Gilberto Petraconi Filho	C.P2.5, G.P2.23, R.P7.29	Giovanne Bruno Mantovani Pinhal	S.P5.22
Gilberto Siqueira	B.O3.D1.1, B.O3.D2.7, T.O1.D1.1	Giovannia A L Pereira	M.O2.D3.3
Gilbert Silva	C.P6.27, P.P1.6	Giovannia Araújo Pereira	A.O3.D1.4, G.P2.74, G.P4.52
Gil Capote	R.P7.21, R.P7.36	Giovanni Alexsander Lima	G.P2.52
Gil Capote Mastrapa	U.P6.39	Giovanni Bonatti Bevilaqua	M.P6.35
Gildiberto Mendonça de Oliveira	A.P4.18	Giovanni Fiori Tini	M.P6.36, M.P6.37, S.P7.19, S.P7.41, S.P7.42
Gilia Cristine Marques Ruiz	B.P2.53	Giovanni Ligorio	F.O1.D3.3
Giliandro Farias	F.O3.D1.1, F.P2.31, F.P2.52	Giovanni Romeu Carvalho	F.O3.D3.2, F.P2.56, F.P6.15
Gilmara Gonzaga Pedrosa	F.P6.29	Girley Ferreira Rodrigues	P.P1.39
Gilmar Patrocínio Thim	C.P2.5, D.P5.11	Gisane Gasparotto	G.P2.70, G.P4.68, G.P4.69, J.O1.D2.1, J.P5.15
Gilvan Moreira Paz	B.P2.64	Giscard Eanes Dias Viana	Q.P3.71
Giorgio Francisco	A.O3.D1.5	Gisele Aparecida Amaral-Labat	A.P4.38, P.P1.7, U.P6.18, U.P6.40, V.P1.12
GIORGIO MARQUES MILANI	B.O3.D2.2	Gisele Elias Nunes	F.O2.D3.2, F.P6.19
Giovana Bette Franscisco	C.P2.9	Gisele Ferreira de Lima	H.P3.13
Giovana Collombaro Cardoso	C.P2.51, C.P6.36	Gisele Ferreira Lima	H.O1.D1.3, H.P3.2, H.P3.4, P.P1.1, P.P1.34, Q.P3.5
Giovana Conod	F.P2.53	Gisele Hammes	Q.O3.D3.3, Q.P3.38, Q.P3.47
Giovana C Zambuzi	B.P2.54	Gisele Simone Lopes	U.O1.D1.3
Giovana da Silva Padilha	C.P6.6, L.P3.31, P.P1.18, P.P1.27, P.P1.28, P.P1.36, P.P1.38		
Giovana Gioppo Nunes	A.P5.52		
Giovana Rosso Caganani	V.P1.18		
Giovani Boaventura Bacarin	D.P4.1, D.P4.2, D.P4.39, D.P4.44, D.P4.46, D.P5.14		

Giselly Bandeira Gomes	L.P3.32	Grace Kelly Quarteiro	G.P2.71
Gislene Valdete Martins	L.P3.69, R.P7.4	Ganharul	
Giulia Alves dos Santos	J.P5.12	Graciano Bay de Souza	B.P2.31
Giulia Danielle Giovanni D'Avila	E.O3.D3.8, M.O2.D3.4, M.P6.38, M.P7.54	Graciela da Costa Pedro	T.P3.28, T.P3.29
Giulia Elisa Guimarães Gonçalves	A.P5.54	Graciela Ines Bolzon Muñiz	A.O1.D2.2, R.O3.D3.8
Giulia Maria Rodrigues Alvares	C.P2.52	Gracielle Andrade Ferreira	A.P4.34
Giuliana Valentini	M.P6.39	Graziela C. Sedenho	F.P2.57
Giulia Rinaldi	G.P4.40		L.P3.50, P.O2.D3.1, P.O2.D3.3, P.P1.42, R.P7.10, R.P7.19, R.P7.22
Giulia Sayuri Fukase dos Santos	M.P6.40, M.P6.41	Graziela da Silva Savonov	
Gizilene Maria Carvalho	D.P5.27	Graziela Pereira Esteves	E.P3.16
Gladys Mínguez-Vega	O.P7.15, S.P7.24	Graziele Daiana Sena de Sousa	D.P4.50
Glageane da Silva Souza	E.P3.40	Gregorio Couto Faria	F.O1.D3.2, F.P4.7, F.P6.25
Glaucia Cristina Müller	I.P7.4	Gregory M. Glenn	T.O3.D1.5
Glaucia Marcossi Cardoso Duarte	D.P4.49, D.P5.62	Greice K. B. Costa	A.P5.55
Gláucio Braga Ferreira	M.P6.23	Greici Gubert	M.O1.D3.2
Glaucio Régis Nagurniak	U.O3.D2.4	Griselda Barrera Galland	U.O3.D1.2
Glauco Soares Braga	M.P7.47	Gualter Silva Pereira	P.P1.43, Q.P3.32
Glaura Goulart Silva	V.O1.D4.2	GUDSON NICOLAU DE MELO	Q.P3.22
Glaura G. Silva	U.O3.D2.1, U.P6.41	Gueber Santos Júnior	P.P1.13, P.P1.14
Gleice Conceição Mendonça Germano	A.P5.55	Guilherme Agreli	B.O2.D3.2, B.P2.23
Gleice Ellen Almeida Verginio	U.P6.34	Guilherme Arthur Longhitano	C.O3.D2.2, C.P2.54
	C.P2.38, C.P2.53, L.P3.33, P.P1.40, P.P1.41	Guilherme Berseli	A.P4.20
Gleudson Silva Figueiredo		Guilherme Boenny Strapasson	G.P4.41
Gleison Lopes da Silva	J.P5.19	Guilherme Calligaris de Andrade	G.O3.D3.5, G.P4.36, G.P6.63
	G.P6.55, G.P6.82, X.P5.16, X.P5.22, X.P5.49, X.P5.8	Guilherme da Silva Lopes Fabris	S.P5.23, S.P5.33, S.P5.35
Gleison Neres Marques		Guilherme da Silva Macena	J.P5.6
Glenda Biasotto	U.P6.42	Guilherme de Paula Guarnieri	E.O1.D4.5
Glenda Gisela Ibañez Redin	F.P2.20, F.P4.5	Guilherme Dognani	T.O3.D1.3
Glória Maria Vinhas	L.P3.36, L.P3.37	Guilherme do Nascimento Schiavi	Q.P3.18
Goki Eda	V.O3.D3.1	Guilherme Donizeti Silva	D.P4.12
Gonçalo Nuno Pinho Oliveira	M.O3.D2.6, M.P7.36	Guilherme Eugênio Brustolin	P.P1.77
Gonzalo Marmol	B.P2.3	Guilherme Fadel Picheth	C.P6.41
Goreti Pereira	A.O3.D1.4, G.P2.74, G.P4.52	Guilherme Fernandes de Souza Miguel	G.P6.87

Guilherme Ferreira de Melo Morgado	U.P6.33	Guilherme Sombrio	G.O1.D4.2, G.P2.31, G.P2.71
Guilherme Ferreira Ferbonink	G.P4.42	Guilherme Yuuki Koga	H.P3.1, Q.P3.61
Guilherme Frederico Bernardo Lenz e Silva	A.P4.38, A.P5.19, P.P1.11, P.P1.64, P.P1.7, U.P6.18, U.P6.40, V.P1.12	Guilherme Zepon	H.O1.D1.1, H.O3.D1.6, H.O3.D1.8, H.P3.1, H.P3.16, H.P3.5, H.P3.7, Q.P3.16, Q.P3.6, Q.P3.61
<b>GUILHERME GASTARDELI GASTARDELI</b>	Q.P3.69	Guilhermina Ferreira Teixeira	D.P4.51, G.O3.D2.8
Guilherme Henrique Ament Barbirato	E.P3.79	Guilhermino J. M. Fachine	U.O1.D2.2, V.O3.D3.1
Guilherme Henrique Zotto Johansen	F.P2.18	Guillermo Ruiz-Sparza	C.O1.D1.2
Guilherme Ilário Correr	G.P4.7	Guillermo Arturo Muñoz	A.P5.27
Guilherme Kretzmann Belmonte	F.P2.34	Guillermo Solórzano-Naranjo	M.P6.34, M.P6.42
Guilherme Kurz Maron	E.P3.19, E.P3.28, E.P3.39, E.P3.49, E.P3.50, E.P3.59, E.P3.75	Guinther Kellermann	J.O3.D2.4, J.P5.1
Guilherme Luiz Dotto	N.P5.41, N.P5.7	Gul Rahman	S.O2.D1.1, S.P5.26
Guilherme Mariz de Oliveira Barra	F.P2.21, F.P6.8, F.P6.9, T.P3.17, T.P3.58, U.P6.16, X.P5.15, X.P5.23	Günter Motz	R.P7.14
Guilherme Molinari Sacco	B.P4.28	Gunther Pasold	I.O1.D3.4
Guilherme Mônego	Q.O3.D3.3, Q.P3.38	Gustav Nyström	B.O3.D1.1, T.O1.D1.1
Guilherme Nunez Nunez	A.P5.56	Gustavo A Lorensi	A.P4.19
Guilherme Oliveira Barra	U.P6.4	Gustavo Arrighi Ferrari	V.P1.21
Guilherme Pacheco Pereira	B.P2.19, B.P2.56, B.P4.33	Gustavo Capistrano	A.O1.D1.1
Guilherme Pereira Guedes	M.P6.23	<b>GUSTAVO CASTRO ROCHA</b>	D.P5.22, D.P5.23
Guilherme Rangel	K.P7.9	Gustavo C. S. Guimarães	U.P6.43
Guilherme Ribeiro Portugal	S.O3.D2.5	Gustavo de Souza	B.P2.57
Guilherme Rodrigues de Lima	F.O2.D1.1, F.P2.29, F.P2.58, F.P4.20	Gustavo dos Reis Gonçalves	E.P3.64
Guilherme Santos Vacchi	L.P3.17, L.P3.2, P.P1.43, Q.O3.D3.5, Q.O3.D3.6, Q.P3.2, Q.P3.23	Gustavo dos Santos Rosa	C.P6.34
Guilherme Schiavão Padovani	G.P4.43	Gustavo Doubek	U.O3.D3.3, U.P7.1, U.P7.8
Guilherme Siqueira Gomide	D.O2.D2.3, U.O3.D2.6	Gustavo Fabri Derroso	G.P4.44
		Gustavo Fernandes Sousa	B.P2.58, B.P2.59, C.O1.D1.2
		Gustavo Ferrari	C.P2.55
		Gustavo Figueira	X.P5.24, X.P5.39
		Gustavo Fóscolo de Moura Gomes	M.O2.D2.3
		Gustavo Freitas de Souza	P.P1.83, P.P1.84
		Gustavo Freitas do Nascimento	F.P4.5
		Gustavo Galleani	J.P5.22, J.P5.35
		Gustavo Garcia da Silva	M.O1.D3.4, M.P7.46

Gustavo Goes Serec	B.P2.41, B.P2.60	Haroldo Cavalcanti Pinto	H.P3.5, P.O3.D2.5, P.P1.76, Q.P3.69, R.O3.D3.7
Gustavo Hardt Hardt	U.P6.25, V.O1.D4.5, V.P1.24	Harrison Santana	X.P5.2
Gustavo Henrique dos Santos Domingos	J.P5.20	Hassine Bouafif	P.P1.7
Gustavo Henrique Sousa	P.P1.63	Heber Oswaldo Abreu	R.P7.23
Gustavo Henrique Truppel	K.O1.D3.2, O.P7.6	Hebert Amorim Folli	P.P1.44
Gustavo Henrique Wegher	U.P7.37, U.P7.59	Héctor Beltrán Mir	O.P7.15
Gustavo Martini Dalpian	G.O2.D1.3, S.O3.D1.4, S.P5.14	Héctor Beltrán-Mir	S.P7.24
Gustavo Miranda Rocha	R.P7.2	Hector Reynaldo Meneses Costa	Q.P3.26, Q.P3.27, Q.P3.33
Gustavo Mourglia Ettlin	A.O3.D1.7	Heitor Secco Seleghini	S.P5.24
GUSTAVO NEVES MARGARIDO	G.P2.33	Helder Moreira Braga	G.O2.D1.3, G.P4.45
Gustavo Oliveira Crispim	U.P7.13	Helena Couto Junqueira	A.P5.64
Gustavo Oliveira de Meira Gusmão	M.P7.48	Helena Cristina Delgado Brito	C.P6.56
Gustavo Prado dos Passos	G.P2.65, G.P2.78, G.P2.86, L.P3.34	Helena Maria Petrilli	M.O3.D1.5, M.O3.D2.6, M.P6.1
Gustavo Roni Bolzan	B.P2.42	Helena Schneider	N.P5.18
Gustavo Sander Larios	A.O3.D2.5, B.O3.D3.4, B.P2.14, B.P2.61	Hélen Cássia Rosseto	B.P2.62, B.P2.63, B.P2.76
Gustavo Sanguino Dias	M.O1.D3.3, M.O3.D2.7, M.P7.22, M.P7.45	Helio Cesar Nogueira Tolentino	G.O3.D3.1, G.O3.D3.5, G.P4.36
Gustavo Satoru Takeya	Q.P3.24, Q.P3.25	Helio Goldenstein	L.O3.D3.4
Gustavo Sérgio dos Santos	F.O3.D2.5	Hélio Goldenstein	Q.P3.15, Q.P3.3, Q.P3.51
Gustavo Tressia	Q.P3.51	Hélio Lucena Lira	N.P5.10
Gwenaelle Pound-Lana	G.P6.65, G.P6.66	Hellen Cristine Prata de Oliveira	C.P6.29
Gyorgy Jozsef Jaics	M.P6.36	Hellen de Almeida Vienna	F.P2.22, F.P4.6
György József Jaics	M.P6.37	Hellen Pereira de Jesus	S.P5.27
		Hellen Regina Oliveira Almeida	X.P5.25
		Helliomar Pereira Barbosa	G.P2.36
<b>H</b>		Hellmut Eckert	J.O2.D2.1, J.O3.D2.5
Hamilton Ferreira Gomes de Abreu	H.P3.9, M.P6.32, Q.O2.D3.3, Q.P3.1	Heloisa Ciol	T.O3.D1.2, T.P3.7, T.P3.8
Hamilton José de Mello	Q.P3.73	Heloísa Cunha Furtado	L.P3.58
Haoran Yu	E.O1.D4.2	Heloisa Regina Turatti Silva	B.P4.5, D.P5.61, R.P7.48
Harald Bock	F.O3.D1.1, F.O3.D2.4, F.P2.19, F.P2.37, F.P2.55, F.P4.3, F.P4.36, F.P6.3	HELOIZA FERNANDA OLIVEIRA DA SILVA ATHAYDE	A.P5.48
		Helton José Alves	B.P4.15, E.O1.D3.1, N.P5.29

Helton José Wiggers	V.O2.D2.2	Heung Jin Santana	A.P5.57
Hemilly Kerem Gomes de Santos Santos	B.P2.64	Hidetake Imasato	C.P2.33
Henriette Monteiro Cordeiro de Azeredo	B.P4.13	Higor Andrade Centurion	E.P3.26, G.O3.D2.2
Henrik Bradtmüller	J.O3.D2.5	Higor Rogerio Favarim	L.P3.35, L.P3.62
Henrik Johannesson	M.P7.1	Hitalo de Jesus Bezerra da Silva	B.P4.53, C.P6.65, G.P2.94, G.P2.95, I.P7.16, R.P7.47
Henrique Aparecido de Jesus Loures Mourão	G.P6.37, G.P6.6	Holger Kleinke	E.O3.D3.3
Henrique Barbosa Gonçalves	G.P2.69	Holmer Savastano Junior	B.O2.D1.3, B.P2.3
Henrique Castro Silva Junior	M.P6.23	Hongji Yan	B.O3.D3.7
Henrique de Medeiros Back	D.O3.D2.8	Hongyang Ma	T.O3.D1.3
Henrique de Santana	F.O3.D1.5	Horácio Coelho Júnior	M.P7.2
Henrique Duarte da Fonseca Filho	A.P5.62	Hortense LE FERRAND	B.O2.D2.1
Henrique Emilio Zorel Junior	C.O1.D3.2, C.P6.37	houssem guessmi	S.O2.D2.2
Henrique Finocchio	E.P3.55	H. S. Martinho	B.P2.30
Henrique Frulani de Paula Barbosa	F.O1.D3.2, F.P4.7	Hubert Karl Stassen	B.P4.10
Henrique Neves Bez	K.P7.11	Hudson Zanin	U.P6.32
Henrique Rodrigues Oliveira	O.O1.D3.4, O.O1.D3.5, X.O3.D1.4	Hugo Alexandre de Oliveira Rocha	R.O1.D3.2
Henrique Simas	D.P4.27	Hugo Arturo Alarcón Cavero	D.O3.D2.4
Henrique Solowej Medeiros Lopes	P.P1.22	Hugo A. Vieyra	K.P7.11
Henry Fellegara	F.P2.35, F.P2.54	Hugo Bonette de Carvalho	S.O2.D1.1, S.P5.1, S.P5.2, S.P5.25, S.P5.26, S.P5.27
Herbert Winnischofer	F.P6.43	Hugo Feitosa Jurca	M.P7.33
Hercílio Gomes de Melo	L.O3.D3.4, P.P1.66	Hugo Gajardoni de Lemos	C.P2.52, D.P4.36, F.P6.41, U.P7.58
Herculano da Silva Martinho	T.P3.50	Hugo Gallardo	F.P2.25, F.P4.8, F.P6.22, F.P6.24, F.P6.35, F.P6.49
Hérica Dias da Rocha	T.P3.28, T.P3.29	Hugo José Nogueira Pedroza Dias Mello	F.O1.D3.3
Herick Ematne da Silva Barros	D.P4.52	Hugo Marchi Luciano	F.P4.8
Hérik Dantas De Lima	J.P5.21, R.P7.24	Hugo Plínio de Andrade Alves	M.P7.3
Herly Brazolin	P.P1.42	Huiliang Liu	D.O3.D1.7
Hermann Franz Degenhardt	J.O3.D2.4	Humberto Denys De Almeida Silva	B.P4.53, C.P6.65, G.P2.94, G.P2.95, I.P7.16, R.P7.47
Hernandes Faustino de Carvalho	A.P4.2, B.P2.51	Humberto Lopes Rodrigues	O.P7.4
Hernandes F Carvalho	C.O3.D1.1	Humberto Medeiros Barreto	B.P2.9
Hernane da Silva Barud	B.P2.19, B.P2.56, B.P4.14, B.P4.33, C.P6.12, C.P6.43, F.P6.14, T.O3.D1.4, T.P3.36, X.P5.17, X.P5.31, X.P5.37	Humberto Naoyuki Yoshimura	S.P5.4
		Huyra Estevao Araujo	E.O1.D4.3, X.P5.26
		huyra estevão Araújo	X.P5.3

# I

Iago Bezerril da Silva	D.P4.53	Igor Carvalho	EXP.1.D2.3, G.O3.D3.2, G.O3.D3.3, V.O1.D4.1, V.O1.D4.4, V.P1.20
Iago Carvalho Pinto	J.P5.22	Igor d'Anciães Almeida Silva	J.O2.D2.1, J.O3.D2.5
Iago W. Zapelini	N.P5.16	Igor de Lacerda	S.P7.30
Ianca Thais Peixe	B.P2.67	Igor Fagundes Valezan	B.P4.5
Ian Felipe Sousa Reis	A.P5.65, A.P5.67, C.P6.38, C.P6.4, C.P6.7, K.P7.12, K.P7.2	IGOR FERNANDES PIMENTA	D.O1.D2.1
Iara Janaína Fernandes	F.P6.20	Igor Fier	F.P4.43
Iasmin Alves Ribeiro	D.P4.54	Igor Frota Vasconcelos	G.P2.96, G.P6.32
Içamira Costa Nogueira	G.P4.26, G.P4.46	Igor Giacomelli Zanella	J.P5.1
Ícaro Gabriel Rodrigues Santos	L.P3.17, L.P3.2, Q.O3.D3.5, Q.O3.D3.6, Q.P3.2, Q.P3.23	Igor José Dester Ladeira	V.O3.D2.3b
Icoana Lais Leitão Mascarenhas Martins	D.P4.55, G.P2.72, V.P1.19	Igor Kasper Dedeco	Q.P3.8
Idglan Sá Lima	B.P2.26, B.P2.8, B.P2.9	Igor Lebedenco Kitagawa	C.P2.56
IDIO ALVES DE SOUSA FILHO	D.O2.D1.2, D.P4.56	Igor Matheus Amorim Silva	G.P2.67
Idomeneu Gomes de Souza Filho	F.P4.9	Igor Oliveira Sobrinho	L.P3.8
Ieda Lúcia Viana Rosa	G.P2.62, G.P4.1, G.P6.44, S.P7.1, S.P7.7	Igor Polikarpov	T.P3.15
Iêda Maria Garcia dos Santos	D.O1.D1.2, D.O3.D1.4, D.O3.D1.5, D.O3.D2.1, D.P4.16, D.P4.3, D.P5.42, D.P5.45, G.P4.76, G.P4.77, G.P6.52, M.P7.47, R.P7.28, S.P7.3	Igor Soares dos Santos	D.P5.16
Ieda Maria Martinez Paino	A.P4.47	IGOR TADEU BATISTA	C.P6.12
Ievgeniia Iermak	T.O3.D1.2, T.P3.7, T.P3.8	Igor Tadeu Silva Batista	X.P5.17
Igor Alencar	L.O1.D4.2, L.O1.D4.4	Igor Wallace Ferreira da Silva	A.P5.58
Igor Alexandre Torres Ribeiro	A.P4.37	Iker Rodrigo Chávez Urbiola	G.P4.32, G.P4.35
Igor Alexsander Barbosa Magno	P.P1.74	Ilan Sousa Figueirêdo	A.O1.D2.3
		Indhira Oliveira Maciel	F.O3.D3.2, F.P2.56, F.P2.9, F.P6.14, F.P6.15, F.P6.30, V.P1.15
		Inês Pereyra	G.P4.65
		Ing Hwie Tan	R.P7.10
		Ingred Lopes Ferreira	U.P7.28, U.P7.41
		Ingrid Gomes Ribeiro	F.P2.4, F.P4.10, G.P4.71, G.P4.9
		Ingrid Tavora Weber	D.O2.D1.2, D.P4.56, G.O1.D4.5
		Ingrid Waleσσα Valeriano Gonçalves	G.P2.74
		Inocência Santos Santos Neto	M.P7.4, M.P7.40, S.P5.28
		Ioannis Jhon Kymissis	F.P4.24
		Iolanda Cristina Silveira Duarte	B.P2.73, B.P4.49



Ionara Fernanda Rezende Vieira	D.P4.28	Isabelle Moraes Amorim Viegas	G.P2.74
Iram Taj Awan	G.P4.47	Isabel Liz Castro Merino	M.P7.5
Irene Garcia Cano	C.P2.44	Isadora Busch	O.O1.D3.4, O.O1.D3.5
IRENE TERESINHA SANTOS GARCIA	G.P4.62	Isadora Leão	B.P2.65
Irineu Mazzaro	J.P5.1, M.P7.33	Isaias José dos Santos Neto	B.O3.D2.6
Iris Ribeiro Ribeiro	A.O3.D1.6	Isaías Oliveira	X.O1.D1.3
Isaac Sánchez Montes	G.P4.13	Iseli L Nantes-Cardoso	E.P3.46, G.P2.73, T.O3.D1.2
Isabela Alves de Albuquerque Bessa	S.P5.29, U.O1.D3.2	Ismael Casagrande Bellettini	A.P4.27
Isabela Atilio	X.O3.D1.6	Ismael Correia Junior	X.P5.36
Isabela Barreto da Costa Januário Meireles	A.P5.59	Ismael Leandro Graff	M.O3.D2.3
Isabela Custódio Mota	G.O2.D3.4, G.P4.48	Isolda Costa	P.P1.19, P.P1.66, P.P1.9
Isabela Dainezi	Q.P3.28, Q.P3.29	Israel Pinheiro de Siqueira	F.O3.D3.5, F.P4.12
Isabela Jasper	F.P4.11	Israel Ramos Rodrigues	C.P2.58
Isabela Maria Balão da Silva	D.P4.57	Itália Vallerini Barbosa	G.P4.4, J.O1.D2.1
Isabela Maria Martins	D.P4.24	Ítalo Azevedo Costa	U.O2.D3.1
Isabela Paula Moreira Costa	D.P4.28	Ítalo Carvalho da Costa	A.P5.62
Isabela Trindade Coutinho	I.O1.D3.2	Italo Odone Mazali	G.P4.10, G.P4.50
Isabel Carolina Hutter Gomes	G.P6.37	Itamar Tomio Neckel	M.O3.D2.3, M.P7.51
Isabel Carvalho Carvalho	A.P5.55	Iuri Araújo Abreu	Q.O2.D3.3
Isabel Cristina Tessaro	B.P2.32, B.P2.69, D.P4.58, N.O3.D1.5, N.P5.18, N.P5.31, N.P5.35, N.P5.36, S.P5.9	Iuri Stefani Brandt	E.P3.17, G.P6.41
Isabel Galain	A.O3.D1.7	Ivair Aparecido Santos	M.O1.D3.3, M.O3.D2.7, M.P7.22, M.P7.45
Isabel Gomes	K.O3.D3.1	Ivaldo Leão Ferreira	P.P1.33
Isabella Carneiro Gonçalves	C.P2.57, U.P7.16	Ivana Aguiar	A.O3.D1.7, G.P2.35, V.P1.10
Isabella Carolina Conceição	E.P3.11	Ivan de Paula Miranda	M.O3.D1.5, M.P6.1
Isabella Caroline Pereira Rodrigues	C.O2.D3.4, C.P6.5	IVAN DE SÁ DA FONSECA	L.P3.1
Isabella Causin Sacco	U.P6.8	Ivan Dias	E.P3.52
Isabella Loureiro Muller Costa	P.O1.D3.2	Ivaneia Barreto Beltrão	T.P3.30
Isabella Maria Lopes Italiano	T.O3.D1.2, T.P3.7	Ivan Guide Nunes da Silva	G.P4.14
Isabella Pinazo Geremias	A.P5.60	Ivan H. Bechtold	F.O2.D3.2, F.O3.D1.1, F.O3.D2.4, F.P2.14, F.P2.25, F.P2.31, F.P2.37, F.P2.52, F.P4.4, F.P6.17, F.P6.19, F.P6.24, F.P6.3, F.P6.48, I.P7.18
Isabella Sampaio do Nascimento	A.P5.61	Ivan Helmuth Bechtold	F.P6.35
Isabella Silva de Souza	S.P5.25		
Isabelle de Oliveira Borges	U.P6.14		

Ivani de Souza Bott	U.P7.35
Ivani Malvestiti	G.P6.74
Ivanise Gaubeur	D.O1.D2.2
Ivan Paula Miranda	M.O3.D2.6
Iván Sorribes	S.O3.D2.6, S.P7.1, S.P7.35
Ive Silvestre	V.P1.21
Ivo Alexandre Hümmelgen	F.P2.26
Ivo Mateus Pinatti	G.P2.62, S.P5.30
Ivonete Oliveira Barcellos	I.P7.4
Ivo Utke	M.O3.D2.5
Izabela Campos Sena	E.P3.72
Izabela Silva Bicalho	F.O2.D2.4
Izabel Cristina Riegel Vidotti	F.P4.11
Izabel Cristina Riegel-Vidotti	B.O1.D3.2, E.O3.D3.7
Izabel Fernanda Machado	L.O1.D3.2, L.O2.D3.3, L.O2.D3.4, Q.O3.D3.2
IZABEL GOMES DE SOUZA SOBRINHA	G.P2.74
Izabel Gomes Souza Sobrinha	A.O3.D1.4
Izabella Fernanda Ferreira Domingues	D.P4.20
Izabelle De Mello Grindi	C.P2.55
Izabel Moraes Caldeira	B.O3.D1.3
Izabel Trindade	G.P6.66
Iza Fonte Boa Silva	G.P4.49
izaias gonçalves lima	U.P7.29, U.P7.5
Izaque Alves Maia	C.P2.31

## J

Jaciara Bär	G.P4.50
Jaciele Marcia Rosso	C.P6.2
Jacivan Viana Marques	A.P5.65
Jackelyn MV	U.O2.D3.4
Jacqueline Andrea Hidalgo	H.P3.8
Jacqueline Ferreira	F.P2.40, F.P6.31
Jacqueline F Leite Santos	G.P6.5
Jacqueline Roberta Tamashiro	D.P4.12, D.P5.46

Jacques Huot	H.O3.D1.3, H.P3.11, H.P3.12, H.P3.14, H.P3.16, H.P3.8
Jacques Robert	U.O3.D1.4
Jacson Malcher Nascimento	L.P3.33, P.P1.74
Jacson weber de Menezes	U.P6.25, V.P1.24
Jacyara Flores Arbues Carneiro	F.P4.38, G.P4.51
Jader Riso Barbosa	K.P7.11
Jade Soares	A.O1.D2.2
Jailson Ferreira Machado	D.P4.3
Jailson José da Silva	G.P4.52
Jailton Romão Viana	B.P4.4, C.P6.7, G.P6.13
Jaime Andrés Lozano	K.P7.11
Jair Carlos Checon Freitas	A.P5.1, U.P7.50
Jair Francisco Rodrigues	F.O3.D2.6
Jairo Breno Francisco de Oliveira Barauna	G.P2.84, G.P6.17
Jair Scarminio	L.P3.45
Jairton Dupont	B.P2.42
Jaisa Fernandes Jaísa	A.P5.52
Jakeline Raiane Dora dos Santos	E.P3.40, E.P3.67
James Moraes de Almeida	D.O2.D2.2, S.P5.20
James Venturini	C.P6.62
Janaina Accordi junkes	E.P3.41, E.P3.42
Janaína Arlete Prasniski	N.O3.D1.7, N.P5.2
Janaina da Silva Crespo	B.P4.19
Janaina de Andréa Dernowsek	C.O3.D2.1
Janaína Fracaro Gonçalves	L.P3.49
Janaina Lima Borges	D.P5.6
Janaina Soares Santos	C.O1.D3.2, C.P2.45, C.P2.46, C.P6.37, R.O3.D3.4, R.P7.49, R.P7.5
Janaísa Luíza Cristino Lucas	F.P6.15
Jandira Leitchweis	D.P5.54, D.P5.55
Janeth Marlene Quispe-Avilés	L.O3.D3.4
Janice B.S. Hamm	S.P5.9
Janicy Arantes Carvalho	A.P5.15, A.P5.16
Janika Lehtonen	B.O1.D4.5
JANILSON ALVES FERREIRA	F.P4.13, V.P1.22

Janine Araújo	A.P5.48	Jean -Jacques Bonvent	B.P2.5
Janine Carvalho Padilha	G.O2.D3.1	Jean-Marie George	M.O3.D1.8, M.P7.33
Janine Contro	A.O3.D1.8	Jean Rodrigo Bocca	E.P3.36, K.P7.7, K.P7.8
Janine Karla França da Silva Braz	R.O1.D3.2	Jeconias Rocha Guimarães	F.P4.14
JAN LUCAS SOUZA OLIVEIRA	L.P3.7	Jeferson Ferreira de Deus	F.P2.11, F.P2.39, U.P6.35, U.P6.38, U.P7.22, U.P7.23
Jannyely M Neri	A.P5.48	Jeferson F. S. Vieira	V.O1.D2.3
Jan Vogel	M.O3.D1.3	Jeferson Leandro Klug	J.P5.33
Jaqueline Benvenuti	D.O1.D2.3	Jeferson Matos Hrenechen	U.P7.9
JAQUELINE CRISTINE DESORDI	G.P4.53	JEFFERSON AFONSO FARIAS	E.P3.41
Jaqueline de Souza Brandão	C.P6.34	Jefferson Araujo	S.P7.19
Jaqueline dos Santos Soares	F.P6.36, G.O3.D1.7, G.P2.44, V.P1.3	Jefferson Augusto Bittencourt	F.P4.18
Jaqueline Falchi da Rocha	U.P7.6, V.P1.14	Jefferson Bettini	G.P4.54, M.O2.D3.1, S.P5.32, U.O2.D2.3
Jaqueline Pereira Rosado	I.P7.5	Jefferson Carnevalle Rodrigues	A.P5.63
Jaqueline Pérola Souza	A.P5.4, A.P5.5	Jefferson Gonçalves Filgueiras	L.P3.14
Jaqueline Soares	C.P2.59, F.P6.38	Jefferson Luis FERRARI	G.O2.D3.1, G.P2.36
Jaquelline Vanelli	G.P4.70, U.P7.27	Jefferson Marcio Sanches Lopes	F.O3.D1.3, F.P4.15
Jardel Pereira Gonçalves	D.P4.7	Jefferson Patrício Nascimento	U.P7.18
Jardel Pereira Gonçalves	L.P3.18	Jefferson Santos da Silva	D.P4.7, L.P3.18
Jarem Garcia	U.P7.15	Jeff Kettle	F.O1.D2.1
Járlesson Gama Amazonas	F.P4.14	Jeice M. Santos	G.O1.D1.2, G.O2.D2.2, G.P4.39, G.P6.61
Jason Guy Taylor	F.P6.44	Jenaina Ribeiro Soares	V.O1.D2.3
Jason Jerry Atoche Medrano	M.P7.58	Jenaina Ribeiro-Soares	V.O3.D2.2
Jasper José Zanco	D.P5.61	Jenny Alejandra Mera Córdoba	A.P5.27, M.P6.19
Javier Mauricio Anaya Mancipe	C.O3.D1.5	Jenny Luis Nhaliguangue Boane	E.P3.43
Javier Mazariegos Pablos	E.O2.D3.3	JEOVANI BRANDAO	M.O3.D1.4, M.O3.D1.7
Javier Ruiz-Fuertes	L.O1.D4.4	Jeovani Brandão	M.O3.D1.6, M.P6.20
Javier Sierra Gómez	U.P6.1, U.P7.7	Jerome Baudoux	C.O3.D1.7
Jay Paul Luben	V.P1.36	Jerome Depeyrot	M.O1.D3.1, U.O3.D2.6
Jayson Cabral dos Santos	C.P6.38	Jerusa M. de Oliveira	A.P5.43, A.P5.44
Jayson Xavier	M.O2.D1.2, M.P7.49, M.P7.6		
Jean Araujo das Neves Silva	C.O3.D1.4		
Jean Carlos Bassani	U.P7.11		
Jean Carlos Silva Andrade	B.P2.71, D.P5.52, T.P3.34		
Jean Colombari Neto	D.P4.13		
Jean Felipe Leal Silva	U.P7.1, U.P7.8		
Jean Filipe Kuhne	U.P7.59		
Jean-François Ganghoffer	C.O2.D3.3		

Jesiel Freitas Carvalho	G.P2.70, G.P4.68, G.P4.69	Jie-Yi Yao	D.O3.D2.7, D.P4.31
Jéssica Andreza Oliveira Rodrigues	F.P4.16	Jilian Nei de Freitas	G.O1.D1.3, G.P2.12, G.P2.66
Jéssica Aparecida Magalhães	A.P5.6, A.P5.64	Jilt Sietsma	Q.O1.D3.1
Jessica Aparecida Serafim	D.P4.29	Jimes de Lima Percy Júnior	Q.P3.58
Jéssica Bassi da Silva	B.P4.16, B.P4.17, B.P4.31, B.P4.42, B.P4.43	Jing Nie	D.O3.D1.7
Jéssica Costa Lima	L.P3.36, L.P3.37	J. L. Clabel	G.P2.75, G.P4.47
Jéssica Cristina Costa de Castro Santana	Q.P3.30, Q.P3.67, Q.P3.68	Joachim Heberle	A.O3.D2.1, B.P4.34
Jéssica da Silva Chagas	T.P3.9	Joacilia Mazzini Marques de Souza	J.O1.D4.2
Jéssica de Oliveira Notório Ribeiro	N.P5.13, N.P5.20, N.P5.30	Joana Claudio Pieretti	A.P4.3, C.O3.D1.3
Jessica de Oliveira Silva	P.P1.46, P.P1.52	Joana de Barros Sacramento	U.P6.24, U.P7.34
Jéssica Eliza Silva Fonsaca	U.O1.D3.3	Joana Eliza de Santana	V.O2.D2.3
Jéssica Heline Lopes Fonseca	X.P5.19, X.P5.34	Joana Gonçalves Forster	I.P7.7
Jéssica Helisa Hautrive Rossato	F.P4.17, T.P3.3	Joana Mesquita Guimarães	C.O2.D1.2
Jessica Jenifer Sornas	B.P4.36, I.P7.12	JOANNA ELZBIETA KULESZA	D.P4.6, D.P5.20, D.P5.24, D.P5.31, L.P3.55
Jéssica Kamilly Pereira França	K.P7.12, K.P7.13, K.P7.2, K.P7.3	João Adriano Rossignolo	L.P3.21, L.P3.22
jessica montenegro santana silva	B.P4.21	João Antonio Oliveira Santos	A.P5.3
Jéssica Pereira Soares da Silva	U.P7.10	Joao Antonio Pegas Henriques	A.P4.19
Jessica Santos Gomes	P.P1.47	João Batista de Mendonça Júnior	M.P6.32
Jéssika Cavalcanti de Lima	G.P6.74	João Batista de Oliveira Libório Dourado	B.P2.25, E.P3.1
Jessyka Carolina Bittencourt	F.P4.18	João Batista Fogagnolo	O.P7.1, O.P7.14
Jesum Fernandes	B.O1.D3.3	João Batista Giordano	I.P7.6
Jesús Manuel Gutierrez Bernal	L.P3.69	João Batista Maia Rocha Neto	B.O3.D3.1
Jeverson Teodoro Arantes	S.O3.D2.5, S.P5.4, V.O3.D3.6	João Batista Santos Barbosa	D.P5.8, M.P7.24
Jeziel Rodrigues Santos	S.P5.31	João Batista Souza Junior	A.P5.23, G.P4.38, G.P4.54, V.P1.23
Jez Willian Batista Braga	D.P4.20, S.P5.11	João B. Floriano	F.P2.1, F.P2.39, F.P6.40, F.P6.45
Jhoan Sebastian Guzman Hernández	X.O3.D1.4	João Caldi	X.P5.2
Jhonatam de Oliveira Carvalho	B.P4.4	João Cardoso de Lima	E.P3.80, V.P1.38
Jhonat Heberson Avelino de Souza	S.O3.D2.4	João Carlos Angélico	G.P6.39, R.P7.38
jhon james hernández sarria	C.P2.60	João Carlos Rocha Araújo	M.O2.D1.2, M.P7.49
Jhonny Villarroel-Rocha	N.P5.39	João Carlos Rocha De Araújo	M.P7.7
Jhuliene Elen Torrento	C.P2.2	João Carlos Silos Moraes	G.P4.34
		João C. M. Neiva	D.P5.43
		João Elias Figueiredo Soares Rodrigues	S.P7.17

João Felipe Queiroz Rodrigues	C.P6.6, P.P1.18, P.P1.36	João Paulo Almirão de Jesus	G.P2.88, G.P4.55
Joao Ferreira Ferreira	G.O2.D3.2	João Paulo Braga	F.O2.D1.1, F.P2.29, F.P2.58, F.P4.20
Joao Francisco Justo	S.O3.D1.5, V.P1.1	João Paulo Campos Costa	S.P5.32, S.P7.1, S.P7.2
João Gabriel Benedito Duarte	P.P1.48, P.P1.86	João Paulo Davim	R.P7.18, R.P7.34
João Gabriel da Cruz Passos	Q.P3.34, Q.P3.35	João Paulo de Mesquita	G.P6.37
João Gomes de Oliveira Neto	A.P5.67, C.P6.38, C.P6.4, C.P6.7, F.P4.16, F.P4.19	João Paulo Gabre	P.P1.56
João Gomes Oliveira Neto	A.P5.65	João Paulo Machado	R.O3.D3.6
João Guilherme Correia	M.P7.36	João Paulo Pereira Carmo	S.P5.32
João Guilherme Moura Santos	U.P6.15	João Paulo Queiroz dos Santos	C.P2.7
João Guilherme Pereira Vicente	N.P5.21	JOÃO PAULO SANTOS DE CARVALHO	A.P5.43, A.P5.44, A.P5.45
João Gustavo da Silva Santos	M.P6.27, M.P7.37	João Paulo Sinnecker	M.P6.22
João Gustavo Leite Costa	U.P7.39	João Paulo Winiarski	B.P2.66, D.P5.28, J.P5.23, U.P7.11, U.P7.33
João Gustavo Silva Santos	M.O1.D2.2, M.P7.8	João Paulo Zen Siqueira	A.P5.38
João Henrique Delavechia Guimarães Silva	V.P1.19, V.P1.28	JOAO PEDRO CAROBOLANTE CAROBOLANTE	C.P6.18, C.P6.8
João Henrique Ghilardi Lago	A.P4.24, A.P5.54	João Pedro Esteves Araujo	K.O2.D3.3, K.O3.D3.1, M.O3.D2.6, M.P7.36
João Henrique Quintino Palhares	R.P7.25	João Pedro Fagundes Cararo	Q.P3.44
João Henrique Zimnoch dos Santos	J.O2.D2.3	João Pedro Hubbe Pfeifer	C.P6.34
João Henrique Zimnoch Dos Santos	D.O1.D2.3, D.O3.D2.6, E.P3.4, L.O1.D4.3, L.P3.6	João Pedro Jenson Oliveira	U.P7.12, U.P7.21
João Horta Belo	K.O2.D3.3, K.O3.D3.1	João Pedro Lemos Morais	G.P2.56, P.P1.50
Joao Humberto Coelho	R.O3.D3.5	João Pedro Penna Guilherme	N.O3.D1.4
João Lucas Isidoro Dos Santos	A.P5.66	João Pêgas Henriques	A.P4.20, B.P4.19
Joao Lucas Silva	EXP.3.D2.7, G.O3.D3.2, G.O3.D3.3, V.O1.D4.1, V.O1.D4.4, V.P1.20	João Rodrigues de Barros Neto	H.P3.9
João Marcos de Oliveira Barbosa	L.P3.35	João Saccoman	R.O2.D3.2
João Marcos Teixeira Lacerda	C.P2.7	João Silva	D.P5.9
João Maria Soares	M.P7.6, N.P5.40	João Victor Barbosa Moura	T.P3.32
João Milton Pereira Júnior	V.P1.42	João Victor El-Hage Meyer Osorio	X.P5.20
João Paula Santos Pires	P.P1.49	João Victor Justulin Fanton	G.P4.56
João Paulo Almeida de Mendonça	F.P6.15	João Victor Mesadri	X.P5.10
		João Victor Pereira Valverde	B.P4.52
		Joao Vinicios Wirbitzki Silveira	B.P2.67
		João Vitor Jardim	Q.P3.55

Joaquim Bonfim Santos Mendes	V.O2.D3.1	Jordan Dalessandro	V.P1.36
Joaquim Brasil Lima-Filho	F.O2.D2.2	Jordan Del Nero	F.P4.14, U.P6.29
Joaquim Paulo da Silva	E.P3.43	Jordan K da Silva	F.P2.45
Joaquin Márquez Marín	G.P2.51	Jordanna Fernandes Assis	C.P6.9
Jocácia Murieli de Oliveira Miranda Kister	D.P5.48	Jordi Ibáñez	L.O1.D4.4
Jocelyne Marciano	V.P1.20	Jorge Augusto de Moura Delezuk	F.P6.18
Jodie L. Lutkenhaus	F.O3.D3.3, F.P4.27	Jorge Cubero-Sesín	H.P3.8
Jo Dweck	J.P5.34	jorge de souza e silva neto	B.P2.68
Joelda Dantas	D.P5.7, M.P7.12, M.P7.9	Jorge de Souza Passos Junior	J.P5.24
Johan Alexander Cortes Suarez	D.P5.15, E.O3.D3.1	Jorge L Cargnin	R.P7.9
Johan Cobeñas	D.P5.35	Jorge Luiz Cardoso	C.P6.29, Q.P3.43
John A. GOMEZ SANCHES	M.P6.25	Jorge Luiz Pimentel Júnior	S.P5.10
John Barco Jiménez	M.P6.19	Jorge Luiz Rosa	Q.P3.31
John Hanna	A.O2.D1.3	Jorge Luiz Vieira Maia	U.P6.27
John Jairo Hoyos	X.P5.32	Jorge Montero Banuelos	H.O3.D1.5
Johnnatan Duarte de Freitas	T.P3.55	JORGE RICARDO MEJIA SALAZAR	C.O1.D3.3, C.P2.60, C.P6.14
Johnny Ferraz Dias	L.O1.D4.2	Jorge Simancas	N.O2.D1.1
Johny Andres Jaramillo	M.P7.10	Jorge Tadao Matsushima	P.P1.51
Joice Palma Bigon	B.P4.27	Jorge Vicente Lopes da Silva	B.P2.1, C.O3.D2.1, C.P2.31, X.O1.D1.1, X.O1.D1.3
Joice Yoko D Alessandro Idehara	A.P5.33, D.P5.36, D.P5.8	José Adolfo Oliveira das Chagas	U.P7.13
Joiciara G. Caroni	B.P2.7	José Agenor Carvalho Júnior	G.O3.D1.7
Jonas Alexandre Govatski	G.O1.D2.1	Jose Alberto Batista da Silva	N.P5.11
Jonas Anversa	V.P1.7	José Alberto Giacometti	F.P4.21, F.P4.28
Jonas Luiz Monteiro	M.O2.D3.4, M.P7.54	José Alexandre Diniz	M.O3.D2.5
Jonathan Bork	R.P7.48	Jose A. Mata	S.O3.D2.6
Jonathan Cormier	P.P1.57	Joseane Caroline Bernardes	E.P3.20, E.P3.22, E.P3.37, G.P2.47, G.P4.21, G.P4.57, G.P4.58
Jonathan Jose Rubio Arias	G.P4.48	Joseane Moreira Giarola	P.P1.43, Q.P3.32
Jonathan Rubio Arias	L.P3.30	Jose Anglada Rivera	J.O1.D4.3, P.P1.17, T.P3.12, T.P3.34
Jonathas Paula Siqueira	G.P6.15, G.P6.16	José António Covas	E.P3.8
Jonathas Sousa Reis	D.P4.15, D.P5.4, L.P3.38, U.P7.46		G.O1.D1.4, G.O2.D1.1, G.O3.D1.2, G.O3.D1.4, M.O3.D2.7, M.P6.30, M.P7.41, M.P7.45
Jonnathan Fernando de Oliveira Duarte	F.P6.36	José Antônio Eiras	
Jonny Burga Sanchez	T.P3.2		
Jonny J. Blaker	T.O3.D1.5		
Jon Pokorski	B.O2.D3.1		
Jordana Georgin	N.P5.7		
Jordana Moreira Silva	U.P7.51		
Jordan Araújo Silva	B.P2.64		

José Antônio Huamaní Coaquira	M.O2.D1.1, M.P7.58	José Eduardo Padilha de Sousa	E.O1.D3.1, V.P1.17, V.P1.35
José Antônio Souza	G.O1.D4.2, G.O2.D1.3, G.P2.22, G.P2.31, G.P2.71, G.P4.45, M.P7.21, M.P7.56	José Eduardo Silva Olegário	F.P2.19, F.P4.3
José Artigas dos Santos Laranjeira	S.P5.23, S.P5.33, S.P5.35	José Enrique Eirez Izquierdo	F.P4.24
José Augusto França Rodrigues	P.P1.13, P.P1.14, X.P5.9	José Ewerton Silva	E.P3.44
José Benedito Marcomini	Q.P3.32	José Felisberto da Costa Neto	M.P6.3
José Biasoli de Mello	U.P6.4	Jose Fernandes Fernandes	F.P4.25
José Brant Campos	C.P6.30, C.P6.40	José Fernando Batista Junior	D.P5.10
Jose Britti Bacalhau	Q.O1.D3.2	Jose Fernando Marin Junior	D.P5.3
José Bruno Cantuária	F.P4.22	José Francisco Leonelli Júnior	P.P1.21
José Carlos Botelho Monteiro	K.P7.13, K.P7.3	Jóse Gabriel da Silva	X.P5.18
José Carlos Calado Junior	T.P3.34, V.P1.6	José Gadelha Silva Filho	T.P3.32
José Carlos Dutra Filho	E.P3.8, I.P7.14	José Geraldo Andrade Pacheco	M.P7.12
José Carlos Germino	F.P2.41, G.O3.D1.6	José Geraldo A.P. Filho	D.P5.7
José Carlos Netto Ferreira	D.O3.D2.5	Jose Geraldo Nery	A.O3.D1.8, B.P4.28, C.P6.10, D.P5.59, E.O1.D4.5, N.O3.D1.2
José Carlos Santos	M.P6.8	José Gomes Filho	M.O1.D2.3
José Claudiano Dantas Neto	N.P5.5	José Guilherme Lopes Ferreira	B.O1.D3.2
José Claudio Corsaletti	G.O3.D3.5, G.P4.36	José Henrique Alano	E.P3.19, E.P3.28, E.P3.49, E.P3.50, E.P3.59
José Claudio Lopes	P.P1.32, Q.P3.73	José Henrique Rubo	C.P6.45
José Cleber Vasconcelos Júnior	D.P5.25	José Heriberto Oliveira Nascimento	I.P7.9
José Costa	D.P5.9	José Hilton Gomes Rangel	G.P6.55, G.P6.82, X.P5.22
José Daniel Biasoli de Mello	Q.O3.D3.3, Q.P3.38	José Humberto Dias da Silva	G.O2.D3.3, G.P6.39, G.P6.78, R.O2.D3.2, R.P7.11, R.P7.31, R.P7.38
José Daniel Da Silva Fonseca	D.P5.24	Jose Jonathan Rubio Arias	B.P2.65, G.O2.D3.4
José Daniel Diniz Melo	D.O1.D2.1	Jose Jovanny Bermudez Sierra	C.P6.11
José de Jesus Barbosa	Q.P3.41	José Leonil Duarte	F.P4.26, G.P2.53
José de los Santos Guerra	A.P5.20, J.P5.28, X.P5.12	José Luís Cardozo Fonseca	B.P2.74, C.P6.24
José Demontier Vieira de Souza-Filho	N.O3.D1.3	Jose Luis Garcia	R.O3.D3.7
Jose Diogo da Silva Oliveira	F.P4.24	José Manuel Rivas Mercury	C.P6.39, N.O1.D1.2
José Divino dos Santos	S.P5.31	José Marcos Sasaki	T.P3.33
José Domingos Ardisson	A.P5.33, D.P5.36, D.P5.8, D.P5.9, M.P7.17, M.P7.24		
José Eduardo Horta Celso	D.P5.49		
Jose Eduardo May	P.O2.D3.1		
José Eduardo Olegário	F.P4.23		

José Maria Anacleto	F.O3.D2.6	JOSMARY RODRIGUES SILVA	B.P4.52
José Maria Campos Dos Santos	P.P1.29	jossano saldanha marcuzzo	D.P4.24, U.P6.40, U.P6.5
Jose Maria Guilemany	C.P2.44		B.P2.25, B.P2.48, B.P2.8, B.P2.9, B.P4.41, C.P2.29, C.P6.12, D.O2.D1.1, D.O3.D2.1, D.P4.19, D.P5.42, E.P3.5, E.P3.65, G.P4.60, G.P4.61, G.P4.76, G.P4.77, G.P6.2, L.P3.39, N.P5.33
José Martín Yáñez-Limón	F.P2.48	JOSY ANTEVELI OSAJIMA	
José Mateus Nobre da Silva	K.P7.14		
Jose Mauricio Rosolen	D.O3.D2.3		
José Milton Elias de Matos	G.P2.94, I.P7.16		
José Molinari Pinto	L.P3.14		
José Paulo Breda Destro	R.O3.D3.6		
José Pedro Bastos Silva	S.P7.11		
José Pedro Mansueto Serbena	F.P2.13, G.P2.18		
José Pedro Thompson Junior	E.P3.16		
Joseph Cameron	F.O3.D1.2	Jovan Duran Alonso	A.P4.4, A.P4.9
Joseph Hazan	H.P3.11	Joyce Gomes Santos	N.P5.34
Joseph Richard Pinheiro de Carvalho	Q.P3.33	Joyce Kelly do Rosário da Silva	F.P4.44, F.P4.45
José Roberto Siqueira Jr.	F.O3.D3.3, F.P4.27	Joyce Rodrigues Araujo	R.O3.D3.1, R.O3.D3.3
José Roberto Souza Jr.	R.O3.D3.1	Joyelanne Kaline Chagas Souza	T.P3.55
José Roberto Tozoni	A.P5.68, T.P3.7, T.P3.8	Joziel Alves de Oliveira	E.P3.5, G.P4.60, G.P4.61
José Robson Silva Filho	F.P6.29	Juan Alfredo Guevara Carrió	U.P7.30
José Siqueira Júnior	F.O1.D4.4, F.O2.D3.3, F.P2.44	Juan Andres	S.P5.7
José Valdenir Silveira	D.P5.25, T.P3.18, T.P3.31, T.P3.32, T.P3.33		D.P5.50, M.P6.10, O.P7.15, S.O2.D1.4, S.O3.D2.6, S.P5.12, S.P5.17, S.P5.24, S.P5.30, S.P5.32, S.P5.34, S.P7.1, S.P7.15, S.P7.2, S.P7.24, S.P7.3, S.P7.32, S.P7.35, S.P7.36, S.P7.38
José . Varalda	M.O3.D2.4	Juan Carlos Burbano	S.P7.4
José Victor Silva Duarte	L.P3.38	Juan Carlos González	G.P2.59
José Vieira	U.P6.1, U.P7.7	Juan Carlos Moreno-López	V.O3.D2.6
Jose Vitor Candido de Souza	R.P7.32	Juan José Damborenea	C.O3.D2.2, C.P2.54
Jose Wagner Maciel Kaehler	U.P6.25	Juan Manuel Bermúdez-García	K.O1.D3.3
José Wilmar Calderón Hernández	L.O3.D3.4	Juan Manuel Pardal	Q.P3.43
Josiane Caetano	D.P4.13, T.P3.21, T.P3.24, T.P3.27, T.P3.5	JUAN RODRIGUEZ	D.O3.D1.8
Josiane Carneiro Souza	D.O2.D1.3, G.O2.D2.1		
Josiane Ribeiro Silva Silva	P.P1.46, P.P1.52		
Josiani Cristina Stefanelo	F.P2.6, F.P4.21, F.P4.28		
Josiel Barbosa Domingos	G.P4.21, G.P4.57, G.P4.58		
Josivanir Gomes Câmara	G.P4.59		



Juarez L. F. Da Silva	G.P4.64, V.O1.D3.2	Juliana Dos Santos Souza	G.P4.78, G.P6.77
Juciane Maria Alves	M.P7.11	Juliana Duarte Zotelli Boaventura	B.P4.27
Judes Gonçalves Santos	M.P7.15	Juliana Eccher	F.O3.D1.1, F.P2.19, F.P2.55, F.P4.23, F.P4.3, F.P4.36, F.P6.12, F.P6.3, G.P2.5, I.P7.18
Julia Aguiar	E.P3.13	Juliana Guerra Pinto	R.P7.22
Julia Andrea Carpenter	B.O1.D4.1	Juliana Hoch	C.P6.13
Júlia Barros Gomes	C.P6.26	Juliana Kelly Dionízio de Souza	D.O3.D1.4, D.P4.16
Julia B Bisogno	R.P7.9	Juliana Kelmy Macario Barbosa Daguano	C.P6.15
Julia Bortolusso Sampaio	G.P4.79, G.P6.22, G.P6.23, G.P6.81	Juliana Luiza da Silva Martins	G.O3.D1.3
Julia Ce de Andrade Pinto	A.O2.D2.3, C.P2.43	Juliana Machado Bertoi	L.P3.12, L.P3.13
Julia Cisilotto	A.O3.D2.4	Juliana Maria Abreu da Silva Morbec	S.O2.D1.1, S.P5.26
Julia Cristina Oliveira Pazinato	G.P4.62	Juliana M. P. Almeida	J.P5.32
Julia da Silva Menezes	E.O2.D3.4, E.P3.45	Juliana Pereira da Silva	J.O1.D4.3, P.P1.17, T.P3.12, T.P3.34, T.P3.4
Júlia da Silveira Salla	G.P2.54	Juliana Primo Basílio de Souza	Q.P3.33
Julia Delatorre Bronzato	E.P3.46	Juliana Regina Kloss	D.P4.30
Julia de Moraes Siedschlag	L.O3.D3.6, M.P7.30	Julian Arnaldo Avila	Q.P3.32
Julia Galhardo Serafim	Q.P3.38	Júlia Nascimento Pereira	Q.P3.34, Q.P3.35
Julia Helena De Paula	D.P5.58, J.P5.25	Juliana Solheid	C.P6.55
Julia Luise Melo Carneiro	A.P4.41	Juliana Thaler	A.O1.D2.2
Julia Moreira Pupe	C.P2.3, E.O3.D3.6	Julia Nathalia S. Almeida	T.P3.9
Juliana Amorim Coelho	N.P5.14	Juliana Zarpellon	M.O3.D1.8, M.P7.33
Juliana Bahu Rodrigues	U.P6.25, V.P1.24	Juliane Bessoni Kosctiuk	C.P2.23
Juliana Barros Silva	N.P5.22, N.P5.23	Juliane Francielle Tutija	B.P2.14
Juliana Batista Silva	A.O1.D2.1, A.O2.D2.1	Juliane Pscheidt	U.P7.14, U.P7.15
Juliana Both Engel	B.P2.69	Juliane Resges Orives	J.O2.D2.2
Juliana Cancino Bernardi	A.O2.D1.1, A.O3.D2.7, A.P5.69	Juliane Ribeiro da Cruz	O.O1.D3.1, Q.O3.D3.7
Juliana Carolina Tarocco	C.P2.17	Juliane Viganó	E.O1.D3.3
Juliana Casares	T.O3.D1.2	Juliane Zacour Marinho	G.P4.63
Juliana Cheleski	J.P5.8	Julian Geshev	U.O3.D1.2
Juliana Cheleski Wiggers	V.O2.D2.2	Julian Jones	A.O2.D1.3
Juliana Coatrini Soares	F.P4.29, F.P6.46	Julian Martínez	E.O1.D3.3
Juliana Daniel	S.P7.12		
Juliana da Silva Bernardes	B.O3.D1.5, B.O3.D1.6, D.O1.D2.2		
Juliana De Conto De Conto	N.O2.D1.2, N.P5.1		
Juliana de Fátima Silva	U.O2.D2.4, U.P7.43, V.P1.5		
Juliana de Souza Nunes	I.P7.9		

Juliano Assis Baron Engerhoff	X.O3.D1.2, X.P5.27, X.P5.28	A.P4.30, G.O1.D2.3, S.P5.22, S.P5.23, S.P5.33, S.P5.35, S.P7.17, S.P7.25, S.P7.3, S.P7.31, S.P7.33, S.P7.8
Juliano Casagrande Denardin	K.P7.17, M.O2.D2.1, M.O3.D2.8	Julio Ricardo Sambrano
Juliano de Andrade	L.P3.42	Julio Roberto Bartoli
Juliano Elvis Oliveira	B.P2.13, D.O1.D2.1, T.P3.9	Julio Roberto Santos Bicalho
Juliano E. Oliveira	E.P3.43, T.O3.D1.5	Julio Tanaka
Juliano Fiorelli	E.P3.79	Julio T Marumo
Juliano Marini	B.P4.1, X.O2.D1.1, X.O2.D1.3, X.P5.30	Jullyane Milena Silva Figueiredo
Juliano Soyama	H.O1.D1.4, P.O1.D3.3, Q.O1.D4.4	Julyanne Rodrigues de Medeiros Pontes
Julian Vieira Silveira	G.P4.64, U.O3.D2.7, V.O1.D3.2	Júnia Soares Nogueira Chagas
Júlia Paula de Oliveira Júlio	U.P7.1, U.P7.8	Junior Aparecido Menezes
Julia Pinto Piccoli	F.O2.D3.4	Junior Reis Silva
Julia r Greer	PL.5.D3.1	Junko Tsukamoto
Julielton de Souza Barata	C.P6.56	Junnia de Jesus Ferreira
Júlio C. Cezar	M.O1.D1.2, M.O3.D1.2, M.O3.D1.3, M.O3.D1.6, M.O3.D2.2, M.P6.20, M.P7.13, M.P7.34	Juraci Aparecido Sampaio
Júlio César Dainezi Oliveira	P.P1.68	Jurandir Hillmann Rohling
Julio César dos Santos	A.P4.44, B.P4.45	Jurandir Marcos Sousa
Julio Cesar Guimarães Tedesco	K.P7.9	Jurandir Rodrigues de Souza
Julio Cesar Jandorno	X.P5.33	Jürgen ANDREAUS
Júlio Cesar Lourenço	Q.P3.31	Jussara Fratelli
Júlio César Matias Souza	C.P2.15, C.P2.43	Jussara Rodrigues Fratelli
Júlio César Monteiro Júnior	F.P6.5	Jussara Soares da Silva
Júlio César Oliveira Ribeiro	V.P1.25	Jussier de Oliveira Vitoriano
Júlio César Pereira	P.P1.26	Justiano Quispe
Júlio César Pereira Barbosa	R.P7.27	
Júlio César Ugucioni	E.P3.43	<b>K</b>
Júlio Cezar de Oliveira Freitas	F.P2.45	Kaike Rosivan Maia Pacheco
Júlio C M Souza	C.O2.D1.2	Kaio Alves Brayner Pereira
Julio MARIN	H.P3.6	Kalyude Diógenes de Sousa
		Kamila da Silva Pompeu
		Kamila Pereira Cardoso
		Kamila Rodrigues Abreu

Kamilla Rodrigues Cruz	C.O1.D3.3, C.P6.14	Karolyne dos Santos Jorge Sousa	C.P6.36
Kanit Hantanasirisakul	V.O3.D3.4	KARYANE MEAZZA	B.P2.71
Karen Bolis	E.O3.D3.8, M.P6.38	Karyne Ramos de Campos Juste	C.P2.59
Karen Jochelavicius	B.P2.70	Kassio Papi da Silva Zanoni	A.P5.60, G.P6.53
Karen Lopes Lima	D.P5.16	Katharina Rodrigues Malafaia Macedo	G.P4.67
Karen Niede Franke	N.P5.15	Katherine Martinez Orozco	L.P3.19
Karen Rubiana Silva	Q.P3.31	Káthia Maria Honório	S.P7.18
Karen Yasmim Pereira dos Santos Avelino	A.P4.10, A.P4.5, U.P7.47		G.O2.D2.1, L.P3.43, N.O3.D1.6, N.P5.26
Karim Bouchmella	N.O3.D1.4	Katia Bernardo-Gusmão	
Karim DAHMOUCHE	G.O2.D3.4, G.P2.76		
Karim Sapag	N.P5.39	Katia Conceição	A.P5.28
Karina Alves Toledo	A.P4.16, A.P4.26, B.O3.D3.2	Kátia Flávia Fernandes	D.P4.51
KARINA ANDRESSA ALVES SEDANS	B.P2.81	Katia Franklin Albertin Torres	C.P6.64, G.P2.93
Karina Carvalho de Farias Nass	L.O1.D3.3	Katia Jorge Ciuffi	C.P2.31, D.P4.33
Karina Cesca	B.P2.31, G.P4.12		H.O1.D1.3, H.P3.2, P.P1.1, P.P1.34, Q.P3.5
Karina Danielle Pereira	C.O2.D3.4, C.P6.5	Kátia Regina Cardoso	
KARINA DA SILVA CHAVES	B.O1.D4.4		G.P2.70, G.P4.68, G.P4.69
Karina Feliciano Santos	C.P6.15	Katiúscia Daiane Ferreira	
Karina Maria Silva	B.O3.D2.4		G.O2.D2.1, L.P3.43, N.P5.26
Karina Passalacqua Morelli Frin	G.P6.64	Katiúscia Nobre Borba	
Karina Rocha Fonseca Souza	Q.P3.40	KATLIN IVON BARRIOS EGUILUZ	O.P7.7
Karine Cappuccio de Castro	T.P3.1, T.P3.2		G.P4.79, G.P6.22, G.P6.23, G.P6.81
Karine dos Santos Caetano	C.P6.16	Kauane Kashiya Pessoa	
Karine S. Alcântara	M.P7.13	Kaveh Edalati	H.O3.D1.4, H.P3.8
KARINY PEREIRA DA SILVA	C.P2.35	Kayam H Hamdar	C.P6.27
Karla Faquine Rodrigues	D.P5.11	Kayo Oliveira Vieira	F.P2.54
Karla Loyola de Oliveira Arantes	B.P2.1	Kazunori Fujisawa	V.O1.D2.2
Karla Silva Malaquias	G.P2.25	Keiliane Silva dos Santos	C.P6.26, C.P6.63
Karlisson Rodrigo de Almeida Sousa	S.P7.6	Kelcilene Teodoro	T.P3.25
Karmel Oliveira Lima	J.O1.D4.2	Kelen Cristina Dos Reis	E.P3.43
	G.P2.64, G.P4.66, G.P4.79, G.P6.22, G.P6.81	Keli Fabiana Seidel	F.O2.D1.2
Karmel Prado Pelissari		Keli Vanessa Salvador Damin	R.P7.13
Karolina Gaska	U.O1.D2.1	Kellen Cristina Mesquita Borges	G.P6.35
		Kellen de Lima Rosendo	J.P5.16
		Kelli de Fátima Ulbrich	M.P7.14
		Kelly Cristina Coelho de Carvalho Benini	E.P3.56
		Kelly Cristine Zatta	C.P6.13

Kelly Francisco Francisco	B.P2.15, B.P2.54	Lais Roncalho Lima	T.P3.35, T.P3.36
Kelly R. Fernandes	B.P2.7	Laís Sardinha Costa	F.P4.44, F.P4.45
Kelly Schneider Moreira	U.P6.2	Lais Soares Vieira	C.O2.D1.3
Kelly Tasso de Paula	J.P5.32, O.P7.8	Laís Weber Aguiar	F.P2.18
Kely Silveira Bonfim	B.P2.24	Laíze Zaramello	E.P3.26
Kenji Watanabe	V.O2.D3.2	Lakshmi S. Nair	C.O1.D2.1
Kenneth E. Gonsalves	F.P2.34	Lalgudi Venkataraman Ramanathan	L.O3.D3.8
Kenny de Almeida Gomes Monteiro	C.P6.17, L.P3.41	Lallamand Canedo de Souza	G.P2.85
Kerolene Barboza Barboza da Silva	C.P6.18	Lamara Maciel dos Santos	N.P5.24
Ketly Pontes	U.P6.28	LARA ABDALLAH ZAHALAN	P.P1.37
Ketly Pontes Soares	M.P7.50	Lara Fernandes dos Santos Lavelli	G.P4.70, U.P7.17, U.P7.27
Ketul C Popat	C.O1.D1.1	Lara F. Loguercio	F.P6.31
Kevin Figueiredo dos Santos	B.P4.52	Lara Kelly Ribeiro	S.P7.7
Kevin Sartori	J.O2.D2.2	Lara Marques Daminelli	V.P1.26
Keyle Torres Guedes	B.O1.D4.4	Larbi Siad	C.O2.D3.3
Khosrow Ghavami	B.O2.D1.3	Laressa Caciano	B.P4.15
Kiany Sirley Brandão Cavalcante	D.P5.39	Larissa Akashi	U.O2.D3.4
Klaus Krambrock	M.P6.7	Larissa Araújo Rolim	A.P4.22
Kleber José do Rosário da Silva	F.P4.44, F.P4.45	Larissa A. Santa Cruz	D.P5.13, G.O1.D1.2, G.P6.61
Kleber Roberto Pirota	K.O2.D3.3, M.O2.D3.1, M.O3.D2.5, T.P3.48	Larissa Bach-Toledo	F.O3.D3.8
Klebson Luceildo da Silva	M.P7.38	Larissa Bevenuto Gomes	E.P3.33
Kleper Rocha	F.P4.1	Larissa Brentano Capeletti	C.O3.D1.7
Konrad Klockars	B.O1.D2.3, B.O3.D1.7	Larissa Chiesa Mendonça de Souza	C.P6.49
Kurt Sillén	U.O2.D2.1	Larissa Cristina C. Garcia	P.P1.83, P.P1.84
		Larissa Cristina Sanchez	X.P5.30
		Larissa da Mota Heerd	G.P4.2
		Larissa Da Silva Marques	V.P1.27
		LARISSA DE SOUZA TOLEDO	D.P5.22
		Larissa dos Santos Born	F.P2.4, F.P4.10, G.P4.71, G.P4.9
		Larissa Faria Ribeiro	L.P3.24
		Larissa Fernanda Ferreira	A.O1.D1.3
		Larissa Giorgetti Mendes	T.P3.1, T.P3.2
		Larissa Lobo	R.P7.42, R.P7.43
		LARISSA MACIEL Maciel NASCIMENTO	R.P7.29
		Larissa Mariana Mendes Matsuda	B.P2.73

## L

Laécio Santos Cavalcante	S.O2.D1.4, S.P7.7
laerte soares filho	X.P5.42
Laffert G. Silva	M.P6.9, M.P7.15
LAIS CHANTELE DE LIMA	D.P4.16, R.P7.28
Laís Chantelle de Lima	D.O1.D1.2, D.P4.3
Laise Maia Lopes	B.P2.72
Laís Feltrin Sidou	I.P7.7
Laís Gimenes Vernasqui	D.P5.12
Laís Pellizzer Gabriel	C.O2.D3.4, C.P6.5

Larissa Mayra Silva Ribeiro	C.P6.19	Layne Taynara Santos Zanon	E.P3.10
Larissa M. B. Soares	A.P5.55	LÁYSA ROCHA LIMA	B.O3.D3.5
Larissa Medeiros Oliveira	B.P4.21	Lays Furtado de Medeiros Souza Kataoka	T.P3.37, V.P1.19, V.P1.28
larissa nunes nunes	Q.P3.36	Lázaro Aleixo dos Santos	C.P2.14, E.P3.23, L.O3.D3.5
Larissa Oliveira Berbel	P.P1.19	Lázaro José Gasparini	B.P4.15
Larissa Oliveira Garcia	D.P5.2, D.P5.44, D.P5.47	LEANDRA CARLA APARECIDA CORDEIRO	Q.O1.D4.5
Larissa Otubo	C.P2.34, M.P6.17, M.P7.55, U.P7.28, U.P7.41	Leandra Oliveira Salmazo	D.P4.39, D.P5.14
Larissa Solano Almeida	R.P7.12	Leandra Pereira dos Santos	U.P6.2
Larissa Solano de Almeida	G.P6.72	Leandra Santos Baptista	C.P2.13
Larissa Stieven Montagna	E.P3.47, E.P3.48, U.P6.33	Leandro Alves Silva	I.P7.13
Laryssa Roque da Silva	A.P5.31	Leandro Aparecido Pocrifka	V.P1.30, V.P1.31
LaShanda Korley	B.O3.D2.1	Leandro Augusto Zago	A.P4.6
Lauany Mazzon Pontes	C.P2.31	Leandro Benatto	E.O1.D4.4, G.P2.77, S.P7.16, S.P7.6
Laudemir Carlos Varanda	A.P5.23	Leandro Bortot	C.P6.31
Laura Almeida Pereira Almeida	H.P3.15, M.P7.53	Leandro Bruno Alves Caio	X.P5.29
Laura Ardila Rodriguez	O.P7.17	Leandro Cardoso Xavier	D.P4.55
Laura Caetano Escobar da Silva	C.O1.D2.2	LEANDRO CARLOS FIGUEIREDO	M.P7.16
Laura Fornaro	D.O3.D1.6, V.P1.10	Leandro Carneiro Fonseca	A.P5.40
Laura Neves Alencar	D.P4.39, D.P5.14	Leandro César Michelotti	X.P5.40
Laura Oliveira Péres	A.P4.36, F.O3.D1.4, F.P4.30	Leandro C. Figueiredo	M.P7.5
Laura Palermo Gomes	R.P7.30	Leandro De Oliveira	C.P6.20, L.P3.46
Laura Renata Aragão Silva	O.P7.7	Leandro Felix Bufaiçal	G.P4.4, M.P7.18
Laura Ribeiro Paulinelli	U.P7.18	Leandro Ferres Cassel	L.P3.10
Laura Simonassi Raso de Paiva	G.P4.8, V.P1.40	Leandro Goulart de Araujo	N.O3.D1.2
Laura Ximena Lovisa	G.P4.82	Leandro H. F. Andrade	M.O2.D2.3, M.P7.17
Laureana Moreira Mota	C.P2.59	Leandro Hostert	U.O1.D3.3, U.O2.D1.2
Laurent Lemaire	A.O3.D2.6	Leandro José Maschio	P.P1.58
Laurent Vila	M.O3.D1.8	Leandro Legramanti Ody	A.O3.D2.4
Lauro June Queiroz Maia	G.P2.70, G.P4.4, G.P4.68, G.P4.69, J.O1.D2.1, J.P5.15, V.P1.10	Leandro Lemos Gonzales	G.P4.72
Lauro Silva	D.P4.10	Leandro Lemos Peres	G.P2.48
lavinia alves borges	Q.P3.64	Leandro Luza	B.O1.D3.3
Lawrence Gonzaga Lopes	C.P2.28	Leandro Mercedes	F.O2.D1.3, F.O2.D3.1, F.O3.D1.8
Layane Rodrigues Almeida	G.P4.61	Leandro M Malard	V.O1.D2.2
Layde Teixeira de Carvalho	A.P4.44, B.P4.45	Leandro Moreira Stefano	E.O1.D3.2
		Leandro Piaggi Ravaro	G.P4.73, J.P5.26

Leandro Rodrigues Barbosa	Q.P3.47		
Leandro Seixas Rocha	V.O3.D2.3		
Leandro Serrano	P.P1.6		
Leandro Silva Rosa Rocha	G.P2.8, S.P7.8		
Leandro Tolentino Coutrim	M.P7.18		
Leandro Zucolotto Cocca	G.P4.11, G.P6.15, G.P6.16		
Leidiane F Gonçalves	C.P6.9		
Leila Aparecida Chiavacci	A.O3.D2.6, A.P4.23, C.P6.67		
Leila Figueiredo de Miranda	A.P5.18, C.P6.21, V.O3.D2.3b		
Leilane Roberta Macario	E.O3.D3.3		
Leila Samara Magalhães	A.P4.7		
Leila Seleme Mariano Alves	U.P7.19		
Leilayne Pascoal Pedro	N.P5.25		
Leila Yuan Visconte	X.P5.33		
Leinig Antonio Perazolli	G.P4.22		
Leliz Ticona Arenas	B.P4.23, C.P6.16, F.P2.40		
	F.P2.15, F.P2.22, F.P4.6, G.P2.58, G.P4.17, G.P4.24, G.P6.24, L.P3.14, M.P6.8		
Leni Akcelrud			
Leonard Bonville	E.O1.D4.2		
Leonard Francis Deepak	C.O2.D3.1		
Leonardo Augusto Luiz	L.P3.42		
Leonardo Barbosa Godefroid	D.P5.18		
Leonardo Barcelos de Paula	A.P4.8, B.P2.36, M.P7.19		
Leonardo Cabral Gontijo	C.P2.10		
Leonardo C. Campos	V.O3.D3.3		
Leonardo Contri Campanelli	C.O3.D2.4, C.P6.22		
LEONARDO CRISTIANO CAMPOS	V.O2.D3.2, V.O3.D3.2		
Leonardo De Boni	G.P4.11, G.P6.15, G.P6.16, G.P6.3, G.P6.79		
Leonardo de Souza	B.P2.5		
Leonardo Dias Cagnani	T.P3.38		
			F.O3.D3.5, F.P2.4, F.P4.10, F.P4.12, F.P4.38, G.O1.D4.3, G.P4.51, G.P4.71, G.P4.8, G.P4.9, G.P6.42, V.P1.40
Leonardo Evaristo de Sousa			
Leonardo Fernandes Antunes	X.P5.28		
Leonardo F Fraceto	A.P4.12, A.P4.13, A.P5.36		
			A.O2.D2.4, A.P4.15, A.P4.33, U.O2.D3.1, U.O2.D3.2, U.O3.D3.4, U.P6.15, U.P7.55
Leonardo Giordano Paterno			
Leonardo Giovanetti	P.P1.80		
Leonardo Gois Lascane	S.P5.8		
Leonardo Gonçalves Dias	C.O3.D1.8		
Leonardo Henrique Gouvêa	P.P1.58		
Leonardo Hideki Hasimoto	U.P7.40		
Leonardo José Amaral Siqueira	F.O3.D1.4		
Leonardo José Dalla Costa	M.P7.20		
Leonardo Junio da Cruz	G.P4.74		
Leonardo Konopaski Andreani	S.P7.9		
Leonardo Lataro Paim	U.P7.12, U.P7.20, U.P7.21		
Leonardo Lúcio de Araújo Gouveia	E.P3.11, L.P3.1		
Leonardo Luis Lemes	M.P7.20		
Leonardo Mitsuo Kofukuda	G.O3.D3.5, G.P4.36		
Leonardo Miziara Barboza Ferreira	A.P4.4, A.P4.9		
			A.P4.17, A.P4.50, C.P6.23, D.P4.21, D.P5.21
Leonardo Negri Furini			
Leonardo Nishiguti Silva	U.P6.33		
Leonardo Oliveira Aguiar	F.P2.14		
Leonardo Pollettini Marcos	H.P3.3		
Leonardo Poloni Pavan	F.P4.31		
Leonardo Ribeiro Fonseca	U.P6.32		
Leonardo Rimrichter	A.P5.51		
Leonardo Sales Araujo	C.P6.49		

Leonardo Soares de Oliveira	G.O1.D4.2, G.O2.D1.3, G.P2.22, G.P2.31, M.P7.21	Letícia Zanchet	D.O2.D1.3, G.O2.D2.1, L.P3.43, N.P5.26
Leonardo Sobreira Rodrigues	G.P2.46	Leticia E. L. Ferreira	U.O2.D1.1
Leonardo Ulian Lopes	E.O3.D3.8, L.O3.D3.6, M.O2.D3.4, M.P6.21, M.P6.38, M.P7.54, X.O3.D1.2	Levi Costa Felix	U.P7.24
Leonardo Villegas-Lelovsky	V.P1.29	Levy Alvarenga Galindo	F.P2.17
Leonardo V. S. França	G.P6.8	Leydi del Rocío Silva Calpa	D.O3.D2.5
Leonardo Wu	Q.P3.13	Leyre Gómez Navascués	A.P5.23
Leonel Meireles	V.P1.21	L. G. Martinez	C.P6.34
Leonilson Kiyoshi Sato de Herval	E.P3.43	Lia Junqueira Pimont	P.P1.54, P.P1.75
Léony Soares Oliveira	A.P4.10	Lia Mara Marcondes	J.P5.17, J.P5.18, J.P5.26, J.P5.30
Leticia Aparecida da Silva	G.P6.47	Liana Alvares Rodrigues	D.P5.11
Letícia Assunção da Costa	Q.P3.37	Lianet Aguilera Domínguez	J.O1.D4.3, T.P3.12, T.P3.4, V.P1.30, V.P1.31
Letícia Barros Prado	G.P6.75	Liangzhi Kou	G.P2.13
Letícia B. V. Sales	G.O1.D1.2, G.O2.D2.2, G.P4.39, G.P6.61	Libardo Andrés González-Torres	B.P2.67
Letícia da Silva Vitorino	U.O1.D3.2	Lídia Correia Aquino	B.P4.4
Letícia Frigerio Cremasco	U.O3.D3.3, U.P7.8	Lídia Cristina D Agostino	N.P5.27
Letícia Gazola Tartuci	G.P2.91	Lidia Maria Rebolho Batista Arantes	F.P2.33, F.P2.5, F.P6.18, F.P6.46
Letícia Guerreiro da Trindade	D.O2.D1.3, G.O2.D2.1, L.P3.43, N.P5.26	Lidiana Maranesi Silva	G.P4.75
Letícia Heldt Rabelo	B.P4.1	Lidiane Cristina Costa	C.P2.33, X.O2.D1.1, X.O2.D1.3, X.P5.30
Letícia Ilberto da Silva	U.O3.D2.2	Lidiane Rodrigues Antunes	T.P3.27
Letícia Lira Tacca	S.P5.6	Lidiane Vizioli de Castro Hoshino	B.P2.63
Letícia Machado	C.P6.44	Lígia Cristina Camargo Dias	C.P6.25
Letícia Maria Anselmo	Q.O3.D3.3, Q.P3.38	Lígia Maria Manzine Costa	T.P3.55
Letícia Mariê Minatogau Ferro	F.O2.D3.1	Ligia Passos Maia	A.P4.11, B.P2.4, B.P2.75, B.P4.24
Letícia Marques Foiani	B.P2.30	Ligia Yassuda	H.O2.D1.3
Letícia O. Laier	S.P5.34, S.P7.10	Lilia Ferreira de Moura Costa	B.P4.44
Letícia Patricio Christopholi	F.P2.39, U.P7.22, U.P7.23	Liliam Viana Leonel	A.P5.33, D.P5.8
Letícia Rabelo Muniz	Q.P3.43	Liliana Lira Pontes	D.O3.D1.5
Letícia Silva De Bortoli	X.P5.1	Lílian Cruz Santos	S.P7.10
Letícia Streck	B.P2.74, C.P6.24	Liliane Damaris Pollo	D.P4.58, N.O3.D1.5, N.P5.31, N.P5.35, S.P5.9
Letícia Trezecik Silvano	M.P6.25	Liliane Lelis Oliveira	D.P5.15

Liliane Maria Ferrareso Lona	B.P4.26, B.P4.27, T.P3.39	Loengrid Bethencourt	V.P1.10
Lilian Gulgielmin	G.P6.5	Long Bai	B.O3.D1.7, B.P4.32
Lílian Lefol Nani Guarieiro	A.O1.D2.3	Lorena Araújo Silva	D.P5.16
Lilian Rodrigues Braga	D.P4.37	Lorena Batista Caliman	M.P7.23
Lilian Vanessa Rossa Beltrami	U.P7.38	Lorena Dariane da Silva Alencar	G.P6.36
Lili Wu	G.P4.19	Lorena Laize Santos Alves	G.O2.D3.1
Lillian Maria Uchoa Dutra Fechine	U.O1.D1.3	Lorena Portela Brazuna	G.P6.14, G.P6.56
Lindiane Bieseki	N.P5.11, N.P5.32	Lorena Silva Nascimento	F.P4.44, F.P4.45
Lindiomar Borges de Avila Junior	S.P7.11	Loren Mora Pastrana	F.P4.24
Lindolfo Araújo Moreira Filho	Q.P3.70	Lorrane Cristina Cardozo Bonfim Oliveira	U.O3.D3.3
Lindomar Albuquerque	A.P4.27	Louise Diniz Maciel	F.P6.8, F.P6.9
Ling Wang	B.P4.32	Lourdes Gracia	S.P5.32, S.P7.15, S.P7.3, S.P7.36
Linnea Selegård	S.O1.D2.2, U.O2.D2.1	Luana Carina Benetti	G.P6.41
Lippy Faria Marques	O.P7.8	Luana Carvalho Leal	T.P3.4
LIRIO SCHAEFFER	R.P7.46	LUANA CRISTINA DE MENEZES DE MENEZES	E.O1.D4.4, G.P2.77, G.P4.5
Lisandro Giovanetti	J.P5.1	LUANA CRISTINA WOUK DE MENEZES	G.O3.D1.3
Lisiane da Silva Severo	V.P1.24	Luana Cristina Wouk de Menezes	S.P7.6
Livia Assis	C.P2.17	Luana Dezingrini Lopes	F.P4.31
Livia Bast	B.O3.D2.5	Luana Gonçalves	C.P2.4, G.P6.70
Lívia Macková	M.O1.D3.3, M.P7.22	Luana Leal Carvalho	J.O1.D4.3
Lívia Ramazzoti Chanan Silva	U.P7.25, U.P7.26	Luana Martins de Carvalho	F.P4.1
Lívia Santos Gomides	C.P6.26, C.P6.63	luana Orlandini	Q.P3.64
Lívia Sottovia	C.O2.D2.4, R.P7.15, R.P7.16, R.P7.3, R.P7.37	Luana Uszacki Krüger	G.O2.D1.4, G.P2.48
Livio Amaral	L.O1.D4.2	Luanda C.V. Lins	C.O3.D1.7
Liwei Lin	D.O3.D1.7	Luanne Ester Monteiro Ferreira	U.P6.22
Lizandra Leticia Lopes de Souza Melo	G.O3.D3.8	Luan Santos Lima	G.P6.8
Lizandra M. Zimmermann	I.P7.18, I.P7.2, I.P7.8, L.P3.44	Lucas Alonso Rocha	C.P2.31, C.P6.3
Lizandro Manzato	E.P3.53, E.P3.69	Lucas A. Manfroi	L.O3.D3.2, R.P7.32, R.P7.42, R.P7.43
Lizeth Carolina Mojica Sánchez	B.O3.D2.3, B.O3.D2.4, T.P3.28	Lucas Anhezini de Araujo	A.P5.44
Liziane Marçal	D.P4.33	Lucas Anhezini de Araújo	A.P5.43
liziane maria belloto de francisco	B.P2.62, B.P2.63, B.P2.76	Lucas Augusto Manfroi	R.P7.22
Loan Filipi Calheiros Souto	U.P6.27	Lucas Barcelos Otani	Q.P3.61
		Lucas Barros de Oliveira	P.P1.2
		Lucas Batista Silva	C.P2.36
		Lucas Battú	L.O1.D4.2



Lucas B. Gomes	N.P5.18	Lucas Neves Botosso	D.P4.2
Lucas Bragança de Carvalho	A.P4.12, A.P4.13	Lucas Noboru Fatori Trevizan	X.P5.31, X.P5.37
Lucas Costa Sena	L.P3.38	Lucas Oliveira da Silva	P.P1.81
Lucas Cruz Nascimento Mo	U.P7.13	Lucas Paixão	K.O3.D3.4, K.P7.1, K.P7.10, K.P7.9
Lucas da Silva Rodrigues	E.P3.19, E.P3.28, E.P3.39, E.P3.49, E.P3.50, E.P3.59, E.P3.75	Lucas Panini Valcanaia	I.P7.7
Lucas de Alcântara Sica de Toledo	B.P2.62, B.P2.63, B.P2.76	Lucas Pauli de Souza	O.P7.6
Lucas de Almada Torres	P.P1.24, Q.P3.39	Lucas Rafael Carneiro da Silva	C.P6.69
Lucas Dionísio Barros	D.P5.16	Lucas Rafael Quirino de Andrade	G.P2.65, G.P2.78, G.P2.81, G.P2.82
Lucas do Prado Cardoso	G.P6.59	Lucas Ribeiro de Sousa	L.P3.18
Lucas Faccioni Chanchetti	H.P3.14	Lucas Ricardo Fernandes Figueiredo	D.O1.D2.1
Lucas Felipe de Lima	F.P4.32	Lucas Rios do Amaral	F.P6.42
Lucas Fernandes Aguiar	G.O3.D1.5	Lucas Scalon	F.P2.1, T.P3.40
Lucas Ferreira Lyra	L.P3.61	Lucas Szmigel Moda	B.P4.24
Lucas Fiocco Sciuti	G.P6.15, G.P6.16, G.P6.3, G.P6.79	Lucas Victor Benjamim Vasconcelos	C.P6.27
Lucas Freitas Berti	L.P3.27	Lucas Vinicius de Lima Citolino	F.P2.27
Lucas Fugikawa Santos	F.O2.D1.1, F.P2.29, F.P2.35, F.P2.54, F.P2.58, F.P4.20, F.P4.22, F.P4.35, F.P6.10	Lucas Wendell Gonzaga Magalhães	A.P4.48, C.P6.66, H.P3.15, I.P7.15
Lucas Galhardo Pimenta Tienne	U.O2.D2.2, U.P6.44, U.P6.9	Lucas Zochio	E.P3.51
Lucas Gontijo Moreira	B.O3.D3.2, B.P2.77	Lucca Monteiro Silva Semensato	D.P5.17, Q.P3.41
Lucas Guerra Silvestre	U.P6.18	Lucia Helena Innocentini Mei	E.O1.D3.3, T.P3.1, T.P3.2, T.P3.39
Lucas Henrique Oliveira Souza	Q.P3.40	Luciana Daniele Trino	C.O3.D1.8
Lucas Henrique Pereira Silva	D.P5.46	Luciana de Oliveira Roque Santos	J.P5.14
Lucas Italo Freitas Pinto	E.P3.5	Luciana de Simone Cividanes	P.P1.10, P.P1.20, P.P1.8, U.P6.3
Lucas Jorge Affonço	G.O2.D3.3, G.P6.39, R.O2.D3.2, R.P7.11, R.P7.31	Luciana do Carmo Paulino Silva	B.P2.78, B.P2.79, B.P4.6
Lucas Kaique Roncaselli	F.O2.D2.3, F.P2.28	Luciana Guimarães Munhoz	A.P5.50
Lucas Leão Nascimento	G.P4.63	Luciana Maccarini Schabbach	X.P5.1
Lucas Lima Pelais	L.P3.45	Luciana Machado Rodrigues	L.P3.12, L.P3.13
Lucas Luiz Messa	T.P3.49	Luciana Maria Hollanda	B.O3.D3.3
Lucas Mateus de Lima Neris	B.P2.8	Luciana M. R. Alencar	A.P4.37, C.P2.34, S.P5.28, V.O1.D2.3
Lucas Moreira Ferreira	P.P1.55	Luciana Reyes Pires Kassab	G.O3.D1.8, G.P4.59
Lucas Muraro Sassi	R.P7.2	Luciana Sampaio Ribeiro	M.P7.24
Lucas Natálio Chavero	G.P4.70, U.P7.17, U.P7.27	LUCIANA SGARBI ROSSINO	R.P7.12

Luciane Effting	M.P6.18	Lucíola Lucena de Sousa	C.P2.18, C.P6.1, Q.P3.28, Q.P3.29
Luciane Novaes Tenório	F.P6.43	Lucio Strazzabosco Dorneles	M.O2.D2.1, M.O3.D1.6, M.P6.20
Luciane Sopchenski Santos	J.P5.14	Luc Pichon	R.P7.1
Luciano Aparecido Meireles Grillo	T.P3.55	Luc Stafford	R.O3.D3.8
Luciano Augusto Lourençato	P.P1.56	Lucy V. Credidio Assali	M.O3.D2.6, S.O3.D1.5, V.P1.1
Luciano Bachmann	C.P6.28	Ludmila da Silva Candido	U.O2.D2.2
Luciano Braga Alkmin	P.P1.57	Luelc Sousa da Costa	G.O3.D2.7, G.P2.84, G.P6.17
Luciano Carneiro Reis	E.O2.D3.2, L.P3.57 A.P4.24, A.P4.36, A.P5.12, A.P5.54, A.P5.56, A.P5.57, A.P5.63, B.P2.33, F.O1.D4.4, F.O2.D3.3, F.P2.44, F.P6.26	Luele Ribeiro de Sousa Barbosa	G.P6.18
Luciano Caseli		Luísa Banar Guedes	G.P4.48
Luciano Clécio Brandão Lima	C.P2.29	Luisa Bataglin Avila	B.P2.80
Luciano da Silva	T.P3.57	Luisa Gouvea Teixeira	C.P6.56
Luciano Gularte	G.P2.45	Luisa Macedo Vasconcelos	B.O3.D1.4
Luciano Paulino Silva	C.P2.3, D.P5.57, E.O3.D3.6, E.P3.62, U.O2.D3.2	Luis Augusto Rocha	R.P7.31
Luciano Ribeiro	G.P6.42	Luís Augusto Rocha	C.O2.D2.4, C.P2.16, C.P2.2
Luciano Tavares da Costa	S.P5.29	Luis Cesar Fontana	J.P5.3, R.P7.30
Luciano Timm Gularte	G.P2.87, G.P2.92	Luis Claudio Mendes	C.P2.57, G.P4.67, U.P7.16
Luciano Vitali	U.P6.14	Luis Dias Carlos	G.O1.D4.4
Lucia Vieira	L.O3.D3.2, L.P3.50, R.P7.22, R.P7.32, R.P7.33, R.P7.42, R.P7.43	Luíse Cambuzzi Dalló	F.P4.33
Luci Cristina de Oliveira Vercik	A.P4.14, A.P5.13, C.P2.32, U.P6.8	Luis Eduardo Antunes Vieira	P.O2.D3.3
Luciena dos Santos Ferreira	T.P3.59	Luis Eduardo de Sena dos Santos	U.P7.29, U.P7.5
Luciene Batista Silveira	M.P7.15	Luis E. Gomez Armas	U.P6.25, V.O1.D4.5, V.P1.24
Luciene Santos de Carvalho	N.P5.11	Luis Esteban Romero Vega	H.O1.D1.2
Lucilaine Valéria de Souza Santos	D.P4.23	Luis Eugenio Fernandez-Outon	A.P5.33, D.P5.36, D.P5.8, D.P5.9, M.O2.D2.3, M.P7.17, M.P7.24, M.P7.28, M.P7.43
Lucimara Gaziola de la Torre	A.P4.2, B.P2.2 A.P5.37, E.O1.D4.4, G.P2.2, G.P2.77, G.P2.79, G.P2.80, G.P4.5, G.P6.34, L.P3.3, L.P3.40, S.P7.6, T.P3.44, U.O1.D1.2, U.O3.D3.2, U.P7.19	Luis Felipe Baptista dos Reis Silva	P.O3.D2.3
Lucimara Stolz Roman		Luis Felipe de Paula Santos	P.P1.49, X.P5.36
		Luís Felipe Lima Matos	B.P2.48
		Luis Felipe Zanetti	L.P3.51
		Luis Fernando Baldo Estorari	D.P5.17
		Luis Fernando Carmo Morato	B.P2.53
		Luis Fernando Castro	Q.P3.56

Luís Fernando da Silva	D.P5.6, G.P2.14, G.P2.6, G.P6.21, G.P6.89	Luiza dos Santos Conejo	U.P7.44
Luis Fernando dos Santos	E.P3.33	Luiza Freire Woigt	C.P6.5
Luis Fernando Garcia Ambrosi	L.O2.D3.1	Luiza Gualter Ramires	F.P2.35, F.P4.35
Luis Flávio Gaspar Herculano	Q.O2.D3.3	Luiz Alberto Ferreira Silva	X.P5.6
Luís Gonzaga Trabasso	O.O1.D3.2, O.O1.D3.4, O.O1.D3.5, O.P7.10, O.P7.11	LUIZ ALBERTO KANIS	B.P4.5
Luis Guilherme Lyra	L.P3.70	Luiz Alkimin de Lacerda	S.P7.30
Luís Gustavo Ferroni Pereira	P.P1.58	Luiz Angelo Berni	P.O2.D3.3
Luís Gustavo Teixeira Alves Duarte	F.P2.41, G.O3.D1.6, G.P4.24	Luiz Antonio de Oliveira Nunes	G.P4.34, J.O1.D4.1
Luis H C Andrade	G.P4.34	Luiz Antonio Pessan	H.O3.D1.1, X.O2.D1.1
Luis Henrique Cardozo Amorin	S.P7.12, S.P7.41, S.P7.42	Luiza Spanamberg Silveira de Souza	F.P4.36
Luis Henrique da Silveira Lacerda	S.P7.37, S.P7.9	Luiz Carlos Cambuim Machado	T.P3.41
Luis Henrique Fontanella	O.O1.D3.4, O.O1.D3.5	Luiz Carlos Carlos Pocas	E.P3.52, G.P6.20
Luis Henrique Tigre Bertoldo	F.O1.D4.1, F.P4.34	Luiz Carlos Casteletti	Q.P3.24, Q.P3.25, R.P7.39
Luis Madeira	P.P1.59	Luiz Carlos Duarte Cavalcante	M.P7.25, M.P7.48
Luis Marcelo G da Silva	B.O2.D3.3, C.P2.52, D.P4.36, F.P6.41, U.P7.58	Luiz Carlos Mariano	G.P2.2, G.P2.79, G.P2.80, L.P3.3
Luis Marchesi	F.O3.D3.6, F.P6.28, U.P7.14, U.P7.15	Luiz Claudio Pardini	P.P1.4
Luis M. G. Abegão	G.P6.16	Luiz Di Souza	N.P5.40
Luís Miguel Pereira	V.O3.D2.4	luiz edmundo bastos soledade	M.P7.47
Luís Otávio Zapparoli Falsetti	F.O2.D3.1	Luiz Eduardo Angelo Sanchez	P.P1.32
LUIZ RICARDO PEREIRA MUCCIARONI	G.P6.19	Luiz Eduardo Justiniano da Silva	E.P3.24
Luis Rogerio de Oliveira Hein	O.P7.3, X.P5.36	Luiz Felipe Bauri	Q.P3.3
Luis Rogério Dinelli	F.O3.D1.3	Luiz Felipe Castello Del Caro	L.P3.70
Luis Torres Quispe	G.P6.41, M.O2.D3.2, M.P6.26, M.P7.31	Luiz Felipe Costa	C.P2.36
Luiza Abrahão Frank	A.P5.14	Luiz Felipe da Hora	I.P7.9
Luiza Amim Mercante	G.P6.3, T.P3.45	Luiz Felipe Kremer	V.P1.32
Luiza Bedin Rocetto	L.P3.53	Luiz Fernando Cótica	M.O1.D3.3, M.O3.D2.7, M.P7.22, M.P7.38, M.P7.45
Luiza Cardoso Cintra	J.P5.34	Luiz Fernando de Araujo Ferrão	P.P1.2, P.P1.46, P.P1.47, P.P1.52, P.P1.54, P.P1.69, P.P1.75
Luiza de Queiroz Corrêa	F.O2.D2.4, G.O3.D1.3	Luiz Fernando Roncaratti	F.P4.12
		Luiz Filho Rodrigues leal	M.P7.25
		Luiz Filipe Tsarbopoulos de Resende	B.P4.29

Luiz Gastão Filho	C.P6.29
Luiz G. Greca	B.O1.D4.5, B.O3.D1.2, B.O3.D1.7
Luiz Gonzaga Martins	P.O3.D2.6
Luiz Greca	B.O1.D2.3
Luiz Guilherme Abreu de Paula	L.P3.30
LUIZ GUSTAVO BONATO	G.O3.D1.6
Luiz Gustavo Simão Albano	F.P2.36, F.P4.37
Luiz Henrique Capparelli Mattoso	A.O3.D2.2, F.P4.29, T.O1.D1.3, T.P3.25, T.P3.9
Luiz Henrique Catalani	T.O3.D1.1
Luiz Henrique Dall Antonia	E.O3.D3.5, G.P4.16
Luiz Henrique Dias Alves	Q.P3.3
Luiz Henrique Gasparotto	A.P5.48
Luiz Henrique Hideki Igari Cavamura	F.P4.38, G.P4.51
Luiz Henrique Martinez Antunes	X.P5.32
Luiz Henrique Quinquilo Ribeiro de Lima	X.P5.7
Luiz Henrique Rodrigues Rola Possarle	F.O2.D3.3
Luiz H.Y. Caldeira	A.P4.13
Luizildo Pitol Filho	B.P4.7
Luiz Jacobsohn	G.O3.D3.6, G.P6.9
Luiz Orlando Ladeira	C.O2.D1.4, F.P6.36, F.P6.38
Luiz Paulo Mendonca Brandão	Q.P3.36
Luiz Stragevitch	G.P4.27
Luiz Tadeu Gabriel	D.P5.18
Luiz Thiago Vasconcelos da Silva	D.P5.19, N.P5.28
Lukas Augusto de Lima Basilio	T.P3.34
Luma Clarindo Lopes	A.P5.9, C.P2.4, G.P6.70
Luma Fritsch	F.P2.12
Lumirca Del Valle Espinoza	X.P5.33
Lutz Grubert	F.O1.D1.3
Luzeli Moreira da Silva	C.P2.34, C.P2.35, K.P7.12, K.P7.13, K.P7.2, K.P7.3

Luzia Maria Castro Honório	B.P2.48, D.O3.D2.1, D.P4.19, D.P5.42, E.P3.65, G.P4.61, G.P4.76, G.P4.77, G.P6.2
Luzia Rejane Lisboa Santos	E.O3.D3.7
Lyara Ferreira Pereira	D.P5.20, D.P5.31
Lyneker Souza Moura	L.P3.36

## M

Maciel Santos Luz	M.O2.D3.2
Magdalena Walczak	R.O3.D3.7
Magna Suzana Alexandre-Moreira	A.P5.45
Magnus Roberto Diniz Junior	E.P3.57
Maguy Jaber	D.P5.42, E.P3.65
Mahdi Rafiee	B.O1.D4.5
Mahmi Fujimori	B.P2.79
Maia Mombrú	G.P2.35
MAIARA DE JESUS BASSI	G.P4.5
Maiara Schein Trevisol	L.P3.6
Maicon Dinael Ücker	G.P2.78, G.P2.81, G.P2.82, G.P6.60
Maicon Gois Magalhães	G.O3.D3.6, G.P6.9
Maicon Rogério Crivoi	Q.P3.13
Maicon Rogério de Souza	G.P6.20
Mailson Matos	B.P4.22, B.P4.8, B.P4.9
Maira Theisen	B.P4.10
Maisa Helena Mancini	D.P5.17
Maitê Thainara Barth	A.P4.27
Maiyara Carolyne Prete	G.P4.16
Maíza da Silva Ozório	F.O1.D4.2, F.P4.39, F.P6.11, F.P6.16
Maíze Aparecida dos Santos Kodama	P.P1.82
Malte Grüner	A.O2.D2.2
Manfred Georg Kratzenberg	G.P6.11
Manfredo Harri Tabacniks	R.P7.5
Manoel Carvalho Castro Junior	M.P6.12
Manoel Cléber Sampaio Alvez	P.O2.D2.2

Manoella Silva Cavalcante	U.O2.D2.3	Marcelo Barbalho Pereira	B.P2.21
Manoel Messias Pereira de Miranda	G.P4.47	Marcelo Barbosa Andrade	V.P1.18
Manoel Quirino Silva Júnior	P.P1.24, Q.P3.39	Marcelo Barbosa de Andrade	O.P7.8
Manoel Victor Frutuoso Barrionuevo	S.P7.13	Marcelo Barbosa Furtini	B.P2.25, D.P4.19, E.P3.5, G.P4.60, G.P4.61
Manuel Henrique Lente	E.P3.12, G.O1.D1.4, G.O2.D1.1, G.O3.D1.2, M.P7.41	Marcelo Baruffi	C.P6.31
Manuel Hernandez-Rodriguez	N.O2.D1.1	Marcelo B Bento	D.P4.55
Manuel Houmard	J.P5.2	Marcelo Brocchi	A.P5.11, C.O3.D1.3
Manuella Gobbo de Castro Munhoz	U.P6.40, U.P6.5	Marcelo Campos	R.P7.18, R.P7.34
Manuella Silva Soares Barreto	D.P4.45	Marcelo Cristiano Meneses Pedra Branca	F.P4.40
Manuel Valente Almeida	K.O2.D3.3	Marcelo Dal Bó	E.P3.18
Maraísa Gonçalves	U.P7.28, U.P7.4, U.P7.41	Marcelo de Assis de Assis	G.P4.46, M.P6.10, O.P7.15, S.O3.D2.6, S.P5.32, S.P5.34, S.P7.1, S.P7.10, S.P7.2, S.P7.24
Mara Zeni Andrade	L.P3.53	Marcelo de Assunção Pereira-da-Silva	B.P4.49, F.O3.D3.1
Marc Chaigneau	V.O1.D4.1	Marcelo Demetrio Magalhães	X.P5.27
Marcela Beatriz Fernández van Raap	A.P5.27	Marcelo Eising	U.O1.D1.2, U.P7.19
Marcela Bergamaschi Tercini	J.P5.13, L.P3.46, S.P5.3	Marcelo Falcão de Oliveira	L.P3.49, P.O3.D2.4
Marcela C. Camara	A.P4.13	Marcelo Falcão Oliveira	P.O3.D2.6
Marcela Guiotoku	L.P3.27	Marcelo Fernandes	F.P2.38
Marcela Lamoglia	P.P1.6	Marcelo Fernandes Cipreste	A.O1.D2.1, A.O2.D2.1, A.P5.66
Marcela Mohallem Oliveira	F.P2.22, F.P4.6	Marcelo Fernandes Oliveira	C.P2.31, X.O1.D1.3
Marcela Pfeifer	B.P4.37	Marcelo Ferreira Machado	C.P6.30
Marcella Auxiliadora de Melo Lucena	G.O1.D4.5	Marcelo Gabriel de Oliveira	C.O2.D2.2
Marcella Cortes da Silva	E.P3.53	Marcelo Ganzarolli De Oliveira	C.O1.D2.2
Marcelle Agudo de Freitas Agudo de Freitas	T.P3.42	Marcelo Giovanela	B.P4.19
Marcello Baricco	H.O2.D1.4	Marcelo Gonçalves Rosmaninho	G.P4.49
Marcello Filgueira	R.P7.24	Marcelo Gryczak	D.P5.1
Marcelly Chue Gonçalves	A.O1.D1.4, A.P4.3	Marcelo G. Vivas	G.P2.34, G.P4.75, G.P6.19
Marcelo Akira Saito	B.P2.37	Marcelo Henrique Sousa	M.O2.D1.1
Marcelo Antonio Donizetti Martinho	M.P6.33, S.P5.15, S.P7.14	Marcelo Jorge Cavalcanti de Sá	B.P4.11, B.P4.12
Marcelo Augusto Gonçalves Bardí	E.P3.6, L.P3.47	Marcelo José de Barros Souza	D.P4.54
Marcelo Augusto Rosa	K.O1.D3.2, M.P6.31		

Marcelo José Gomes da Silva	C.P6.29, Q.P3.43	Marcia Rodrigues de Morais Chaves	D.P4.12, D.P5.22
Marcelo José Santos Oliveira	C.P6.23, D.P5.21	Marcia Tsuyama Escote	G.P2.71
Marcelo Kioshi Hirata	G.P2.66	Márcia Tsuyama Escote	F.P4.17, M.P6.24, T.P3.3
Marcelo Knobel	M.O1.D1.1	Marcielly Melo Freitas	X.P5.18
Marcelo Lucas Souza Silva	P.P1.41	Marcilene Cristina Gomes	G.P2.14, G.P2.23, G.P2.24, G.P2.6, G.P6.21
Marcelo Lucas Vitale	G.P2.78, G.P2.81, G.P2.82, G.P4.81	Marcílio Morais	B.P2.80
Marcelo Luiz CALEGARO	C.P2.33	Marcio Andreato Mendes	D.P5.10, L.P3.48, L.P3.49
Marcelo Machado Viana	A.P5.2, D.P4.23, G.O3.D1.7, G.P2.44, U.P6.17, V.P1.3	Marcio Assolin Correa	M.O1.D2.2, M.O2.D1.2, M.O2.D2.2, M.P6.13, M.P6.27, M.P7.3, M.P7.37, M.P7.49, M.P7.6, M.P7.8
Marcelo Meira Faleiros	F.P2.41	Márcio Barreto Rodrigues	G.P6.73
Marcelo Moizinho Oliveira	C.P6.39, G.P6.55, G.P6.82, X.P5.22	Marcio Celso Fredel	A.O2.D2.3, B.O3.D3.6, B.P4.48, C.O2.D1.2, C.P2.15, C.P2.43, D.P4.27, E.P3.18, S.P7.34, X.P5.1, X.P5.4
Marcelo Mulato	C.P6.31, F.O1.D3.3	Márcio César Pereira	E.P3.72, G.P6.18
Marcelo Nalin	J.O1.D4.2, J.O1.D4.4, J.O2.D2.2	Marcio Costa	V.O1.D3.3
Marcelo Nava	C.P2.37, P.P1.71	Marcio Daldin Teodoro	G.P6.1, G.P6.20
Marcelo Navarro	E.P3.44, G.O1.D4.6, G.P4.23	Marcio Ferreira Hupalo	P.O3.D2.7
Marcelo N.P. Carreño	G.P4.65	Marcio Florian	C.P2.1, C.P6.32
Marcelo Ornaghi Orlandi	E.O3.D3.2, E.P3.14, E.P3.30, E.P3.54, E.P3.7	Marcio Gustavo Di Vernieri Cuppari	Q.O1.D4.2
Marcelo Szymanski	A.O3.D2.2	Marcio Kobayashi	E.P3.55
Marcelo Taveira Veiga	O.O1.D3.2, O.P7.10	Márcio Luiz dos Santos	C.P2.33, G.P6.62
Marcelo Zampieri	G.P2.38	Márcio Medeiros Soares	G.O3.D3.5, G.P4.36, G.P6.39
Marcia Barbosa Henriques Mantelli	L.P3.52, Q.O3.D3.4	Marcionila Neli Lima dos Santos	L.O2.D3.2
Márcia Cardoso Manique	G.P4.2	Marcio Peron Franco de Godoy	G.P4.7, S.P5.26
Márcia Cristina Branciforti	C.P6.58	Marcio Roberto da Rocha	Q.P3.44
Marcia Helena Oyafuso	A.P4.4, A.P4.9	Marcio Roberto de Freitas	M.P7.20
Marcia Moreira Medeiros	P.P1.26, P.P1.48, P.P1.86, X.P5.14	Márcio Roberto Rocha	L.P3.32, P.P1.31
Marcia Regina de Moura	B.P2.17, B.P2.24, B.P2.43, B.P2.44, B.P2.55, B.P4.13, B.P4.14, B.P4.54	Márcio Solino Pessoa	M.P7.16
Marcia Regina von Zeska Kress	A.P5.38	Márcio Sousa Góes	G.O2.D3.1
Márcia Rejane Santos da Silva	R.P7.28		

Marcio Vidotti	F.O3.D3.6, F.O3.D3.8, F.P4.11, F.P6.28, F.P6.43, U.P7.15	MARCOS ANTONIO AGUENA HERRERA VICENTE	A.P5.18
Márcio Yuji Nagamachi	P.P1.2, P.P1.46, P.P1.47, P.P1.52, P.P1.54, P.P1.75	Marcos Antonio Padilha Júnior	L.P3.21
Marco A. Morales	B.P4.51, M.O2.D1.2, M.P7.49	Marcos Antonio Pinto Martins	A.P5.30
Marco Antonio da Costa Borges	C.P6.43	Marcos Antonio Polinarski	B.P4.15, N.P5.29
Marco Antônio de Carvalho Faria	B.P4.52	Marcos Antonio Ribeiro	G.P6.51, M.P7.35, M.P7.59
Marco Antonio Ramirez	R.P7.33	Marcos Antonio Villetti	A.P5.30
Marco Antonio Schiavon	F.P6.30, G.P2.36, G.P2.37, G.P2.91	Marcos Aparecido dos Santos Mariano	A.P5.20
Marco Antônio Siqueira Rodrigues	D.P4.1	Marcos A Pimenta	V.O1.D2.1
Marco A. S. Oliveira	B.O1.D3.2	MARCOS AUGUSTO DE SÁ	C.P2.12
Marco Aurélio da Silva Carvalho Filho	T.P3.44	Marcos Augusto Lima Nobre	F.P6.39, G.P4.3, N.O3.D1.8, U.P7.48
Marco Aurelio Horban	L.P3.50, P.O2.D3.1	Marcos Benedito Jose de Freitas	E.P3.64
Marco Aurélio Liuthevicene Cordeiro	M.P6.33, S.P5.15, S.P7.14	Marcos Bizeto	A.O3.D1.5
Marco Aurélio Pereira Buzinaro	M.P7.26, M.P7.27	Marcos da Silva Sousa	B.P4.52
Marco Aurélio Toledo da Silva	E.P3.52, G.P2.88, G.P4.55, G.P6.20	Marcos Eduardo Soares	L.P3.51
Marco Aurélio Vichi Oliveira	B.P2.5	Marcos F. S. Teixeira	F.P4.41, T.P3.19, T.P3.20
Marco Buongiorno Nardelli	V.O1.D3.3	Marcos Gomes Ghislandi	U.O2.D1.1, U.O2.D1.4, U.O3.D1.3
Marco César Soares	G.P4.65	Marcos Hideki Miyazaki	P.P1.43
Marco Colella	F.O1.D1.1	Marcos Jose Leite Santos	B.P2.42, E.P3.73, G.O1.D2.4, G.O2.D1.2, G.O3.D3.7, G.P2.20, G.P2.21, G.P2.63, G.P2.89, G.P2.90, G.P6.25, G.P6.26, G.P6.27, G.P6.5, G.P6.80
Marco Cremona	C.O2.D3.1, F.P2.10, F.P2.9, F.P6.14	Marcos Kendy Miyashima Moritugui	U.O2.D2.1
Marco Donisete de Campos	E.P3.78	Marcos Lázaro Moreli	A.P4.18
Marco Paulsen Rodrigues	G.O2.D1.4	Marcos Lopes Dias	C.O3.D1.5, C.O3.D1.6, C.P2.13, T.P3.30, T.P3.43
Marco Roberto Cavallari	F.P4.24, U.P7.55		
Marcos Akira d'Ávila	X.O2.D1.2, X.P5.19, X.P5.34		
Marcos Allan Leite dos Reis	Q.P3.37, U.P7.29, U.P7.5		
Marcos Alves Fontes	R.P7.39		
Marcos Andriola Gross	U.O3.D3.4		

Marcos Luciano Bruschi	B.P2.28, B.P2.62, B.P2.63, B.P2.76, B.P4.16, B.P4.17, B.P4.31, B.P4.42, B.P4.43	Maria Aparecida Pereira da Silva da Edgar da Silva Filho	A.P4.15
Marcos Luiz Ferreira Gomes	F.P4.42	Maria Aparecida Zaghete	G.O3.D2.8, G.P4.22, U.P6.42
Marcos Marques da Silva Paula	T.P3.12	Maria Auxiliadora de Barros Martins	E.P3.58
Marcos Massi	U.P7.30	Maria Beatriz P.P. oliveira	B.P2.76
Marcos Oliveira Junior	J.O3.D2.3	Maria Betânia de Freitas Marques	A.O2.D2.1
Marcos Ribeiro da Silva	C.P6.33	Maria Celiana Pinheiro Lima	T.P3.30
Marcos Roberto Vasconcelos Lanza	S.P7.18	MARIA CLARA GUIMARÃES PEDROSA	T.P3.43
Marcos Toda	E.P3.24	Maria Costa	A.P5.60
Marcos Valério Ribeiro	P.O1.D2.3, P.O2.D2.2	Maria Cristina Amaral	L.P3.52
Marcos Vinicius Bittencourt	G.P6.70	Maria Cristina Borges	Q.P3.31
Marcos Vinícius Dias Vermelho	J.O3.D2.3	Maria Cristina Carlan da Silva	A.P4.27
Marcos Vinicius Puydinger dos Santos	M.O2.D3.1, M.O3.D2.5	Maria Cristina Modesto Clementino	A.P5.15, A.P5.16
Marcos Yutaka Shiino	E.P3.56, P.P1.60	Maria Cristina Rosifini Alves Rezende	C.P6.46
Marcus A.F. Corat	C.P2.19	Maria Danielly Lima de Oliveira	A.P4.10, A.P4.5
Marcus Alexandre Diniz	E.P3.57	Maria Darly Teles Fernandes	D.P5.25
Marcus Antonio Freitas Melo	D.P4.17	Maria D. Baro	H.O2.D1.4
Marcus Corat	B.P2.59, C.O1.D1.2	Maria de Almeida Silva	U.P6.10, U.P6.11, U.P7.31, U.P7.32
Marcus Vinicius-Araujo	A.O3.D2.3, M.O2.D1.1	Maria de Fátima Borges	B.O3.D1.4
Marcus Vinícius Pinheiro Lopes	M.P6.27	Maria de Fátima Dantas Silva	D.P4.17
Marcus Vinicius Silva	E.P3.12	Maria de Fátima Salgado	Q.P3.71
Margarete Tereza Almeida	A.P5.38		B.P2.65, G.O2.D3.4, G.P4.48, L.P3.30, T.P3.47, U.O2.D2.2, U.P6.44, U.P6.9
Margarida Juri Saeki	C.P6.34, D.P5.23	Maria de Fátima Vieira Marques	
Maria Adrina Paixão de Souza da Silva	C.P2.38, C.P2.53, L.P3.33, P.P1.37, P.P1.74		
MARIA ALAIDE OLIVEIRA	D.P5.24	Maria de Jesus Matos Gomes	S.P7.11
María Alexandra Puerto Medina	S.O3.D2.3	MARIA DE LOURDES XAVIER DE FRANÇA NETA	D.P4.48, D.P5.37
Maria Amélia Zazychi	D.P5.55	Maria do Carmo Gonçalves	C.O1.D2.2
Maria Angeles Arenas	C.O3.D2.2, C.P2.54	Maria Eduarda Fernandes da Silva	U.P6.28
Maria Angélica Cassú Menck	R.P7.49, R.P7.5	Maria Eduarda Ribeiro	N.P5.15
Maria Antônia Rodrigues de Paulo	F.P6.1	Maria Eduarda Tedesco Farina	O.P7.9
Maria Aparecida Larosa	C.O3.D2.2, C.P2.54		



Maria Elayne Rodrigues Alves	E.P3.1	Maria Karolina Ramos	U.O2.D3.3, U.O3.D2.3
María Elena Cardoso	A.O3.D1.7	Maria Kuznetsova	G.P4.78, G.P6.77
Maria Elisa Galarraga	C.O2.D1.2, C.P2.43	Maria Letícia Murta Valle	J.P5.34
maria Elisa Philippsen Missner	R.P7.30	Maria Luísa Botter de Figueiredo	A.P4.17
María Eugenia Pérez	D.O3.D1.6, V.P1.10	Maria Luisa Braunger	F.P4.43, F.P6.42
María Eugenia Pérez Barthaburu	A.O3.D1.7	Maria Luisa Sartorelli	F.P2.23, F.P2.24, F.P2.32
Maria Fatima das Graças Fernandes da Silva	A.P5.25	Maria Luiza da Silva Paula	A.P4.44, B.P4.45
Maria Gabriela Araújo Ranieri	E.P3.58	Maria Luiza Lopes Sierra e Silva	A.P4.18
Maria Gabriela Nogueira Campos	C.P6.1, T.P3.1	Maria Luiza Miranda Rocco	U.O1.D3.3, U.O3.D3.2
Maria Gabriella Detone Guaita	E.O3.D3.5, E.P3.63	Maria Luiza Vilela Oliva	A.O1.D1.2
Maria Gardennia Fonseca	D.P4.3, D.P5.42, E.P3.65, L.P3.39	Maria Margareth da Silva	C.P2.27, P.P1.61, P.P1.62, P.P1.82
Maria Genesi Meirelles	D.P4.1	Mariana Agostini Moraes	B.O2.D2.2, B.P2.72, B.P4.18
Maria Gomes Araújo	N.P5.39	Mariana Andrade Boense Tavares	M.O2.D2.3, M.P7.28, M.P7.33
Maria Goreti Rodrigues Vale	D.O3.D2.6	Mariana Arpini Vieira	U.P7.50
Maria Helena Carvalho	D.O2.D1.3	Mariana Arruda Pereira	E.P3.31, N.P5.30
Maria Helena Gonçalves	F.O1.D4.6	Mariana Botelho Barbosa	C.O2.D1.4
Maria Helena Piazzetta	F.P2.30, F.P4.42	Mariana Carreira Geralde	A.O2.D2.2
Maria Iaponeide Fernandes Macedo	X.P5.42	Mariana Correa Rossi	C.P6.34
Maria Ines Basso Bernardi	D.P5.26, D.P5.6, D.P5.60, G.O3.D2.5, G.P6.36, S.O2.D1.1, S.O2.D2.3, S.P5.2, S.P5.27, U.P6.12	Mariana de Castro Prado	V.P1.3
Maria Inês Bruno Tavares	A.P4.21, E.P3.8, I.P7.14	MARIANA de OLIVEIRA SILVA	C.P2.20, C.P2.21
Maria Izabel Gallão	C.P6.11	Mariana de Sousa Prazeres	E.O2.D3.1
Maria Izabel Xavier Scapolan	G.P6.59	Mariana Doina Banea	B.P2.68
Maria Jesus Santofimia	Q.O1.D3.1	Mariana Gava Segatelli	U.P6.10, U.P6.11, U.P6.30, U.P6.31, U.P7.25, U.P7.26, U.P7.31, U.P7.32
Maria José Araujo Sales	U.O2.D3.2	Mariana Gerardi Mello	C.P2.6, C.P6.35
Maria José Sales	D.P5.57, E.P3.62, U.O2.D3.1	Mariana Lopes	X.P5.2
Maria Julia Bistaffa	A.P4.16, A.P4.26, B.O3.D3.2	Mariana Lumi Ichihara Sado	M.P7.29
Maria Julia Farroco	M.P7.50	Mariana Luna Lourenço	C.P2.51, C.P6.36
Maria Júlia Passarin	A.P4.14	Mariana Malard Andrade	M.P7.1
		Mariana Martins Duque	P.P1.4
		Mariana Moraes Góes	D.P5.27
		Mariana Oleone Marinho de Castro	C.O2.D2.3
		Mariana Oliveira	B.O1.D3.2
		Mariana Pavesi	E.P3.79

Mariana Ribeiro Farah Mazzilli	A.P5.15, A.P5.16	Maria Z. Oliveira	G.O1.D1.2
Mariana Richelle Pereira Cunha	G.P4.18	Marie Christine Hugon	U.O3.D1.4
Mariana Richelle Pereira da Cunha	F.O2.D2.1, F.P6.2, G.P4.53	Mariele de Mello	N.P5.23, N.P5.24
Mariana Roesch Ely	A.P4.19, A.P4.20, B.P4.19	Marielena Vogel Saivish	A.P4.18
Mariana S. Gigliotti	K.P7.1	Mariella Terán	A.O3.D1.7
Mariana Silva Alves	A.P4.21	Marielle Mara da Silva	D.P4.23
Mariana Souza Sikora	C.P6.25	Marie-Paule Delplancke-Ogletree	U.P6.43
Mariana S Sikora	C.O1.D3.2, C.P2.45, C.P2.46, C.P6.37, C.P6.47, R.O3.D3.4	Marigilson Pontes Siqueira Moura	A.P4.22
Mariana Yumi Simões Kuramoto	G.P2.64, G.P4.66, G.P4.79, G.P6.22, G.P6.23, G.P6.81	Marilda Munaro	L.P3.14
Mariandry Rodriguez	E.P3.72	Marilda Nascimento Carvalho	U.O2.D1.1, U.O2.D1.4
Mariane Martins Silva Pelegrinelli	O.P7.7	Marilena Valadares Folgueras	M.P6.25
Mariane Peres Pereira	U.O2.D2.3	Marília da Silva Bortolotto	P.P1.71
Maria N Kneeteman	U.P7.20	Marilia Garcia Diniz	L.P3.58
Marianna de Oliveira da Costa Maia-Pinto	C.P6.57	Marília J. Caldas	F.P6.47, V.P1.13
Marianne Ferreira de Barros	U.P6.17	Marilia Lucas Del Bel	A.P4.38
Mariano Castagnet	X.P5.11, X.P5.41	Marília Rafaela Oliveira	N.O2.D1.2, N.P5.1
Mariano Sato S B Monteiro	T.P3.30	Marília Regina Schaly	F.P4.4, F.P6.3
Mariano Venanzi	B.O2.D2.3	Marília Reginato de Barros	D.P5.28, U.P7.33
Marian Rosaly Davolos	G.P6.64	Mariliz Gutterres	D.O1.D2.3
Mariany Vieira Furtado	D.P4.28	Mariliz Soares Gutterres	E.P3.4
Maria Odila Hilário Cioffi	P.P1.60	Marilza Sampaio Aguilar	C.P6.30, C.P6.40
Maria Onaira Gonçalves Ferreira	B.P2.9	MARINA COSTA RAMOS	A.P5.67, C.P6.38, C.P6.4, C.P6.7
Maria Pau Ginebra	PL.4.D2.1	Marina Firmino Lima de Oliveira	G.O1.D4.5
Maria R. A. Félix	D.O1.D2.1	Marina Fuser Pillis	C.P2.22, G.P4.80, G.P4.83
Maria Rita de Cássia Santos	G.P6.35	Marina Kauling Almeida	Q.P3.44, Q.P3.45
Maria Rita de Moraes Chaves Santos	G.P2.94, I.P7.16	Marina Luisa Rodrigues Oliveira	L.P3.61
Maria Ruth Neponucena dos Santos	F.P2.43	Marinalva Cardoso dos Santos	A.P5.53
Maria Valnice Zanoni	E.P3.30	Marina Paiva Abuçafy	A.P4.23
MARIA VITÓRIA DOS SANTOS VILLA BANDE	D.P4.20, D.P4.38	Marina Ribeiro Batistuti	C.P6.31
Maria Vitória Lima Ramos	T.P3.31	Marina Silveira Tagliari Hoffmann	L.O3.D3.6, M.P7.30
Maria Walter	B.P4.34	Marina Sparvoli	U.P6.18
		Marina Trevelin Souza	J.O3.D2.5
		Mário Andrean Macedo Castro	C.P6.39
		Mario Del Rosso	C.O2.D3.1
		Mario de Souza Reis	K.O2.D3.3, K.O3.D3.3

Mario Godinho Junior	G.P6.35	Marlon Correia da Silva	E.P3.27
Mario Henrique Paziani	A.P5.38	Marlus Koehler	A.P5.37, E.O1.D4.4, G.O1.D2.1, G.P2.77, S.P7.16, S.P7.6
Mário Lúcio Moreira	G.O1.D1.1, G.O1.D2.2, G.O1.D2.3, G.O1.D2.4, G.O2.D1.2, G.P2.1, G.P2.16, G.P2.4, G.P2.41, G.P2.42, G.P2.45, G.P2.57, G.P2.60, G.P2.65, G.P2.83, G.P2.87, G.P2.9, G.P2.92, G.P6.50, S.P7.17	Marta Célia Dantas da Silva	D.P5.7, M.P7.9
MARIO NOGUEIRA BARBOSA JUNIOR	U.P7.35	marta Elisa Rosso Dotto	F.O3.D2.4, F.P2.37, F.P2.53
Mario Reis	M.P6.15, M.P6.16	Marta Lobo-Sanchez	C.P2.49
Mário Ricardo Góngora Rubio	U.P7.6	Martha Lissette Sanchez	R.P7.36
Mario Roberto Meneghetti	G.P2.67, T.P3.55	Martina Carneiro	T.P3.44
Mario Rodrigo dos Santos Soares	G.O2.D2.1, S.P5.15	Martin Adelaido Hernández- Landaverde	A.P5.10
Mário Sérgio de Carvalho Mazzoni	F.P6.13, V.P1.2	Martin Dornheim	H.O2.D1.4
Mario Ueda	R.O3.D3.2, R.P7.1, R.P7.35	Martin Fabian	M.P7.38
Marisa Carvalho Oliveira	S.P7.15, S.P7.32	Martinho Rau	I.P7.4
Marisa Gomes da Silva	B.P4.20, B.P4.40, B.P4.55	Maryana Rogéria dos Santos	A.P4.5
Marisa Masumi Beppu	B.O3.D3.1, B.P2.51, B.P2.72	Maryline Guilloux-Viry	D.P5.45
Maristela Olzon-Dionysio	R.P7.18, R.P7.34	Marylyn Setsuko Arai	A.O2.D2.2
Marister Oliveira Froehlich	G.P6.24	Maryne P. Siva	U.O2.D1.1
Marivalda Magalhães Pereira	A.O2.D1.3, C.P2.12, C.P6.48	MARYSTELA FERREIRA	C.P6.25, C.P6.47, F.P2.30, F.P4.32, F.P6.6
Mariza P Melo	A.P4.14, A.P5.13, C.P2.32, U.P6.8	Marzieh Kadivar	B.O2.D1.3, B.P2.3
Markus Hügel	F.O3.D2.1	Massimiliano Marangolo	M.O3.D2.4
Marla Karolyne dos Santos Horta	C.P6.40	Mateus B Cardoso	A.O3.D1.6, C.O3.D1.7
Marlene Notelio Borges Luíza de Moraes	F.O1.D2.3	Mateus Borba Cardoso	A.O1.D1.3, A.O3.D1.2, B.O3.D1.5, N.O3.D1.4
Marlene Soares	T.P3.61	Mateus Botani de Souza Dias	M.O2.D1.3
Marli Leite de Moraes	F.P6.4, F.P6.5, T.P3.35	Mateus Cottorello Fonsêca	D.P5.29
Marli Luiza Tebaldi	B.P4.50	Mateus Dassie Maximino	B.P2.34
Marlo Costa Oliveira	P.P1.13, P.P1.14, P.P1.74	Mateus de Albuquerque Souza Costa	J.O3.D2.6
		Mateus dos Santos Reis	C.P2.38
		Mateus Eugenio	A.P5.48
		Mateus Ferreira Oliveira	D.P5.52
		Mateus Ferrer	G.O1.D2.2, G.P2.16, G.P2.4, G.P2.45, G.P2.83, G.P2.92
		Mateus Gallucci Masteghin	E.P3.54
		Mateus Henrique Cornelsen	Q.P3.38

Mateus Henrique Köhler	G.P6.86	Matheus Mendes de Oliveira	U.O2.D2.1
Mateus Keniti Nakashima Sinzato	H.P3.10	Matheus Moraes Biondo	F.P2.2, F.P2.3
Mateus Meneghetti Ferrer	G.O1.D2.3, G.O1.D2.4, S.P7.17	Matheus Moura Oliveira	N.P5.1
Mateus Meneghetti Ferrer	G.P2.9	Matheus Nantes Costa	Q.P3.48
Mateus Monteiro Marques	G.P2.17, G.P2.86, G.P4.81, G.P6.60	Matheus Petreche	EXP.2.D2.1
Matheus Augusto Da Silva	B.P2.23	Matheus Picolli Pellizzer	L.P3.9
MATHEUS AVENCOURT SOARES AVENCOURT SOARES	G.P6.25, G.P6.26	Matheus P. Lima	V.O1.D3.2
Matheus Campolina Mendes	C.P6.49	Matheus Santos Cunha	X.P5.25
Matheus Cavalcanti dos Santos Nunes	G.O3.D3.6, G.P6.7, G.P6.8, G.P6.9	Matheus Teixeira Novôa	U.O3.D2.5
Matheus Cicero Ribeiro	A.O3.D2.5, B.P2.61	Matheus Veloso	F.O3.D2.6
MATHEUS CICHERO CICHERO	J.O2.D2.3	Matheus Vinicius da Silva	A.P5.43
Matheus Correia de Almeida	T.P3.47, U.P6.44, U.P6.9	Matheus Vinicius Oliveira Herrero	F.P2.18, P.P1.68
Matheus Costa Oliveira	B.P2.42, G.P2.63, G.P2.89, G.P6.27	Mathias Strauss	F.O2.D1.4, U.O1.D2.3, U.O2.D2.3, U.P7.36
Matheus Damasceno Salgueiro Andrade	P.P1.63	Mathilde Julienne Gisèle Champeau Ferreira	B.O3.D2.2, C.P6.41, I.O1.D3.2, X.P5.35
Matheus da Silva Barbosa	N.O3.D1.4	Matias Eliseo Melendez	F.P2.33, F.P2.5, F.P6.18, F.P6.46
Matheus Elias Rosa	A.P4.24	Mattheus Torquato	U.P7.37
Matheus Felipe Fagundes das Neves	U.O3.D3.2, U.P7.19	Matthias Hillenkamp	F.O1.D4.6
Matheus Ferreira Gomes	C.O3.D2.7	Matthias Lehmann	F.O3.D2.1
Matheus Fonseca Ferreira	F.P2.2	Maura Vincenza Rossi	C.P6.21
Matheus Franzotti Rozza	F.P2.18	Mauricio A. Melo Jr.	G.O3.D2.5
Matheus Freitas Rodrigues	U.P7.30	Mauricio Chagas Silva	S.O3.D1.1
Matheus Gamino Gomes	M.P7.37	Maurício de Jesus Monteiro	X.P5.25
Matheus Gomes Kosinski	A.P5.68, B.P2.41, B.P2.60	Maurício Domingues Coutinho-Neto	S.P7.29
Matheus Henrique Andrade Barbosa	P.P1.79	Mauricio Dwek	P.O1.D3.1
Matheus Henrique Quadros	F.P2.35, F.P2.54, F.P4.35	Maurício Jeomar Piotrowski	G.P2.57, U.O3.D2.4
Matheus Hromatka	Q.P3.38	Maurício Kubaski	F.P6.8, F.P6.9
Matheus Josué de Souza Matos	F.P6.13, V.P1.2	MAURICIO MARTINES DAS NEVES	L.P3.25, O.P7.5
Matheus Julian Cruz Gomes	F.P6.7	Maurício Moraes de Lima Jr.	S.P5.26
Matheus Kamers Andrade	Q.P3.46, Q.P3.47	Mauricio Motta	U.O2.D1.1, U.O2.D1.4
Matheus Melo Machado	F.O3.D2.6	Maurício Oliveira Filho	X.P5.36
		Mauricio Rangel Seixas	C.P6.42
		Mauricio Ribeiro Baldan	P.P1.51, P.P1.64, P.P1.7, S.P7.20, S.P7.21

Maurício Ribeiro Baldan	D.P4.24, P.P1.11, P.P1.65, U.P6.40, U.P6.5, X.P5.44	Mayara Mondego Teixeira	G.P4.13, G.P6.1, G.P6.44, S.P7.10
Mauricio Roberto Bomio Delmonte	G.P6.62	Mayara Raimondi Martina	I.P7.1
Mauricio Roberto Delmonte Bomio	G.P2.11, G.P4.82, G.P6.10, S.P7.15, S.P7.32	Mayara Silva Santos	A.P5.1
Mauricio Rodriguez	V.P1.10	Mayara Simonelly dos Santos	F.O3.D3.5, U.O2.D3.2
Mauricio Rodríguez Chialanza	A.O3.D1.7	Maycoln Depianti Conci	Q.P3.50
Maurício Sousa Pereira	G.P2.96, G.P6.32	Maycon Motta	M.O3.D2.1, M.P7.39
Mauricio Terrones	V.O1.D2.2, V.O3.D2.3	Maycon Rotta	M.P7.39
Mauricio Vicente Donadon	P.P1.60	Maykel Santos Klem	F.O1.D4.1, F.P4.34, F.P6.32, V.O1.D4.3, V.P1.8
Maurício Vitor Kozerski Giaretton	Q.O3.D3.4	Maykol Damasceno Oliveira	F.O2.D1.1, F.P4.20, F.P6.10
Maurizio Prato	G.P4.65, PL.7.D4.1	Maykon André Montanhera	D.P5.5, G.P2.98
Mauro Ferreira	U.O1.D1.2	Mayk Rodrigues Nascimento	F.P4.34, F.P4.39, F.P6.11, F.P6.16
Mauro Henrique Lapena	P.O2.D2.3	Mayla Alencar Medeiros	P.P1.3, P.P1.5, P.P1.53, X.P5.5
Mauro Luciano Baesso	C.P6.2, J.O1.D4.1	MAYLURA MORAIS CALDAS	A.P4.25, D.P5.30
Mauro Meliga Wysard	R.P7.2	Mayra Lucila Melgoza Ramírez	G.P6.29
Mauro Pinheiro Silva	U.P7.55	Mayra Moura Moreira	U.P6.29
Mauro Terence	U.P7.30	Maysa Terada	P.P1.66, P.P1.9, Q.P3.32
Mawin Javier Martinez Jimenez	F.O3.D2.8, F.O3.D3.1, F.P4.42	Mayté Paredes Zaldivar	C.P6.43, X.P5.31, X.P5.37
Max Erik Soffner	G.P6.30, G.P6.43	Mayza Morais Franca	D.P5.19, N.P5.28
Maximiliano Delany Martins	C.P2.11, C.P2.42, M.O2.D2.3, M.P7.28, M.P7.33	Meledje nomel	S.O2.D2.4
Máximo Siu Li	B.P2.17, G.P2.75, G.P4.1	Melina Espanhol Soares	E.O3.D3.4, E.P3.35, I.O1.D3.5, I.P7.10, J.P5.16
Maxímo Siu Li	G.P6.45, S.P7.27, S.P7.42	Melissa F. Siqueira Savedra	F.O1.D2.3
Max Passos Ferreira	V.P1.41, V.P1.5	Melissa Rodrigues de la Rocha	N.P5.31
Max Pereira Gonçalves	B.P2.45	Melissa Röhrig Martins da Silva	M.O2.D3.2, M.P6.26, M.P7.31
MAXWALDO DA SILVA RABELO	B.P4.21, B.P4.57	Mel Naomí da Silva Borges	M.P6.9
Mayara Auxiliadora Castilho Benites	P.P1.48	Meríci de Fátima Machado	G.P6.30, G.P6.43
Mayara Cardozo dos Santos	G.O2.D1.1, G.O3.D1.2	Mérlin Cristina dos Santos Fernandes	E.P3.60
Mayara Carla Uvida	Q.P3.49	Meysam Aliabadi	B.P4.9
Mayara Cristina Bertolini	X.P5.23	Mia Phillipson	B.O3.D3.7
Mayara Elizabeth Pereira	D.P5.3	Micaela Dani Ferarri	L.P3.37
Mayara Martins Spielmann da Silva	E.P3.59, E.P3.75	Micaela Dani Ferrari	L.P3.53

Micaela Ferrari Ferrari	C.P6.44, L.P3.36, U.P7.38	Miguel Gonzalez Balanta	G.P6.31, G.P6.54, G.P6.84
Michaela Kuepferling	K.P7.11	Miguel Henrique Boratto	R.P7.11, S.P5.5, S.P7.22
Michael Douglas Fernandes Pela	P.P1.56	Miguel Sales Porto de Sousa	U.P7.20, U.P7.21
Michael Higgins	C.O3.D1.2	Mikaelly Daiany Ferreira Borges	A.P4.37
Michael J. Aziz	F.P2.57	Milady Renata Apolinário Silva	E.P3.35, I.O1.D3.5, I.P7.10, J.P5.16
Michael Jones Silva	U.P7.39	MILENA KOWALCZUK MANOSSO AMORIM	D.P4.6, D.P5.20, D.P5.31, L.P3.55
Michael K. Hausmann	B.O3.D2.7, T.O1.D1.1	Milena Martelli Tosi	B.P4.25
Michele Aparecida Salvador	S.O3.D2.2	Milena Noronha	J.P5.8, V.O2.D2.2
Michele Àvila dos Santos	D.P5.57, E.P3.62	Milena Trevisan Pelegrino	A.P4.3
Michele Cacioppo	G.P4.65	Millena de Cassia Sousa e Silva	I.P7.15, J.P5.37, M.P7.52, T.P3.56
Michele Duarte Tonet	F.P2.55, F.P6.12, F.P6.3, G.P2.5	Milliane Passos da Silva Palacio	G.P2.96, G.P6.32
Michèle O. de Souza	L.P3.43	Miloslav Beres	X.P5.32
Micheline dos Reis Araújo	M.P6.13	Milton Alexandre Cardoso	F.O1.D4.3
Michel Lacerda Marcondes Santos	S.O3.D1.5	Milton Beltrame Junior	A.P5.15, A.P5.16
Michell de Oliveira Almeida	S.P7.18	Milton Faria Diniz	U.P7.3
Michelle Sostag Meruvia	X.P5.38	Milton Pereira	O.P7.6, X.P5.20
Michelli Siqueira Monteiro Barros	L.P3.54		O.O1.D3.1, O.O1.D3.6, O.O1.D3.7, O.O1.D3.9, O.P7.13, P.O3.D2.2, X.O3.D1.6
Michelly Patrícia Santana de Almeida Fógia	J.O1.D2.1, J.P5.15	Milton Sergio Fernandes de Lima	
Michely Glenda Silva	L.O3.D3.2, R.P7.22, R.P7.32, R.P7.42, R.P7.43	Milton Sergio Fernandes Lima	Q.P3.58
Mieczyslaw Lapkowski	F.O3.D2.7	Milton Tumelero	E.P3.17
Miguel A de Souza	F.P2.45	Milton Walsinir Lima Junior	A.P5.58
Miguel Adolfo PONCE	D.P5.41, S.P7.8	Mingzhong Wu	M.O1.D2.1, PL.6.D3.1
Miguel Angel Cobos Fernandez	M.P6.36, M.P6.37, S.P7.19	Mirabel Cerqueira Rezende	U.P7.4
Miguel Angelo do Amaral Junior	P.P1.11, P.P1.51, P.P1.64, P.P1.65, S.P7.20, S.P7.21	Mirela Angelita Artner	B.P4.22, D.P5.32
Miguel Angel Ramírez Gil	E.O3.D3.1	Mirela de Castro Santos	K.P7.14
Miguel Angel Rodríguez- Pérez	D.P4.39, D.P5.14	Mirele Horsth de Paiva Teixeira	D.O1.D1.3, I.P7.11
Miguel Angel San-Miguel	S.P5.21, S.P5.24, S.P7.26	Mirella Boaro Kobal	A.P4.16, A.P4.26, A.P4.42
Miguel A. San-Miguel	S.O2.D1.4, S.P5.12, S.P5.17, S.P5.7, S.P7.1, S.P7.13, S.P7.24	Mirella Cristina Fares	E.P3.55
Miguel Borodiak	P.P1.22	Mirella Sousa Vieira	A.P5.43
Miguel Felipe Galera da Silva	B.P2.12, E.P3.13	Mirella Virginie	N.P5.31

Miriam Kézia Nicolau Gregório de Oliveira	G.P6.33	Morgana Sofia Zilse	A.P4.27
Mirian de Lourdes Noronha Motta Melo	E.P3.58, X.P5.9	Morgana Vital de Araújo	A.P5.45
Mirian Michelle Machado de Paula	B.P2.59, C.P2.19	Morgan Hjorth	B.O3.D3.7
Mirko Congiu	S.P7.22	Moritz Dechant	F.O3.D2.1
M. Massi	G.P2.24, P.P1.44, R.P7.4	Morsyleide de Freitas Rosa	B.O3.D1.4
MOACIR FRANCO DE OLIVEIRA	R.O1.D3.2	Morsyleide Freitas Rosa	C.O1.D2.3
Mohamed El Amrani	S.O2.D2.2	Muhammad Asmat Pervez	M.P7.32
Mohamed El Mansori	L.O2.D3.2	Muhammad Nisar	U.O3.D1.2
Mohammad Masoumi	Q.O1.D4.1, Q.P3.51	Muriel Blanzat	A.P4.22
Mohammad Reza Dousti	J.O3.D2.3	Muriel de Pauli	F.P2.23, F.P2.24, F.P2.32
Moisés Costa Borges	N.P5.38	Murillo Henrique de Matos Rodrigues	G.P6.35
Moisés das Virgens Santana	B.P4.53, C.P6.65, G.P2.94, G.P2.95, I.P7.16, R.P7.47	Murillo Martins Leite	C.P2.28
Moises Felipe Teixeira	L.P3.10, O.P7.10, O.P7.11, O.P7.9	MURILO CAMARGO CONSTANTINO	C.P6.41, D.P5.33
Moisés Luiz Parucker	Q.P3.8	Murilo C. Crovace	C.P2.50, X.O1.D1.2
Moises Martins de Oliveira	P.P1.62, P.P1.82	Murilo Da Silva Del Vecchio	L.P3.56
Molíria Vieira dos Santos	O.P7.8, X.P5.17	Murilo Franco Coradini	P.P1.68
Molly Stevens	A.O2.D1.3	Murilo H. M. Facure	T.P3.45
Mônica Aline Magalhães Gurgel	Q.P3.36	Murilo Izidoro Santos	C.O1.D2.2
Monica Alonso Cotta	G.O3.D3.4	Murilo Kendjy Vieira Onita	S.P7.23
Monica Costa Rodrigues Guimarães	P.P1.67	Murilo Pereira Moisés	E.O1.D3.2
Monica de Mesquita Lacerda	V.O3.D2.1		U.O1.D2.3, U.O2.D2.3, U.P7.40
Monica Helena Monteiro do Nascimento	A.O1.D1.4	Murilo Santhiago	
Mônica Helena Monteiro Nascimento	C.O3.D1.3	Murilo Shiniti Koizumi	L.P3.31
Mônica H. Okura	B.P2.7, B.P4.30	Mychelle Vianna Pereira Companhoni	C.P6.2, E.O1.D3.2, E.P3.38
Mônica Maria de Abreu Mendonça Schwartzman	Q.P3.40	Mylena Samantha Ferreira Mendes	P.P1.40, P.P1.41
Monica R. F. Machado	C.P6.9	Mylla Coffaro Ferreira	M.P6.15
Monike Silva Kutz	F.O3.D2.3	Myllena Souza Pereira	F.P2.1
Monique Deon	N.O2.D1.2	Myrela Vieira Araújo	L.P3.57
Monique Osório Talarico Conceição	C.P2.36		
MONSUETO CARDOSO	L.P3.39		
Morgana muller de França	G.P6.34		

## N

Nabil Chaia	P.P1.55, P.P1.57
Nadia Guerra Macedo	S.P7.24
Nadia Lunardi	C.P6.43
Nadia Macedo	O.P7.15
Nádia Silva Cosmo	C.P2.53, P.P1.37
Nadine Essayem	N.P5.38
Náhrima Chambela Moraes	Q.O1.D4.5

Naiana Serafim da Silva Goulart	P.P1.69	Nataly Messina Pecelin	E.P3.61
Naiane Naidek	U.O1.D3.3	Natan Mendes Casero	G.P2.16, G.P2.83
Naiara Letícia Marana	A.P4.30, S.P5.22, S.P7.25, S.P7.31, S.P7.33, S.P7.8	Natasha Dias Martins	E.P3.38
Naiara Lima Lima	G.P6.36	Nathália Akemi Yoshioka	F.P6.14, F.P6.30
Naidel A. M. S. Caturello	V.O1.D3.2	Nathalia Cristina Rissi	A.P4.29, A.P5.25, A.P5.26
Nailma de Jesus Martins	G.P6.37, G.P6.6	Nathália C Verissimo	G.O3.D2.3, G.O3.D2.6, G.O3.D2.7, G.P2.84, G.P6.17, P.P1.66
Naira Linhares Sabino	E.O3.D3.2, E.P3.7	Nathalia de Carvalho Indolfo	A.O3.D1.6
Naira Maria Balzaretto	S.O3.D2.3	Nathalia Guimarães Fagundes	J.O1.D4.3, J.P5.24
Nair Cristina Margarido Brondino	C.P6.45, P.P1.70, P.P1.72, P.P1.78, P.P1.79	Nathália Maria Barbosa Nogueira	U.O3.D1.3
Nancy K. Umisedo	G.P6.69	Nathália Maria Costa Guari	M.P6.36, M.P6.37, S.P7.19, S.P7.41, S.P7.42
Nancy Kuniko Umisedo	G.P2.10	Nathália Maria Moraes Fernandes	V.P1.14
Naomi Akiba	D.O1.D2.2	Nathália Silva de Medeiros	M.P7.24
Napoleão Bonaparte Caldas Cunha	C.P6.11	Nathália Tomazio	G.P6.3, G.P6.79
NARA CRISTINA DE SOUZA	B.P4.52	Nathalia Vieira Barbosa	E.P3.35
Nara Miranda Guimarães	C.P6.46	Nathalia Wisniewski Siqueira	E.P3.24, F.P2.18
Nara Silva Soares	B.O3.D3.3	Nathalie Barroca	K.O2.D3.3
NATALHA DA SILVA ROCHA	C.P2.35	Nathanael Vieira Medrado	C.P2.59, V.P1.3
Natália Bruzamarello Caon	M.P6.39	Nathan C. Frey	V.O3.D3.4
Natalia Carminatti Ricardi	B.P4.23	Nathan Fernandes Ignácio	Q.P3.53, Q.P3.54
Natalia Cristina Borges	B.P4.24	Nathan Riany Valério Albino	I.P7.14
Natália Cristina Martins da Silva	G.P2.44, V.P1.3	Nathan Silvano	K.P7.19
Natalia Cristina Silva	B.P4.25	Nathiely Pereira Dos Santos	L.P3.12
Natália da Conceição Pereira	U.O3.D1.7	Nathiely Pereira Santos	L.P3.13
Natália F Daudt	E.O1.D4.2, R.P7.46, R.P7.9	NAVADEEP SHRIVASTAVA SHRIVASTAVA	A.O3.D2.3
Natália Florêncio da Costa Vargas	G.O1.D1.4	Nayally Soares	F.P6.29
Natália Katarina Brito de Matos	M.P6.3	Nayanne Lima dos Santos	C.P6.11
Natália Lopes Zinato	F.P6.44	Nayara A. Alves	T.P3.19
Natalia Mayumi Inada	A.O2.D2.2, A.P5.53, A.P5.68, T.O3.D1.2, T.P3.7, T.P3.8	Nayara de Araújo Pinheiro	D.O3.D1.4
Natália Paz Neme	F.P6.13	Nayssa Martins Ribeiro	P.P1.68
Natália Pereira Rezende	V.O3.D3.2	Nayton Claudinei Vicentini	F.O3.D3.2, F.P2.56, F.P6.15
Natalia Ruben Castro	A.P4.28	Nazir Monteiro dos Santos	R.O3.D3.2
		Neftali Lenin Villarreal Carreño	E.P3.28, E.P3.39, E.P3.59, E.P3.75



Neftalí Lenin Villarreal Carreño	E.P3.19, E.P3.49, E.P3.50, F.P6.31, T.P3.52	Neyda de la Caridad Om Tapanes	X.P5.42
Nei Carlos Oliveira Sousa	V.O3.D2.3b	Ney Pereira Mattoso Filho	E.P3.29
Neice Ferreira dos Santos	Q.P3.40	Nicholas Eras Fonseca	P.P1.83, P.P1.84
Neide Aparecida Mariano	C.P2.18, C.P6.1, Q.P3.28, Q.P3.29, Q.P3.41	Nicholas Figueiredo Prestes	M.O3.D1.8, M.P7.33
Neide Kazue Kuromoto	C.O3.D2.5	Nicholas Zufelato	A.O1.D1.1
Neidenei Gomes Ferreira	D.P5.12, U.P6.21, U.P6.7, U.P7.44, U.P7.49	Nico Bruns	B.O1.D1.3, B.O1.D3.1, B.O3.D2.5
Neil John Coville	F.P2.26	Nicolas Briere	C.P6.57
NEILO M TRINDADE	G.O3.D3.6, G.P6.7, G.P6.8, G.P6.9	Nicolas Ferreira Martins	A.P4.30
Nélio Henrique Nicoleti	S.P7.40	Nícolas Oliveira Decarli	F.P6.17
Nélio Scrivener Furtado	E.P3.27	Nicolas Reyren	M.O3.D1.8
Nelissa Garcia Balarim	D.P5.34	Nicolás Yutronic	A.P4.31
Nelson Barrera	R.O1.D3.2	Nicolau André Silveira Rodrigues	R.P7.17
Nelson Batista de Lima	C.P6.21	Nicolau Apoena Castro	Q.P3.22
Nelson Delfino de Campos Neto	L.P3.49	Nicolau Molina Bom	K.P7.1, K.P7.10
Nelson G. C. Astrath	G.P6.46	Nicola Vicentini	T.O2.D1.1
Nelson Guedes Alcântara	X.P5.7	Nicole Barrera	B.O3.D2.3, B.O3.D2.6
Neri Alves	F.O1.D4.1, F.O1.D4.2, F.O2.D1.1, F.P4.34, F.P4.39, F.P6.11, F.P6.16, F.P6.32, V.O1.D4.3, V.P1.8	Nicole Bassous	C.O1.D1.2
Neusmar Junior Artico Cordeiro	G.P2.53, V.O3.D2.4	Nicole Haas Lazzari	G.P4.41
Newton Adriano dos Santos Gomes	P.P1.83	Nicole Kelly	A.O2.D1.3
Newton Gomes	P.P1.84	Nicole Morales	R.O1.D3.2
Newton José Arruda Júnior	F.O2.D2.4	Nicole Oliveira de Araujo	P.P1.71
Newton Kiyoshi Fukumasu	C.O3.D2.6, L.O1.D3.2, L.O2.D3.1, L.O2.D3.2, L.O2.D3.3, L.O2.D3.4, Q.O3.D3.2	Nicole Raymonde Demarquette	U.O3.D1.1
Newton Martins Barbosa Neto	F.O3.D1.3, F.P4.15	Nicole Schwarz Silva	E.P3.16
Newton Soares Silva	R.P7.32, R.P7.33	Niedja Fittipaldi Vasconcelos	B.O3.D1.4
		Nilo Francisco Cano-Mamani	G.P6.38
		Nilson Aguiar Neves	R.P7.12
		Nilson C Cruz	B.P2.73, C.O2.D3.3, G.P6.72, R.P7.12, R.P7.15, R.P7.16, R.P7.3, R.P7.44, R.P7.6
		Nilson C. Cruz	C.O2.D2.4, R.O3.D3.3, R.P7.37
		Nilson dos Santos Ferreira	A.P4.1, M.P7.26, M.P7.27

Nilson Romeu Marcilio	D.P4.58, N.O3.D1.5, N.P5.18, N.P5.31, N.P5.35, N.P5.36, S.P5.9	Odiluz Maria Saldanha de Oliveira	B.P2.16
Nilton Francelosi Azevedo Neto	G.O2.D3.3, G.P6.39, R.P7.38	Odivaldo Cambraia Alves	M.P6.23
Nima Moghimian	U.O3.D1.1	Odney Carlos Brondino	B.P2.81, C.P6.45, P.P1.70, P.P1.72, P.P1.78, P.P1.79
Niravkumar Jitendrabhai Joshi	D.O3.D1.7, F.P2.20	Olacir Alves Araújo	L.P3.4, M.P6.35
Nirton Cristi Silva Vieira	U.P7.28, U.P7.41	Olandir Vercino Correa	G.P4.80, G.P4.83, L.O3.D3.8, L.P3.25
Nito Angelo Debacher	R.P7.45	Oliver Lieleg	B.O3.D3.7
NIZAMARA PEREIRA PEREIRA	D.P5.57, E.P3.62	Olivia Carr	F.P6.18
Noboru Hioka	T.O2.D1.3	Olivia Maria Berengue	D.P4.52, X.P5.44
Noé Cheng	P.P1.23	Olivier Boulle	M.O3.D1.3
Noé Cheung	C.P2.25, C.P6.59	Olivier Fourmann	B.O3.D2.7
NOELIA V. F. RONDÓN	G.P6.61	Olli Ikkala	B.P4.32
Noelio Oliveira Dantas	A.P5.43, A.P5.44, A.P5.45	Omar Pandoli	U.P7.35, U.P7.54
Noélio Oliveira Dantas	J.P5.28	Orestes Estevam Alarcon	D.O3.D2.8
Noemi Raquel Checca Huaman	M.P6.16	Orfelinda Avalo	D.P5.35
Noêmi Rodrigues Lovato Assumpção	B.P4.26, B.P4.27	Orlando Donoso	A.P4.31
Norbert Koch	F.O1.D1.3, PL.2.D1.1, V.O3.D3.4	Orlando J Rojas	B.O1.D4.5, B.O3.D1.2, B.O3.D1.5, B.O3.D1.7, B.P2.50, B.P4.32
Norma Buarque de Gusmão	B.O3.D2.3, B.O3.D2.6	Orlando Rojas	B.O1.D2.3
Norma Lucena-Silva	A.P4.10, A.P4.5	Orlando Zelaya Ángel	G.P2.51
Normando Perazzo Barbosa	L.P3.21, L.P3.22	Oscar Andrés Negrete	K.O3.D3.6, K.O3.D3.7, K.P7.15
Norma Oliveira	V.P1.41	Oscar Antonio Nino Santisteban	B.P4.28
NÚBIA RIBEIRO MACHADO	Q.P3.22	Oscar Balancin	Q.O3.D3.1
Nuria Cinca	C.P2.44	Oscar Giordani Paniz	E.P3.19, T.P3.51, T.P3.52
<b>O</b>		Oscar Regis Junior	P.P1.56
Odair Pastor Ferreira	D.P5.25, T.P3.31	Oscar William Perez Lopez	S.P5.16
Odemir Martinez Bruno	F.P2.33, F.P2.5	Osmar De Sousa Santos	C.P2.27
Odila Florencio	C.P6.21	Osmar Roberto Bagnato	J.P5.27, P.P1.73, R.P7.41
Odilio B. G. Assis	B.P4.25	Oswaldir Taranto	X.P5.2
Odilon Divino Damasceno Couto Júnior	G.O3.D3.4	Oswaldo Donato Lourenço Junior	T.P3.44
		Oswaldo Freitas	B.P2.15, B.P2.54
		Oswaldo F. Schilling	K.P7.16
		Oswaldo Mitsuyuki Cintho	P.O3.D2.7, Q.P3.13, Q.P3.76

Oswaldo Novais de Oliveira Jr	A.P4.35, A.P4.42, B.O1.D1.1, B.P2.10, B.P2.18, B.P2.20, B.P2.53, B.P2.70, C.O1.D3.3, C.P2.60, C.P6.14, D.O3.D1.7, F.O1.D4.6, F.O2.D3.4, F.P2.20, F.P2.30, F.P2.33, F.P2.5, F.P4.29, F.P4.5, F.P6.18, F.P6.46, O.P7.12, T.O1.D1.3, T.O3.D1.2
Oswaldo Baffa Filho	G.P6.8
Oswaldo Luis Alves	A.P5.40
Oswaldo Luiz Alves	A.P5.11
Otavio A Disconzi	R.P7.9
Otavio Augusto Capeloto	J.O1.D4.1
Otávio Cândido Neto	A.P5.65
Otávio Contart Gamboni	Q.P3.55, Q.P3.56
Otavio de Brito Silva	G.P4.47
Otávio de Brito Silva	G.P4.37
Otávio Fernandes Lima da Rocha	C.P2.53, L.P3.33, X.P5.9
Otávio Fernandes Lima Rocha	P.P1.33, P.P1.74
Otávio José de Oliveira	E.P3.63
Otávio Vilaça Mesquita	D.P4.10, N.P5.6
Otto Mao Vargas M. Bueno	S.P7.26

## P

PABLO CESAR SERRANO ARAMBULO	F.O2.D3.2, F.P6.19
pablo henrique menezes	G.P6.31, G.P6.54
Pablo Santana Lemos	D.P5.50, G.P4.26
Paloma B. Barreto	G.O1.D1.2, G.O2.D2.2, G.P4.39, G.P6.61
Paloma Vinaches Melguizo	N.O2.D1.3
Pamela Busarello	I.P7.2
Pamela Costa Carvalho	M.P6.1
Pâmela Cristine Pereira	Q.P3.19

Pamela Karina dos Santos Bomfim	X.P5.39
Pamela Naulin	R.O1.D3.2
Pâmela Sierra Garcia	U.P7.36
Pamela Thais Sousa Melo	B.P4.14
Pamella Kessler de Campos	L.P3.58
Pankaj Agrawal	L.P3.36, L.P3.37
Paola Ayala	V.O3.D2.6
Paola Egert Ortiz	B.P4.5, D.P5.61, R.P7.48
Paola Gay dos Santos	G.P2.4
Paola Lamberty	F.P6.20
Paola Rivolo	U.P6.42
Paola Z Crocomo	F.P2.25
Paola Zimmermann Crocomo	F.P6.21
Paolo Samori	F.O3.D3.4
Parichart Naruphontjirakul	A.O2.D1.3
Pascal Silas Thue	U.O3.D1.2
Pascoal José Giglio Pagliuso	M.O2.D3.1
Patricia Akemi Tuzimoto	F.P6.22
Patricia Alexandra Antunes	D.P5.46
Patricia Almeida Mattos	A.P4.38, V.P1.12
Patrícia Benelli	B.P2.32, B.P2.69
Patricia Capellato	C.P2.18, C.P6.1, C.P6.19, C.P6.27
Patrícia Cordeiro	S.P7.19
Patrícia Cristina Silva Menêzes	D.P4.37
Patrícia Gelli Feres de Marchi	B.P2.78, B.P2.79, B.P4.6
Patricia Gonçalves	T.P3.42
Patricia Goto	A.P4.22
Patrícia L.F. Proença	A.P4.12, A.P4.13
Patrícia Malheiros	B.P2.21
Patrícia Mariana Alves Caetano	A.P5.33, D.P5.36, D.P5.8
Patricia Moreira Lima	N.P5.15
Patricia Morena Sanchez	U.P7.25
PATRICIA M PIMENTEL	D.P4.17, D.P4.47, D.P5.37, D.P5.38, N.P5.10
Patrícia Nirlane da Costa Souza	B.P2.45
Patricia Ramírez-Noguera	A.P5.10
Patrícia Raquel Silva Zanoni	B.P2.47

Patrícia Sartorelli	A.P5.56	Paula Valério	F.P2.54
Patrícia Sbaraini	A.P5.35	PAULA ZANATTA	B.P2.11, L.P3.34
Patricia Targon Campana	A.P5.68, B.P2.41, B.P2.60, B.P4.29, C.P2.47, T.O3.D1.2, T.P3.7, T.P3.8	Paul Beyer	F.O1.D1.3
Patricia Teixeira Marques	C.O1.D3.2	Paulla Beatriz Franca Sousa	E.P3.68
Patricio Fernando Vargas	K.O3.D3.6, K.O3.D3.7, K.P7.15	Paulo Afonso Freitas Diniz	D.P5.39
Patricio Häberle	L.P3.65	Paulo Antônio Pereira Wendhausen	E.O3.D3.8, K.O1.D3.2, L.O3.D3.6, L.P3.63, M.O2.D3.2, M.O2.D3.4, M.P6.26, M.P6.31, M.P6.38, M.P7.30, M.P7.31, M.P7.54, O.P7.6, X.O3.D1.2, X.P5.27, X.P5.28
Patricio Rodolfo Impinnisi	S.P7.30	Paulo Antonio Trindade Araujo	F.O3.D1.3, F.P4.15
Patrick Chapon	V.P1.20	Paulo Augusto Marques Chagas	T.P3.45
Patrick Lima Vieira	C.P2.36	Paulo Augusto Nardi	S.P7.27
Patrick Pascoal de Brito Silva	G.P2.85	Paulo Augusto Raymundo- Pereira	A.P4.35, F.P6.18
Patrick Pires Conti	T.P3.45	Paulo Barbeitas Miranda	A.P4.35, F.O2.D2.2
Paula Aboud Barbugli	C.P2.44	Paulo Cabral Filho	G.P4.27
Paula Arbildi	A.O3.D1.7	Paulo César Borges	R.O3.D3.5, R.P7.40
Paula Becker Pertuzatti	L.P3.28, L.P3.59	Paulo Cesar de Sousa Filho	G.O1.D3.2, G.O1.D3.3, G.P4.40, G.P4.44, G.P4.74
Paula Chiachia Pasta	D.P5.23	Paulo César Moraes	A.P5.39
Paula Cristina De Souza	D.P4.25	Paulo Cesar Piquini	G.P6.86
Paula Cristina Gomes Fernandes	P.P1.54, P.P1.75	Paulo Cezar Tulio	L.P3.60
PAULA CRISTINA RODRIGUES	G.P4.53, U.P7.37	Paulo Clairmont Feitosa de Lima Gomes	D.P5.29
Paula C. Rodrigues	F.P2.1, F.P2.39, F.P6.40, F.P6.45, G.P4.18, G.P6.75, T.P3.40	Paulo de Tarso Cavalcante Freire	T.P3.18, T.P3.31, T.P3.32, T.P3.33
Paula de Oliveira Ribeiro Alho	K.O2.D3.2, K.P7.14, K.P7.18, K.P7.19	Paulo de Tarso Mendes Luna	A.O3.D2.4
PAULA DUTRA DUTRA	U.O2.D2.4, U.P7.43	Paulo E. Arratia	F.P4.43
Paula Fernanda da Silva Farina	Q.P3.15, Q.P3.50, X.P5.32	Paulo Eduardo Brito	M.P7.1
Paula Gouveia	C.O2.D1.2	Paulo Eduardo Souza	U.O2.D3.2
Paula Leticia Correa de Toledo Cury	C.P6.70	Paulo Ernesto Marchezi	F.P2.42, F.P2.43, F.P2.8, G.O3.D1.6
Paula Maria Pincela Lins	A.P5.25, A.P5.69	Paulo Euzebio Cabral Filho	A.O3.D1.4
Paula Moreira	C.P6.3	Paulo Fabricio Macario	L.O3.D3.2
Paula Paulino Silva	L.P3.28, L.P3.59	PAULO HENRIQUE ALMEIDA DA HORA	D.P4.14, D.P4.14
Paula Prenholatto Lopes	C.P6.25, C.P6.47		
Paula Silvia Haddad	A.O2.D1.2, N.O1.D1.3		
Paula Simões Casagrande	F.P6.23		

Paulo Henrique Boulitreau Assirati	A.P4.38	Paulo Ximenes Aragão Filho	E.P3.27
Paulo Henrique Eleuterio Falsetti	D.P5.40, G.P6.40, G.P6.49	Pavel Chulkin	F.O3.D2.7
Paulo Henrique Lazari Buzinaro	M.P7.26, M.P7.27	Pavel Vorobiev	G.P4.35
Paulo Henrique Ogata	Q.P3.14, Q.P3.18, Q.P3.57	Pedro Akira Bazaglia Kuroda	C.P2.40, C.P2.41, C.P6.33
Paulo Henrique Rodrigues	D.P4.25	Pedro Augusto de Paula Nascente	C.O3.D2.6, C.P2.10, R.P7.39
Paulo Lourenço Monteiro Junior	C.P2.38	Pedro Augusto Silva	U.O2.D2.4, U.P7.43
Paulo Luiz Lopes	F.O3.D2.6	Pedro Barquinha	V.O3.D2.4
Paulo Manoel Conceição Santos	L.P3.54	Pedro Bell Santos	O.P7.9
Paulo Miguel Garcia	B.P4.19	Pedro Bertemes Filho	M.P6.25
Paulo Neilson Marques dos Anjos	G.P6.4	Pedro Caetano Sabino Santos	M.P7.34
Paulo Noronha Lisboa Filho	C.O3.D1.8, C.P2.16, C.P2.56, R.P7.31	Pedro Campos	R.P7.17
Paulo Parreira	A.P4.45	Pedro Cunha de Lima	C.P2.37, E.P3.27, P.P1.71
Paulo Pureur	M.O3.D1.1	Pedro de Freitas Façanha Filho	F.P4.19
Paulo Rafael Nunes e Silva Albuquerque	E.O2.D3.2	Pedro Emílio Amador Salomão	G.P6.18
Paulo Rangel Rios	Q.P3.53, Q.P3.54	Pedro Felype Ferreira Araújo	G.P6.83
Paulo Roberto Bueno	E.O1.D4.1	Pedro Fernandes Zenóbio	J.P5.2
Paulo Roberto da Silva Ribeiro	C.P6.51, C.P6.52	Pedro Gabriel Vieira Silva	V.P1.33
Paulo Roberto de Aguiar	Q.P3.73	Pedro G. Demingos	S.O3.D1.2, V.P1.34
Paulo Roberto Innocente	G.P6.41	Pedro Guilherme do Nascimento Pereira	Q.O2.D3.3
Paulo Rocha	F.O1.D3.1	Pedro Henrique Aguiar	T.P3.18
Paulo Rogério Catarini da Silva	E.O3.D3.5, E.P3.63	Pedro Henrique Benites Aoki	A.P4.16, A.P4.26, A.P4.42, B.O3.D3.2, B.P2.10, B.P2.27, B.P2.77
Paulo Rogério da Costa Couceiro	G.P4.28, G.P6.67	Pedro Henrique Cury Camargo	G.P4.42
Paulo Rogério Pinto Rodrigues	G.P2.28	Pedro Henrique da Silva Vieira	X.O2.D1.3
Paulo Sergio Carvalho Pereira da Silva	C.O3.D2.4, C.P6.22	Pedro Henrique de Oliveira Neto	F.O3.D3.5, F.P2.4, F.P4.10, F.P4.12, F.P4.38, G.O1.D4.3, G.P4.51, G.P4.71, G.P4.8, G.P4.9, G.P6.42, V.P1.40
Paulo Soares	J.P5.14, J.P5.7	Pedro Henrique Fazza Stroppa	F.P2.56
Paulo Victor de Azevedo Guerra	C.P2.7	Pedro Henrique Ferrarezi Rodrigues	U.P7.39
Paulo Victor Rodrigues Gomes	B.P2.16		
Paulo Victor Soares	C.P2.53		
Paulo V Trevizoli	K.O1.D3.1, K.O3.D3.5		

Pedro Henrique Gonzalez de Cademartori	B.P2.11, R.O3.D3.8, U.P6.23	Pedro Vitor Dixini	E.P3.64
Pedro Henrique Pereira Rebello	F.P2.54	Pedro Xavier Rodriguez Massaguer	B.O2.D1.1
Pedro Henrique Sangaletti	G.P2.82, G.P2.86, G.P6.88, L.P3.34	Pedro Y. C. de Santana	S.P5.28
PEDRO HENRIQUE TIAGO LEITE	L.P3.1	Pejman Hadi	T.O3.D1.3
Pedro Italo Cruz	B.P2.74	Pericles Andre Assis Azevedo	S.P7.5
Pedro Jorge von Ranke	K.O2.D3.2, K.P7.14, K.P7.18, K.P7.19	Péricles Bosquetti	Q.P3.55, Q.P3.56
Pedro José de Castro	S.P7.20, S.P7.21	Péricles Joaquim Hilário da Cunha Lemos	D.P4.11
Pedro Lana Gastelois	A.O2.D2.1, M.O3.D2.2	Perpétua Maria Rodolphi Fabre	G.P6.30, G.P6.43
Pedro Leonardo Silva	T.P3.10, T.P3.14, T.P3.46, T.P3.54, T.P3.60	Persio Mozart Pinto	C.O2.D2.3, C.O2.D3.2
Pedro Leonidas Oseliero Filho	S.P7.28	Peter C Ford	G.P4.73
Pedro L. G. Jardim	G.P2.87, J.P5.9	Peter Hammer	L.O1.D4.1, Q.P3.49
Pedro Lovato Gomes Jardim	G.P2.1, G.P2.42, G.P2.45, G.P2.60, G.P2.92	Peter Skabara	F.O3.D1.2
Pedro Luis Grande	L.O1.D4.2	Peterson Gomes Carneiro	Q.P3.14
Pedro Manuel Calas Lopes Pacheco	Q.P3.33	Peterson Timoteo Ribeiro	Q.P3.57
Pedro Martins Santucci	M.P7.35	Petru Apostol	F.O3.D2.4, F.P2.37
Pedro Miguel da Rocha Rodrigues	M.O3.D2.6, M.P7.36	Petrus Santa-Cruz	B.O1.D4.6, B.O3.D2.3, B.O3.D2.4, B.O3.D2.6
Pedro Orellana	K.O3.D3.6	Pich Andrij	A.O3.D2.2
Pedro Paulo Ortega	D.P5.41	Pierre Basílio Almeida Fechine	U.O1.D1.3
Pedro Paulo Rodrigues Pinheiro	G.P4.25, M.P6.17, M.P7.55	Pierre Dechambenoit	F.O3.D1.1
Pedro Ramon Almeida Oiticica	O.P7.12	Pierre Giovanny Ramos	D.O3.D1.8
PEDRO RENATO TAVARES AVILA	P.O3.D2.5, P.P1.76, R.O3.D3.7	Pierre Vinchon	R.O3.D3.8
Pedro Schio	M.O1.D1.2, M.O3.D1.2, M.O3.D2.2, M.P7.13, M.P7.18, M.P7.34, M.P7.42	Pietro Antonio Livio	F.O3.D3.4
Pedro Tendrih Sodré	S.P7.29	Pilar Hidalgo Falla	D.P4.55, G.P2.72, U.P7.35, V.P1.19, V.P1.28
Pedro Vargas	A.P5.35	Piter Gargarella	O.P7.2, X.O3.D1.5, X.P5.24, X.P5.39, X.P5.40, X.P5.45, X.P5.47, X.P5.7
Pedro Victorio Caetano Abrantes de Quadros	R.P7.40	Plinho Francisco Hertz	B.P4.23
		Plínio Antoninho de Freitas	G.P2.69
		Plinio Ivo Gama Tenorio	P.P1.65
		Pollyana Caetano Ribeiro	D.P5.7, M.P7.9
		Pollyana Trigueiro	B.P4.41, D.P5.42, E.P3.65, G.P4.76, G.P4.77, L.P3.39, N.P5.33

Polyana Alves Radi	C.O2.D2.2, L.O1.D3.3, L.P3.50, R.P7.32
Polyana Baungarten	X.P5.18
Polyane Reis dos Santos	C.O2.D1.4
Ponnada A. Narayana	A.O3.D1.8
PRABHAKARAN THANDAPANI	K.P7.17
Prashanth Konda Gokuldoss	X.O3.D1.3
Priscila Alessio	B.P2.34, C.P6.23
Priscila Barros de Almeida	G.P2.62, G.P4.1, G.P6.44, S.P7.31
Priscila Cavassin	F.O1.D3.2
Priscila Cristh Fonseca Alves	N.P5.3
Priscila da Costa Gonçalves	L.P3.52, Q.O3.D3.4
Priscila Ferreira Reis	D.P5.43
Priscila Leite	L.O3.D3.2, R.P7.22, R.P7.32, R.P7.42
Priscila Pazini Abatti	F.P6.24
Priscila Rios Teixeira	A.O2.D2.4, A.P4.33
Priscila Rodrigues Siqueira	A.P5.5
Priscila Silva Sampaio Souza	A.P4.16
Priscilla Carvalho Veggi	B.P4.18
Priscilla Mengarda	S.P7.30
PRISCILLA MOL QUEIROZ	C.P6.48
Priscyla Daniely Marcato Gaspari	A.P5.29
Priyanka Bhatt	H.P3.11
Prof. Bruno Silveira de Souza	E.P3.26
Przemyslaw Data	F.O1.D1.2, F.P6.21, G.O3.D2.4, G.P2.7
Przemysław Podsiadły	G.O3.D2.4
Pulikanti Guruprasad Reddy	F.P2.34

## Q

Quaid Zaman	U.P7.54
Querem Hapuque Rebelo	E.P3.21

## R

Rachel Faverzani Magnago	B.P4.5, L.P3.29, T.P3.57, X.P5.18
Rachid Rahouadj	C.O2.D3.3
Radek Kolman	S.P7.34
Rademaks Bento de Oliveira	L.P3.61
Radenka Maric	E.O1.D4.2
Rafaela Campos Queiroz	A.P5.28, A.P5.32, U.P7.3
Rafaela Caroline Rodrigues dos Apostolos	A.P4.34
Rafaela Cristina Cota	D.P4.28
Rafaela C. Sanfelice	B.P2.6, B.P2.7, B.P4.30
Rafaela Daiane de Oliveira	U.P7.14, U.P7.15
Rafaela Ferneda Ferneda	D.P5.2, D.P5.44, D.P5.47
Rafael Añez	S.O3.D2.7
Rafael Aparecido Ciola Amoresi	D.P5.15, G.P2.8, G.P4.22, S.P7.31, S.P7.8
Rafaela P Gazzi	A.P5.14
Rafaela Said dos Santos	B.P2.76, B.P4.17, B.P4.31
Rafaela Salvador Souza Lemos	G.P2.44, V.P1.3
Rafaela Silveira Andre	B.P4.3, T.P3.45
Rafael Augusto Valentim da Cruz Magdalena	D.P4.8
Rafael Bento Serpa	F.P2.23, F.P2.24, G.P4.21
Rafael Besse	G.P4.64, V.O1.D3.2
Rafael Borges Alves Rennó	U.O2.D2.4, U.P7.43
Rafael Cabreira Gomes	M.O1.D3.1
Rafael Cardoso Toledo	P.P1.65, S.P7.20, S.P7.21
Rafael Chaves Lima	N.P5.32
Rafael Cintra Hensel Ferreira	F.O1.D4.6
Rafael da Silva	V.P1.17, V.P1.35
Rafael da Silva Fernandes	G.P4.52
Rafael de Camargo Catapan	R.P7.7
Rafael Defavari	R.P7.41
Rafael de Freitas Cuer	E.P3.66

Rafael de Moura Nobre	X.O3.D1.4	Rafael Melo Freire	U.O1.D1.3
Rafael de Oliveira Pedro	A.P4.35		F.P4.40, G.P2.46,
Rafael de Sá Freitas	M.P7.55	Rafael Mendonça Almeida	G.P2.55, G.P2.56,
Rafael Domingues Della Pace	M.P6.13, M.P7.3, M.P7.37, M.P7.8		M.P6.6, P.P1.50, P.P1.59
Rafael dos Santos Carvalho	F.P2.10	Rafael Miguel Sábio	B.P4.33
Rafael Eiji Saito	G.P2.61, G.P6.45, G.P6.46	Rafael Nascimento Moreira	D.P4.15, D.P5.4
Rafael Eleodoro de Góes	A.O1.D2.2	Rafael Otoniel Ribeiro	V.P1.26
Rafael Fabri Chimidt	L.P3.62	Rafael Parra Ribeiro	R.O3.D3.3, R.P7.12, R.P7.44
Rafael Fillus Chuproski	R.P7.20, R.P7.8	Rafael Perez Ferreira	L.P3.5
Rafael Francisco Santiago De Souza	F.P6.25	Rafael Perrella	G.O1.D3.3, G.P4.40, G.P4.44
Rafael Frasson Monteiro	G.P6.47, G.P6.48	Rafael Ramírez-Bon	G.P4.32, G.P4.35, G.P6.29
Rafael Furlan de Oliveira	F.O3.D1.8, F.O3.D3.1, F.O3.D3.4	Rafael Rocha Maia	Q.P3.14, Q.P3.18, Q.P3.57
Rafael Furtado Seeberger	L.P3.70	Rafael Rodrigues Barbosa	V.P1.17, V.P1.35
Rafael Gallina Delatorre	P.P1.77, Q.P3.8	Rafael Salles Kurusu	U.O3.D1.1
Rafael Gitti Tortoretto Fim	X.O3.D1.2, X.P5.27, X.P5.28	Rafael Silva Alencar	V.O1.D2.3
Rafael Gomes Nunes Silva	X.P5.20	Rafael Silvestre de Sena	L.P3.38
Rafael Grande	B.P2.57, B.P4.32, T.P3.23	Rafael Souza da Costa	E.P3.62
Rafael Gustavo Torres Leal	EXP.3.D2.3	Rafael Tomaz Silva	S.O2.D1.1, S.P5.1, S.P5.2, S.P5.27
Rafael Humberto Mota de Siqueira	O.O1.D3.6, O.O1.D3.9, O.P7.13, O.P7.3, O.P7.4, P.O3.D2.2, Q.P3.58, X.O3.D1.6	Rafael Trautwein Santiago	M.P7.38
rafael Jesus gonçalves Rubira	A.P4.17, D.P4.21, D.P5.21	Rafael Turra Alarcon	D.P4.57
Rafaella Casado Silva	M.P6.36, M.P6.37, S.P7.19, S.P7.41, S.P7.42	Rafael Uarth Fassbender	G.P6.50
Rafaella Hissae Koga	G.P6.49	Rafael Villaurrutia	Q.O1.D4.3
Rafaella M Ribeiro	C.O3.D2.7, C.P6.49	Rafael Villaurrutia Arenas	EXP.3.D2.4
Rafaella Takehara Paschoalin	T.O1.D1.3, T.O3.D1.2	Rafael Yokoo Shoiti de Souza	D.P4.29
Rafael Leonardo Cruz Gomes Silva Silva	F.P6.26	Rafael Yosikatsu Odo	E.O3.D3.8, L.P3.63, M.P6.38
Rafael Libanori	T.O1.D1.1	Rafael Zadorosny	M.P6.4, M.P7.39
Rafael Lopes Seeger	M.P6.20	Ragnar Larsson	S.O1.D2.2
Rafael Luís Boemo	T.O3.D1.1	Raigna Augusta da Silva Zadra Armond	F.O3.D1.5
Rafael Marangoni	D.O3.D2.2	Railson Bolsoni Falcão	H.O1.D1.2, X.O3.D1.4
Rafael Marques Ribas	K.O2.D3.2	Raimundo Araújo Netto	L.P3.57
		Raimundo Lora Serrano	M.P7.42
		Raimundo Nonato Fernandes Moreira Filho	C.O1.D2.3
		Raimundo Ribeiro Passos	V.P1.30, V.P1.31
		Raira Chefer Apolinario	Q.P3.28
		Raíssa Monteiro Pereira	C.P6.53



Raissa Morais Alves dos Anjos	F.P2.35, F.P4.35	Raquel Aparecida Domingues	G.P4.24
Raissa Samira Rocha da Silva	D.P5.12, U.P7.44	Raquel Dantas Campos	G.P6.52
Raissa Venancio	G.O2.D3.2	Raquel de Moraes Lobo	X.P5.11, X.P5.41
Raiza Nara Antonelli Maia	B.P4.34	Raquel de Oliveira dos Santos	A.O1.D2.2
Raja Sebastian	A.O3.D2.2, T.O1.D1.3	Raquel Fernandes Pupo Nogueira	D.O1.D1.1, D.P4.4, D.P5.53
Raluca Savu	U.P7.45	Raquel Gouvea dos Santos	A.P5.33
Ramalinga Viswanathan Mangalaraja	K.P7.17	Raquel Guttierres Gomes	B.P4.42, B.P4.43
Ramona Schlesinger	B.P4.34	Raquel Riciati do Couto Vilela	A.P5.60, G.P6.53
Ramon Dadalto Carvalho	G.P2.45, G.P2.87, G.P2.92	Raquel Sampaio Jacob	D.P4.23
Ramón Raudel Peña Garcia	M.P7.25, M.P7.48	Raquel Silva Thomaz	L.O1.D4.2
RAMON RODRIGUES DE MIRANDA	L.P3.1	Raquel Simancas	N.O2.D1.1
Ramon Silva Vilela	D.P4.51	RAQUEL SOARES REIS	T.P3.47
Ramsés Otto Cunha Lima	P.P1.3, P.P1.5, P.P1.53, X.P5.5	Raul Back Campanelli	M.O2.D3.1, T.P3.48
Ranata Gomes	A.O1.D2.2	Raul Costa Oliveira	B.P4.35
Rangel Graudiston Aredes	E.P3.25	Raul Fernando Cuevas	G.P6.31, G.P6.54, G.P6.84
Rangel Vasconcelos da Silva Pinto	C.P2.53	Raul O. Freitas	F.P2.42
Ranylson Marcello Leal SAVEDRA	F.O1.D2.3	Raul Pavanelli Colicchio	Q.P3.14
Raphael Capruni Vaz	G.P6.51	Raul Quijada	M.P6.14
Raphael de Souza	L.P3.60	Raul Torres Rodrigues	F.O1.D4.4
Raphael Dorneles Caldeira Balboni	B.O3.D1.3, G.P6.85	Rayane Bueno Goularte	U.P6.14
Raphael Értola Pereira de Deus Santos	G.P4.48	Rayanne Barbosa da Silva	B.P2.61
Raphael Euclides Prestes Salem	C.P6.50	Rayanne Penha Wandenkolken Lima	B.P4.2
Raphael F. Moral	G.O3.D1.6	Rayanne Priscila Gonçalves da Silva	G.P6.33
Raphael Francisco Coutinho dos Santos	Q.P3.35	Raychimam Douglas Santana Bezerra	C.P6.51, C.P6.52
Raphael Garcia Moraes da Fonseca	M.P6.33	Rayssa Barbosa Medeiros	D.P5.45
Raphael Kuhnlein Kuhnlein	D.P4.8, E.P3.16	Rayssa Cristina Viana Costa	G.P6.55, G.P6.82, X.P5.22
Raphael Leonardo Bulla	E.P3.36	Rayssa de Souza Lopes	F.P6.1, F.P6.27
Raphael Longuinhos	V.O3.D2.2	Rebeca Bacani	G.P6.14, G.P6.56
Raphael Nagao	F.P2.42	Rebeca Castanedo Pérez	G.P2.51
Raphael Oliveira da Silva	P.P1.22	Rebeca Cristina Costa de Sá	G.P2.46
Rapher D.M Santos	L.P3.43	Rebeca da Rocha Rodrigues	A.P4.36
Raquel Alvim Figueiredo Mansur	O.O1.D3.7, O.P7.13	Rebeca Delatore Simões	D.P5.46
		Rebeca Falcão Correia	A.P5.32, C.P6.53, L.P3.69, U.O3.D1.6
		Rebeca Ferreira Lemos Vasconcelos	U.O3.D1.7
		Rebecca Faggion Albers	V.P1.23

Rebecca Higginson	Q.P3.63	Renata Lang Sala	A.O3.D1.2
Rebecca Vasconcellos	C.P2.59	Renata Mello Giona	D.P5.48
Regiane Cristina Oliveira	G.P6.1, G.P6.44, S.P7.31	Renata Simao	S.P7.45
Regiane do Nascimento	V.O3.D3.1	Renata Sousa Nascimento	N.O1.D1.2
Regiane Gordia Drabeski	G.P6.57	Renata Viana Santos	G.P4.25, M.P6.17, M.P7.55
Regiane Santana Oliveira	P.P1.44	Renata Vieira Lima	F.P6.28
Regina Aparecida Capeli	D.P5.2, D.P5.44		C.P6.20, L.P3.25, L.P3.46, Q.P3.11, Q.P3.30, Q.P3.4, Q.P3.67, Q.P3.68, Q.P3.74, Q.P3.9
Regina Aparecida Capeli da Silva	D.P5.47	Renato Altobelli Antunes	
Regina Célia	R.P7.42, R.P7.43		
Regina Célia Galvão Frem	A.P4.23, C.P6.67	Renato Azevedo Moreira	C.P6.11
Regina Ferreira Ribeiro	A.P4.37, M.P7.40	Renato Belli Strozi	H.O3.D1.8, H.P3.7
Régine Perzynski	M.O1.D3.1	Renato Borges Pontes	S.O3.D1.1
Régis Daniel Cava	P.O3.D2.8, Q.P3.6, X.P5.10, X.P5.45	Renato Boschilia Junior	E.P3.25
Régis Valker Santos	Q.P3.59, Q.P3.60	Renato Carvalho Resende	R.O3.D3.3
Reinaldo Aparecido Bariccatti	D.P4.13, M.P6.40, M.P6.41	Renato Chaves Silva	L.P3.64
Reinaldo Camino Bazito	A.P4.11	Renato Cruvinel de Oliveira	J.P5.28
Reinoldo Grudtner Kuntze Jr.	G.P4.21	RENATO DE CANTONEIRO	G.P6.60
Rejane Maria Pereira da Silva	Q.P3.67	CANTONEIRO	
Rejane Teixeira do Nascimento	A.P4.48, C.P6.66	Renato de Gouveia Cantoneiro	G.P4.81, G.P6.88, L.P3.34
Renan Augusto Pontes Ribeiro	S.P7.15, S.P7.32, S.P7.38, S.P7.9	Renato Figueira da Silva	EXP.3.D2.6
Renan Caike Silva	G.P6.58	Renato Forni	O.O1.D3.4
Renan Colucci	F.O1.D3.2	Renato Galvão da Silveira Mussi	P.O3.D2.3
Renan da Silva Fernandes	B.P2.43, B.P2.44	Renato Grigolon Capelo	J.P5.12, J.P5.29
Renan Eduardo de Lima Lopes	C.P2.58	Renato Grillo	A.P5.36
Renan Floriani Bertoldi	U.P6.14	Renato Meneghetti Peres	C.P6.21
Renan Serrano	I.O1.D3.6	Renato Oliveira Evangelista	J.P5.30
Renata A. Monteiro	A.P4.13	Renato Poli Mari	B.P4.36, I.P7.12
Renata Antoun Simão	R.O3.D3.1, U.O2.D2.2	Renato Rosseto	V.P1.25
Renata Aquino	M.O1.D3.1, U.O3.D2.6		E.P3.26, G.O3.D2.2, G.O3.D2.5, G.P6.36
Renata Bigal Werdesheim	N.P5.32	Renato Vitalino Gonçalves	
Renata Cristiano Nome	I.O1.D3.6	René Alfonso Nome	G.P4.42
Renata Cristina de Lima	S.P7.35, S.P7.36	Rene Alfonso Nome Silva	U.O1.D3.2
Renata Danielle Adati	G.P6.59	Renê Bronze Santos	P.P1.78, P.P1.79
RENATA DE CARVALHO TELES BERTOTTO	N.O3.D1.5	Rene Francisco Boschi Gonçalves	P.P1.40, P.P1.41
Renata Favoretto	P.P1.27, P.P1.28, P.P1.38	Rene Martins Volu	D.P5.51, O.P7.16, O.P7.3, O.P7.4
		Rene Olivier	A.P5.18

Renilma de Souza Pinheiro Fonseca	M.P7.4	Ricardo Mimo Halak	Q.P3.61
Renivaldo José dos Santos	D.P4.1	Ricardo Moreira	M.O3.D2.6, M.P7.36
Rennáh Francisco Figueiredo Gonçalves	E.P3.40, E.P3.67	Ricardo Paupitz	V.P1.29, V.P1.36
Rhauane Almeida Galvão	G.O2.D2.2, G.P4.39, G.P6.61	Ricardo Pereira Bonini	M.P6.30
Ricardo Luis Tranquilin	G.P2.11, G.P6.10, G.P6.62	Ricardo Queiroz Aucelio	U.P7.54
Ricardo Alexandre Amar de Aguiar	B.P2.68, Q.P3.27, Q.P3.33	RICARDO RAMOS ROCHA	D.P4.9, D.P5.49
Ricardo Alexandro Medeiros Valentim	C.P2.7	Ricardo Rampanelli	U.P7.11
Ricardo Andrade	U.O1.D2.2	Ricardo Reis	M.P7.18
Ricardo Augusto Moreira Valdir	E.P3.38	Ricardo Rodrigo Ramos Cecci	I.P7.13, I.P7.14
Ricardo Bortoletto-Santos	B.P4.20, B.P4.37, B.P4.38, B.P4.40, B.P4.55, G.P4.38	Ricardo Ruther	G.P6.11
Ricardo Canute Kamikawachi	U.P7.59	Ricardo Santana	A.O3.D2.3, V.P1.10
Ricardo Carneiro Borra	S.P7.2	Ricardo Stefani	B.O1.D4.4
Ricardo Castro	G.P2.15, G.P4.19	Ricardo Valli	G.P6.63
Ricardo Delgado	L.P3.63	Ricardo Vieira	P.P1.58, X.O1.D1.3
Ricardo Ferreira Affeldt	E.P3.26	Ricardo Vignoto Fernandes	E.P3.52, F.P4.26, G.P2.53, G.P2.88, G.P4.55, G.P6.20
Ricardo Flavio Aroca	F.P4.25	Richard Caraballo	M.P6.16
Ricardo Floriano	H.O1.D1.4, H.O3.D1.4, H.P3.10, P.P1.80	Richard Castro Júnior	S.P7.33
Ricardo Geraldo Sousa	A.O3.D1.3	Richard J. Mandle	F.P2.12
Ricardo Gonçalves Mendes	EXP.2.D2.3	Richard Landers	U.P7.55
Ricardo Henrique Buzolin	P.O3.D2.5	Richard O Kennedy	A.P4.20
Ricardo Henrique Lima Leite	B.P2.39, B.P2.49	Richard Paredes	D.P5.35
Ricardo Henriquez	L.P3.65, V.P1.16	Rieyssa Maria Almeida Corrêa	M.P7.41
Ricardo Jorgensen Cassella	G.P4.67	Rimma Lapovok	Q.O2.D3.1, Q.P3.20
Ricardo Klaus Kramer	B.P2.57	Rinaldo Ferreira Gandra	R.P7.33
Ricardo Knoblauch	L.P3.63	Rita de Cássia Barbosa Camargo Lamparelli	E.P3.47
Ricardo Lima Guimarães	F.P6.29	Rita de Cássia Cipriano Rangel	R.P7.44
Ricardo Luis Barcelos	X.P5.18	Rivelino Flores-Farías	F.P2.48
Ricardo Luiz Longo	G.P6.74	R. Mohan Sankaran	R.O1.D3.1
Ricardo Luiz Parise	J.P5.27, P.P1.73	Roberta Antigo Medeiros	G.P4.16
Ricardo Luiz Perez Teixeira	E.P3.11, L.P3.1	Roberta Bernardino	J.P5.31
Ricardo Magini	C.P2.43	ROBERTA DA SILVA BUSSAMARA RODRIGUES	A.P4.39
Ricardo Marques Silva	E.P3.19, E.P3.39	Roberta de Farias	X.P5.1
Ricardo Mendes Leal Neto	H.O1.D1.1, H.O1.D1.2	Roberta Gaidzinski	X.P5.42
Ricardo Meurer Papaléo	A.P5.35	Roberta Helena Mendonça	C.O3.D1.5, X.P5.25

Roberta Martins da Bianchi Bianchi	D.P5.3	Robson Ferrari Muniz	J.O1.D4.1
Roberta Rizzo Domingues	C.P2.24	Robson Leal Silva	F.P2.18, P.P1.68
Roberto Aguiar Ramos Jr	R.P7.11	Robson Lourenço Cavalcante	F.P2.23, F.P2.24
Roberto Benavides	T.P3.57	Robson Rosa da Silva	B.P4.33
Roberto Dalledone Machado	S.P7.30	ROCELITO LOPES ANDRADE	G.P2.89
Roberto de Aguiar Ramos Jr.	G.P6.78		G.O3.D2.3, G.O3.D2.6, G.O3.D2.7, G.P2.84, G.P6.17, O.O1.D3.1, Q.O3.D3.7
Roberto de Matos	G.P2.26, G.P2.27, G.P2.38, G.P4.16	Rodnei Bertazzoli	
Roberto Gomes de Aguiar Veiga	Q.P3.21, S.P5.3, X.P5.43	Rodney Marcelo do Nascimento	B.O2.D1.2, C.O2.D3.3
Roberto Koji Onmori	G.P4.29	Rodolfo Lisboa Batalha	X.O3.D1.5, X.P5.47
Roberto Martins Souza	L.O1.D3.1, L.O1.D3.2, L.O2.D3.1, L.O2.D3.2, L.O2.D3.3, L.O2.D3.4	Rodolfo Minto de Moraes	A.P4.44, B.P4.45
Roberto Masahiko Aoki	G.P2.88	Rodolfo Politano	P.P1.9
Roberto Mendonça Faria	F.O1.D2.2, F.O2.D2.1, F.P2.47, F.P4.21, F.P4.28, F.P4.9, F.P6.2, G.P4.18, G.P4.53, T.P3.38, V.P1.18	Rodolfo Rodrigues Nunes da Silva	G.P6.74
Roberto Paulo Barbosa Ramos	A.P5.47, Q.P3.62	Rodolfo Silva Silva	M.O2.D1.2, M.P7.49, M.P7.6, M.P7.7
Roberto Pereira dos Santos Júnior	E.P3.78	Rodolphe Sopracase	S.O2.D2.2
Roberto Popolim	A.P5.49	Rodolpho Alessandro Nesta Silva	G.P6.64
Roberto R de Avillez	C.P6.54, D.O3.D2.5	Rodolpho Leite	M.O1.D3.1
Roberto Rodrigues Cunha Lima	E.P3.68	Rodrigo Afonso Esteves	D.P4.41
Roberto Rodrigues Ribeiro	A.P5.18	Rodrigo Amauri Nogoceke	J.P5.14
Roberto Vaz	G.P2.91	Rodrigo Balen	R.P7.45
Roberto Viana de Sales	B.P4.39, F.P4.40	Rodrigo B Capaz	S.P7.45
Roberto Zenhei Nakazato	C.P6.42	Rodrigo Bezerra Vasconcelos Campos	H.O3.D1.7
Roberto Zilles	G.P2.68	Rodrigo Blödorn	O.P7.14
Robert Prudêncio Amaral	M.P7.42	Rodrigo Borges	I.P7.7
ROBERT SARAIVA MATOS	A.P4.1	Rodrigo Cezar de Campos Ferreira	V.O3.D2.6
Robson Andreazza	B.O3.D1.3, U.P6.19	Rodrigo Coura Dias	F.P2.26
Robson Couto da Silva	G.P6.46	Rodrigo Cristiano	F.P2.45, F.P6.49
Robson da Silva Rocha	D.P4.8, E.P3.16	Rodrigo C Sabadini	B.P4.56
		Rodrigo da Silva	Q.P3.23, Q.P3.35
		Rodrigo de Carvalho Paes Loureiro	Q.P3.1
		Rodrigo de Souza Correa	F.P6.44
		Rodrigo de Vasconcellos Lourenço	M.P7.43

Rodrigo Fernando Bianchi	D.P5.18	Rodrigo Silva Braga	M.P7.44
Rodrigo Ferrão de Paiva Martins	F.P4.9, V.O3.D2.4	Rodrigo Silva Nascimento Mancini	B.O2.D2.3
Rodrigo Ferreira	A.O1.D1.2		B.O3.D1.4, B.O3.D3.5, C.O1.D2.3
rodrigo frança pacheco	X.P5.42	Rodrigo Silveira Vieira	
Rodrigo Gomes Costa	F.P6.30		F.P2.42, G.O3.D3.5, G.P4.36
Rodrigo Gribel Lacerda	V.O3.D3.2, V.P1.21	Rodrigo Szostak	
Rodrigo Klaic	B.P4.40, B.P4.55, D.P4.43	Rodrigo Tavares de Oliveira	M.P6.32
Rodrigo Labat Marcos	A.P4.38	Rodrigo Teixeira Bento	C.P2.22, G.P4.80, G.P4.83
Rodrigo Labat-Marcos	A.P5.19	Rodrigo Vilaça	F.O3.D2.6
Rodrigo Lassarote Lavall	V.O1.D4.2	Roger Borges	D.P4.43
Rodrigo Leandro Bonifácio	N.P5.4, T.P3.42	Roger Carvalho Oliveira	M.O3.D2.7, M.P7.45
Rodrigo Lupinacci Villanova	T.P3.61	Roger C Hiorns	F.O2.D2.3, F.P2.28
Rodrigo Mantovani Ronchi	Q.P3.63, V.O3.D3.6	Roger Gomes Fernandes	J.O1.D4.4
Rodrigo Matte Rios Fernandez	G.P2.90	Rogéria Rocha Gonçalves	G.P4.37, J.O1.D4.2
Rodrigo Metz Gabriel Paes	L.P3.10	Rogério Almeida Gouvêa	G.O1.D2.4, G.O2.D1.2
Rodrigo Morawski	F.P6.31	Rogério Aparecido Bataglioli	B.O3.D3.1
Rodrigo Moreira Valerio	G.P6.65, G.P6.66	Rogério de Almeida Vieira	G.P2.30
Rodrigo Muniz de Sousa	G.P4.28, G.P6.67, T.P3.34	ROGERIO FREITAS DOS SANTOS	A.P4.39
Rodrigo Nagata	A.P4.45, L.P3.68		V.O3.D3.5, V.P1.32, V.P1.37, V.P1.7
Rodrigo Nascimento Ferreira Alves	L.P3.61	Rogério José Baierle	
Rodrigo Nepomuceno	K.P7.6	Rogério Margonar	C.P6.43
Rodrigo Nunes De Souza	G.P6.68	Rogério Miranda Morais	F.P6.11, F.P6.32
Rodrigo Ono	L.P3.48	Rogério Queiroz	D.P5.9
Rodrigo Otávio Venturini Salamão	Q.P3.17	Rogério Ramos Sousa Jr	C.P6.41, U.P6.24, U.P7.34
Rodrigo Perito Cardoso	C.P6.27, J.P5.1	Rogério Valaski	F.P6.38
Rodrigo Prado Feitosa	B.P4.41, N.P5.33	ROGÉRIO VALENTIM GELAMO	U.O3.D3.5
Rodrigo Queiros Almeida	V.O3.D3.3	Roger M Leblanc	F.P6.26
Rodrigo Queiroz Albuquerque	G.P4.42	Roisin Owens	F.O1.D3.2
Rodrigo Saldanha Romanus	A.O1.D2.4, T.P3.61	Roland Kádár	U.O1.D2.1
Rodrigo Sávio Pessoa	G.P2.23, G.P2.24, R.P7.29	Romaiana Picada Pereira	A.P5.9
Rodrigo Schild Valega Fernandes	B.P2.69		D.O3.D1.3, D.P5.50, G.P6.35, S.P7.24
Rodrigo Sierpe	A.P4.31	Romário Araújo Pinheiro	D.P5.51, O.P7.16, U.P6.37, U.P7.46
Rodrigo Silva	L.P3.17, L.P3.19, L.P3.2, Q.O3.D3.5, Q.O3.D3.6, Q.P3.2	Romario justino da silva	T.P3.28, T.P3.29

Romeo Juge	M.O3.D1.3	Rosely Maier-Queiroz	B.O3.D2.3, B.O3.D2.6
Romeu Rony Cavalcante da Costa	A.P5.8, B.P2.12, B.P2.17, E.P3.13	Rosembergue Gabriel Lima Gonçalves	N.P5.27
Romildo Jeronimo Ramos	F.P2.8	Rosemeire Brondi Alves	C.P6.26
Romildo Jerônimo Ramos	F.P2.43, G.P2.39	Rosemere de Araújo Alves Lima	B.P2.68
Romualdo Menezes	T.O3.D1.5	Rosimara Passos Toledo	F.P6.33, F.P6.34
ROMUALDO R. MENEZES	D.P4.48, D.P5.37, D.P5.38	Rosmary Nichele Brandalise	C.P6.44, L.P3.36, L.P3.37, L.P3.53
Rômulo Luís Fernandes Martins	L.P3.38, U.P7.46	Rossana Mara da Silva Moreira Thiré	C.O3.D1.4, C.O3.D1.5, C.O3.D1.6, C.P6.56, C.P6.57
Romulo Luiz Mendes Souza	B.P2.67	Rossano Gimenes	C.P6.19, C.P6.68, E.O3.D3.4, E.P3.35, I.O1.D3.5, I.P7.10, J.P5.16
Ronaldo Andrade de Araújo	C.P2.35, K.P7.12, K.P7.13, K.P7.2, K.P7.3	Rossano Lang	C.P2.34, G.P6.63, U.P7.28, U.P7.41
Ronaldo Censi Faria	F.P4.5	Rovan Fernandes Lopes	M.O3.D1.1
RONALDO DA MACENO LIMA	L.P3.16, L.P3.67	Roy G. Gordon	F.P2.57
Ronaldo Ferreira Do Nascimento	D.P5.19, N.P5.28	Rozana Wendler Rocha	C.P6.56
Ronaldo Junio Campos Batista	C.P2.59, V.P1.3	Rozane Fátima Turchiello	A.P4.41, G.P6.70, G.P6.71
Ronald Tararam	A.O3.D2.4	Ruana Cardoso Lima	C.P2.34
Ronei C. Oliveira	M.O3.D2.4, M.P7.33	Ruana Danielly de Moura	U.P7.47
Ronilson Lima Souza	C.P2.35, K.P7.13	Rubem Luis Sommer	A.P4.19, M.O1.D2.3, M.O2.D2.2, M.P6.29, M.P7.11, M.P7.2, M.P7.32
Rony Gonçalves de Oliveira	G.P2.64, G.P4.66, G.P4.79, G.P6.22, G.P6.23, G.P6.81	Ruben Acevedo	S.P7.34
Rosa Corrêa Leoncio de Sá	C.P6.55	Rubens Camaratta	D.P5.56, G.P2.40
ROSA Karolina Barros ARAGÃO	D.P4.14	Rubens Caram	C.P2.6, C.P6.35
Rosana Alves Gonçalves	D.P4.52, X.P5.44	Rubens Maciel Filho	C.O3.D2.2, C.P2.54, U.P7.1, U.P7.8
Rosana de Fátima Gonçalves	G.P6.35	Rubens Maribondo do Nascimento	E.P3.39
Rosana Fernandes Antonio	R.P7.37	Rubia Figueredo Gouveia	U.O1.D2.3
Rosana Maria Alves Saboya	D.P5.25, T.P3.18, T.P3.31	Rubiane Ganascim Marques	G.P6.72, G.P6.73
Rosane Michele Duarte Soares	B.P4.10	Rudimar Riva	O.P7.2
Rosângela Assis Jacques	D.P4.34	Rui Eduardo Moreira	EXP.2.D2.2
Rosaura Piccoli	I.P7.17	Rui Manoel Reis	F.P6.46
Roselaine da Silva oliveira	A.P4.40	Rui Manuel Reis	F.P6.18
Roselena Faez	T.P3.49	Rute A.S. Ferreira	G.O1.D4.4
Roseli Kunzel	G.P2.10, G.P6.69		
Roseli Marins Balestra	C.P2.48, T.P3.26		
Rosely Aparecida Peralta	J.P5.23, U.O3.D2.2		

Rute Nara de Jesus Farias da Silva	Q.P3.12
Ruth H. G. A. Kiminami	M.P7.20
Ruth Pinheiro Muniz	M.O1.D3.4, M.P7.46
Ryan D. Greenhalgh	T.O3.D1.5

## S

Sabrina Aléssio Camacho	A.P4.26, A.P4.42, B.P2.27
Sabrina Anicácia de Brito Correia	A.P4.43, C.P6.69, G.P2.97, P.P1.81
Sabrina Barbosa Ferreira	B.P4.16, B.P4.17, B.P4.42, B.P4.43
Sabrina Barbosa Rosini	L.P3.51
Sabrina Kelly Trajano Basílio	M.P6.28
Sabrina Mirele de Oliveira Nascimento	D.P5.62
Sabrina Moura Rovetta	C.P6.53
Sabrina Nicoleti Carvalho dos Santos	J.P5.32, O.P7.8
Sabrina Silva Santana	D.P5.52
Saeed Rahmati	X.P5.43
Saidy Cristina Ayala	D.P5.53
Saimon Domenegheti	P.P1.55
Sajjad Ullah	D.O3.D1.2, J.O3.D2.1
Sakine Khajavi	H.P3.8
Salma Sleiman	H.P3.12
Samantha Custódio Silva Lemos	S.P7.35, S.P7.36
Samantha Sousa de Melo	H.P3.13
Samara de Quadros	I.P7.18, I.P7.2, I.P7.8
Samarah Vargas Harb	C.O1.D1.2, L.O1.D4.1
Samara Schmidt	G.P2.61, G.P6.45
Samaysa de Lima Lins	A.P5.45
SÂMEA VALENÇA ALVES BARROS	D.P4.47, D.P4.48, D.P5.37, D.P5.38
Samile Raiza Carvalho Matos	D.P4.7
Samira Costa Rosa	T.P3.50
Samir Santos Costa	K.P7.18, K.P7.19
Samson Afewerki	B.P2.58, C.O1.D1.2, C.P2.19

Samuel Charca	B.O2.D1.3
Samuel de Oliveira Martins	X.P5.5
Samuel Fernando Moraes	P.P1.27, P.P1.28, P.P1.38
Samuel Flewett	M.O3.D1.6, M.O3.D2.8
Samuel G. Torres	B.P2.6
Samuel Lucas Santos Medeiros	J.P5.33
Samuel Santos de Oliveira	A.P5.54
Samuel Silva Santos	S.O3.D1.5
Samuel Slipack	E.P3.24
Samuel S. M. Santos	M.O3.D2.6
Samuel Veloso Carneiro	U.O1.D1.3
Sandra Bizarria Lopes Villanueva	N.P5.21
Sandra Cruz dos Santos	A.P5.53
Sandra de Cássia Pereira	A.P4.25, D.P5.30
Sandra dos Santos Vales	X.P5.45
Sandra Helena Pulcinelli	N.P5.27
Sandra Landi	C.O2.D3.1
Sandra Mara Kaminski Tramontin	P.P1.56
Sandra Maria da Luz	T.O2.D1.2, T.P3.37
Sandrine Piguel	G.P6.16
Sandro Donnini Mancini	L.O3.D3.7
Sandro Fonseca Quirino	P.P1.51
Sandro Marcio Lima	G.P4.34
Sandro Nascimento Costa	F.O3.D1.3
Sang Won Han	A.O3.D1.5, A.P4.2, B.P2.2
Santiago J.A. Figueroa	H.O3.D1.8, N.O3.D1.4
SANTIAGO MEDINA CARRASCO	L.P3.39
Santiago Sanchez-Cortes	D.P4.21
Sara Correa Marques	H.O2.D1.3
Sarah David-Müzel	P.O1.D2.3, P.O2.D2.2
Sarah Emanuelle Pereira da Silva	G.P6.74
Sarah Lima	G.P2.91
Sara Luiza Gusso	G.P6.75
Sara Nascimento Oliveira	F.P2.8
Sara Tatiana R. Velasquez	B.O1.D1.3

Saul Ovalle	F.P6.22, F.P6.35	Sergio Mazurek Tebcherani	G.P2.61, G.P6.45, G.P6.46, G.P6.57
Saulo Vinicius Martins Souza	D.P4.44, D.P4.46	Sérgio Michielon De Souza	E.P3.2, E.P3.21, E.P3.3, E.P3.71, V.P1.27
Sayonara Andrade Eliziário	B.P2.17, G.O2.D3.2	Sergio Noboru Kuriyama	D.O3.D2.5
Scarlett Lalesca Santos de Lima	B.P4.44	Sérgio Paulo Campana Filho	B.P2.18, B.P2.20
Sebastian Eduardo Reyes-Lillo	S.O2.D2.1	Sérgio Pinheiro	M.P6.23
Sebastiano Garroni	H.O2.D1.4	SÉRGIO RAIR MEDEIROS SILVA	D.P4.47
Sébastien Livi	C.O3.D1.7	Sérgio Ribeiro Teixeira	G.P2.21
Sechi Antonio	A.O3.D2.2	Sergio Ricardo de Lazaro	S.P7.15, S.P7.32, S.P7.37, S.P7.38, S.P7.9
Selene Elifio Esposito	J.P5.14	Sérgio Ruschi Bergamachi Silva	A.P5.48
Sendy Marques Soares	C.P6.58	Sérgio Toshio Fujiwara	C.P2.4, D.P4.30
Sergi Dosta	C.P2.44	Sergio Yesid Gómez González	D.O1.D1.3, I.P7.11
Sergio Akinobu Yoshioka	C.P6.58	Severino Alves Júnior	F.P4.13, G.O1.D4.5, V.P1.22
Sérgio Alves de Azevedo	B.P4.4	Sheila Gonçalves de Castro	D.P4.40
Sergio Antonio Marques Lima	A.P5.3, G.O1.D4.4, G.P4.15, G.P4.6, G.P6.58, G.P6.64, G.P6.76	Sheila Medeiros de Carvalho	O.O1.D3.6, O.O1.D3.9, O.P7.13, P.O3.D2.2
Sergio Damasceno Damasceno	U.O1.D2.3	Sheila Souza Barreto	E.P3.33, E.P3.34
Sergio da Silva Cava	G.O1.D1.1, G.O2.D2.3, G.P2.1, G.P2.17, G.P2.4, G.P2.40, G.P2.41, G.P2.42, G.P2.45, G.P2.60, G.P2.65, G.P2.78, G.P2.81, G.P2.82, G.P2.86, G.P2.87, G.P2.92, G.P4.72, G.P4.81, G.P6.60, G.P6.88, L.P3.34	Sherdil Khan	G.P2.21, G.P2.69, G.P6.83
Sérgio de Lemos Campello	M.O2.D3.3	Sheyla Karolina Justino Marques	E.P3.57
Sérgio de Souza Camargo Jr.	C.P6.17, H.O3.D1.7, L.P3.41, R.P7.2, U.P6.43, U.P7.60	Sheyla MC Máximo Bicalho	C.P6.58
Sérgio dos Anjos Silva	O.P7.14	Shiguelo Watanabe	G.P6.38
Sergio Fernando Curcio	F.P6.36, F.P6.37, F.P6.38	SIARA SILVESTRI SILVESTRI	D.P5.54, D.P5.55
Sérgio Fernando Curcio	F.P6.13	Sibele Berenice Castellã Pergher	N.O2.D1.3, N.O3.D1.7, N.P5.11, N.P5.17, N.P5.2, N.P5.22, N.P5.23, N.P5.24, N.P5.32, N.P5.34, N.P5.38, N.P5.39, N.P5.5
Sergio Francisco Santos	R.P7.32	Sibele Piedade Cestari	C.P2.57, U.P7.16
Sergio Granados-Focil	F.P2.57	Sibila de Almeida de Oliveira	G.P4.78, G.P6.77
Sergio Leonardo Gómez	A.P4.41, G.P6.70, G.P6.71	Sidnei Davi Souza	Q.P3.56
Sergio Maciel Faragasso	S.P7.5	Sidnei Paciornik	R.P7.2



Sidney Alves Lourenço	E.P3.52, G.P2.32, G.P4.33, G.P4.55, G.P6.20, V.O3.D2.4	Silvia Luciana Favaro	D.P4.42, E.O1.D3.2, E.P3.36, E.P3.38, F.P2.18, K.P7.4, K.P7.6, K.P7.7
Sidney Gomes Azevedo	A.P5.62, B.P4.21, B.P4.57	Silvia Luciana Fávaro	E.P3.24, K.P7.8
Sidney J.L. Ribeiro	D.O3.D1.2, F.P6.14, J.O2.D2.2, O.P7.8, T.P3.35, T.P3.36	Silvia Maria Egues	N.O2.D1.2, N.P5.1
Sidney JL Ribeiro	J.O3.D2.1	Silvia Mesquita Tamborim	C.P2.14, E.P3.23, L.O3.D3.5
Silas Matheus Brosco de Toledo Piza	C.P6.62	Silvia Pelegrini	E.P3.17
Sileide Oliveira Ramos	N.P5.10	Silvia Rodrigues Rodrigues	E.P3.23, L.O1.D4.3, L.P3.6
Silgia Aparecida Costa	I.O1.D3.6	Silvia Sizuka Oishi	U.P7.44, U.P7.49
Silma de Sá Barros	E.P3.69	Silvia Vaz Guerra Nista	U.P7.45
Silmara Bispo Dos Santos	X.P5.14	Silviene Novikoff	C.O3.D2.1
Silmara Furtado	J.P5.34	Silvio de Barros	E.P3.9
Silvana de Abreu Martins	Q.P3.64	Silvio Luiz Francisco Osório	P.O2.D2.1
Silvana Marina Piccoli Pugine	A.P4.14, A.P5.13, C.P2.32	Silvio Rainho Teixeira	F.P4.25
Silvania Lanfredi	F.P6.39, G.P4.3, N.O3.D1.8, U.P7.48	Simon Dalgleish	F.O1.D3.3, F.O2.D1.2
Silvano Leal dos Santos	Q.P3.65, Q.P3.66, Q.P3.68	Simone Hickmann Flores	B.P4.47
Sivelene Alessandra Dyer	O.P7.16	Simone Maria da Cruz Gonçalves	G.O3.D3.8, G.P6.33
Silvia Alves Garcez	U.P7.46	Simone Maria Menegatti de Oliveira	R.P7.33
Silvia Azevedo dos Santos Cucatti	G.O1.D1.1, G.P2.4, G.P2.45, G.P2.87, G.P2.92	Simone Medeiros	A.P4.44, B.P4.45
Sílvia D. A. S. Ramôa	T.P3.58, X.P5.15	Simon Hogg	Q.P3.63
Silvia Denofre De Campos	D.P4.35, J.P5.8, V.O2.D2.2	Simoni Margareti Plentz Meneghetti	G.P2.67
Silvia Guterres	A.P5.14, C.P6.13	Simon Oyarzun	M.O2.D2.1
Silvia Helena Prado Bettini	B.O3.D1.6, X.O2.D1.1, X.P5.30	Simon Pauly	X.O3.D1.1, X.O3.D1.5, X.P5.47
Silvia Helena Roberto de Sena	V.P1.42	Sinara Borborema Gabriel	C.P2.36
Silvia Helena Santagneli	J.O1.D4.4	Sinésio Domingues Franco	P.O3.D2.1
Silvia Jaerger	D.O3.D2.2	SINTIA DA SILVA FREIRE	L.P3.67
Silvia Lenyra Meirelles Campos Titotto	S.P7.39, X.P5.35, X.P5.46	Siqi Huan	B.O3.D1.7
Silvia Leticia Fernandes	G.O3.D1.1, G.P6.78, R.P7.11	Sirlene Maria da Costa	I.O1.D3.6
		Sirlon Francisco Blaskievicz	U.O1.D3.3
		Siwei Li	A.O2.D1.3
		Sócrates de Oliveira Dantas	X.P5.50
		Sofia Catharina Desegna	E.P3.77
		Sofia de Carvalho Britto Sousa	U.P6.17
		Sofia Gaiaschi	V.P1.20
		Sofia Luders	A.O1.D2.2

Sofia Oliveira Parreiras	M.O3.D2.2	Suellen Matias Ferreira	S.P7.40
Soheila Holakoei	U.O3.D3.2	Suellen Rosa dos Santos	A.P5.6
Solange Maria Valadares	V.P1.5	Suhelen Tannus de Almeida	E.O1.D4.5
Sonia Didry	S.O2.D2.2	Susana Ines Cordoba de Torresi	C.O3.D1.2, F.O3.D3.7
Sonia Letichevsky	D.O3.D2.5	Susana Nobrega Medeiros	M.O2.D1.2, M.P7.49, M.P7.6, M.P7.7
Sônia Maria Hickel Probst	L.O3.D3.3, L.P3.52	Susana Zepka	P.P1.61, P.P1.82
Sonia Nair Bão	U.O2.D3.2	Sushila Maharjan	C.O1.D1.2
Sonia Renaux Wanderley Louro	F.P2.10	Suzana Bottega Peripolli	C.P6.40
Sonia Santos	A.O1.D1.1	Suzana Souza da Silva Scardua	E.P3.42
Soohyung Park	V.O3.D3.4	SUZAN XAVIER LIMA	B.P2.16, E.P3.71
Sophie Collin	M.O3.D1.8	Suziete Batista Soares Gusmão	M.P7.48
Soraia Cristina Gonzaga Neves Braga	E.P3.70, I.P7.3, R.P7.17	Suzilene Vasconcelos Santos	G.P4.25, M.P6.17
Soraia Salman	C.P2.17	Sven Barth	M.O3.D2.5
Soraia Zaioncz	F.P2.1, F.P6.40	Sydney Ferreira Santos	Q.O1.D4.4, Q.P3.30, Q.P3.63, Q.P3.65, Q.P3.66, Q.P3.67, Q.P3.68, S.O3.D2.5, V.O3.D3.6
Stanislav Moshkalev	M.O3.D2.5, U.P7.45	Syed Adnan Raza	M.O2.D2.2
Stefan Blawid	E.P3.77	Syed Hamza Safeer	V.O3.D2.3
Stefan Hecht	F.O1.D1.3	Sylma Carvalho Maestrelli	B.P4.1, D.P5.17, J.P5.20, Q.P3.41
Stefania Pizzini	M.O3.D1.3	Sylvio Dionysio de Souza	R.P7.18, R.P7.34
Stéfani Laise Silva	B.P4.46	Syrleire Lopes de Paula Silva	P.P1.37
Stefano Baroni	PL.1.D1.1, S.O1.D2.1		
Stefano Casalini	F.O3.D3.4		
Stefany Caroline de Souza dos Santos	F.P6.34		
Stefany Rodrigues Saraiva	D.P4.36, F.P6.41, U.P7.58		
Stela Maria Carvalho Fernandes	L.O3.D3.8		
Stella Kresiak Farneze	C.O2.D2.1		
Stephanie Lins Dardengo Cavalcanti	G.P6.7		
Steven J. May	V.O3.D3.4		
Sthefany Selhorst	C.P2.26		
Sthefany Zaida Silva do Amparo	U.P6.17		
Sthevan Klingel	V.P1.38		
Stterferson Emanuel Silva	G.O1.D4.6		
Suélem P. Souza	F.P2.14		
Suelen Alves Silva Lucena de Medeiros	M.P7.47		
Suélen Maria Amorim	U.O3.D2.2		
Suelen Weimer Cendron	F.P2.34, L.P3.66		
		<b>T</b>	
		Tábata Schütz dos Santos	R.P7.46
		Tahir Tahir	C.O2.D3.1
		Tahmasb Hatami	E.O1.D3.3
		Taiana Gabriela Bonadio Bonadio	C.P6.2
		Taicia Pacheco Fill	E.P3.55
		Tainara Luiza Guerra Costa	U.P7.50
		Taíse Leite	F.P4.15
		Taise Matte Manhobosco	C.P2.59, G.O3.D1.7, V.P1.3
		Taís Felix	R.P7.45
		Tais Teo de Barros	B.P4.25
		Takashi Taniguchi	V.O2.D3.2

Takeshi Hayasaka	D.O3.D1.7		
Tales José da Silva	F.P6.47, V.P1.13		
Talita Almeida Vida	C.P2.25, C.P6.59		
TALITA ARAÚJO VARJÃO	L.P3.67		
Talita Fogaça de Oliveira	A.P4.45, L.P3.68		
Talita Goulart Silva	X.P5.25		
Talita Martins Lacerda	A.P4.44, B.P4.45		
Talita Mazon	A.P4.46, A.P5.22, A.P5.7		
Talita Miguel Marin	A.O3.D1.6		
Talitha Ramos Canabarra dos Santos	G.P2.2, G.P2.79, G.P2.80, L.P3.3		
Talyta Silva Prado	G.P6.4		
Tamires de Souza Nossa	P.P1.76, Q.P3.69, X.P5.48		
Tamires Isabela Botelho	C.P2.53, L.P3.33		
Tamires Soares Fernandes	A.P4.49, S.P5.29		
Tânia Beatriz Creczynski-Pasa	A.O3.D2.4		
Tania Cassol	F.P4.13, V.P1.22		
Tania Maria Haas Costa	B.O1.D3.3, B.P4.23, B.P4.47, C.P6.16, V.P1.9		
Tânia M. Sarmento Silva	A.P5.45		
Tania Regina Giraldi	D.P5.17, N.P5.4, T.P3.42		
Tânia Ueda-Nakamura	C.P6.2		
Tanja Zimmermann	B.O3.D2.7, T.O1.D1.1		
Tanna Elyn Rodrigues Fiuza	U.O3.D3.3		
Tanyse Parada Sampaio	D.P5.56, U.P7.51		
TARCÍSIO ELÓI DE ANDRADE JÚNIOR	D.P4.47, D.P5.38		
Tarcísio Micheli Perfecto	C.P6.60, C.P6.61		
Tarcísio Silva Cunha	C.P6.17		
Tassia Flavia Dias Castro	S.P7.2		
Tassiane Neves Astuti	G.P4.12		
Tássia Parada Sampaio	U.P7.51		
Tássia Souza Gonçalves	G.P6.79, J.P5.39		
Tatiana Americo da Silva	F.P6.42		
Tatiana Aparecida Ribeiro dos Santos	G.P4.49		
Tatiana Batista	D.P4.11		
Tatiana Bendo	Q.P3.46, R.P7.13		
Tatiana Duque Martins		C.P2.28, G.O3.D1.5, G.P6.12	
Tatiana Louise Avila de Campos Rocha		F.P4.2	
Tatiana Martelli Mazzo		D.O2.D1.3, G.O2.D2.1	
Tatiana Parra Vello		F.O2.D1.4, F.P2.36, F.P4.37	
Tatiana Pedron		D.O1.D2.2	
Tatiana Santos Andrade		E.P3.72	
Tatiane Benvenuti		D.P4.45	
Tatiane Cristine Silva de Almeida		C.P2.42	
Tatiane Moraes Arantes		A.P4.18, C.P6.9, F.P6.27, G.P2.25, T.P3.11	
Tatiane Pretto		E.P3.73, G.O3.D3.7, G.P2.63, G.P6.80	
Tatiani Ayako Goto Donato		C.P6.36, C.P6.62	
Tatyana Christina Faccin borazanian		G.P4.80	
Tauã Emanuel Silva		T.P3.11	
Tayanne Cristina Marques		M.P7.40	
Tayhane Fernandes Sá Cavalcante		L.P3.54	
Tayná Copes Rodrigues		F.P4.2	
Tayná Cristina Germano da Silva		C.O3.D2.7	
Tayra R Brazil		U.P7.4	
Telma Regina Nogueira		T.P3.39	
Teresa Adelaide Dias		V.P1.5	
Teresa Dib Zambon Atvars		F.P2.41, G.P4.24	
Teresa Diz Zambon Atvars		G.O3.D1.6	
Teresa Duarte Lanna		U.P7.52	
Teresa Gatti		T.O2.D1.1	
Tereza da Silva Martins		B.O1.D4.3, N.O1.D1.3	
Tero Kämäräinen		B.O1.D2.3, B.O3.D1.7	
Tessie Gouvea Cruz		M.P7.44	
Thaiane Alcarde Robeldo		S.P7.1, S.P7.2	
Thaiane Balestreri Knopf		B.P4.48	
Thaila Quatrini Corrêa		T.O3.D1.2, T.P3.7, T.P3.8	

Thaiza B. Santos	R.P7.22, R.P7.32, R.P7.42, R.P7.43	Thalles Moura Fe Marques	M.P7.48
Thais Aline Prado Mendonça	U.P7.4	Thallita Pereira Queiroz	C.P6.43
THAIS ANDRADE GALDINO	L.P3.39	Thamires Santos Moreira	F.O3.D1.1
Thaís Bastos Miranda	U.P6.41	Thamires Vizioli Damo	L.P3.53
Thais Cardoso de Oliveira	U.P6.3	Thamiris Martiny	B.P2.80
Thais Caroline Almeida da Silva	D.O3.D1.2	Tharles Antônio Ribeiro	V.P1.39
Thais C. V. Carvalho	V.O1.D2.3	THARSIA CRISTIANY DE CARVALHO COSTA	L.P3.16, L.P3.67
Thaís da Costa Dias	T.P3.26	Thatiane Dorneles de Almeida Teixeira	D.P5.57, E.P3.62
Thais da Silva	G.P4.79, G.P6.22, G.P6.23, G.P6.81	Thatiane Veríssimo Dos Santos	G.P2.67
Thaís dos Santos Moraes	F.P4.26	Thayane Pereira da Silva	L.P3.8
Thaís Fátima Rodrigues	D.P4.1	Thayane Portela Oliveira	G.P6.55, G.P6.82, X.P5.22
THAIS FERREIRA DA SILVA	U.P6.34	Thayna Cantos Pizol	P.P1.11
Thais Gouveia	E.P3.45	Thayna Lima	U.O1.D3.3
Thaís Larissa do Amaral Montanheiro	C.P2.5, E.P3.47	Thays Cordeiro	C.P2.24
Thaís Martins Neves	D.P4.58, N.P5.35	Thayse Ricardo da Silva	E.P3.67
Thaís Matiello Gonçalves	R.P7.37	Thebano Emílio De Almeida Santos	G.P2.19
Thaís Rachid Netto	C.P6.26, C.P6.63	Thenner Silva Rodrigues	G.P4.42
Thais Regina Bombarda	B.P4.33	Thiago A L Burgo	U.P6.2
Thais Rosana Cugnier Machado	G.P4.70, U.P7.17	Thiago André Salgueiro Soares	G.O1.D1.2, G.P2.69, G.P4.23, G.P6.83
Thais Rosana Machado	U.P7.27	Thiago Antônio Paixão de Sousa Costa	P.P1.33
Thais Scarllety de Almeida Almada	P.P1.40, P.P1.41	Thiago Araujo Simoes	T.P3.59
Thaís Schmitz	N.P5.36	Thiago Augusto Lodi	J.P5.35
Thais Schroeder Rossi	F.P6.43	Thiago Bezerra Taketa	B.O3.D3.1
Thais Soares de Góes	B.P4.49	Thiago Cazati	F.P2.14, F.P6.13, F.P6.36, F.P6.37, F.P6.38, F.P6.44, G.P2.44, G.P6.65
Thaizy de Gois Martins	N.O3.D1.3, N.P5.37, N.P5.9	Thiago Custódio dos Santos	U.O1.D3.2, U.P6.22
Thales Alves Faraco	F.P6.14	Thiago de Melo Lima	U.P6.22
Thales Calmon de Aguiar Neto	I.P7.13	Thiago Domingues Stocco	B.P2.58
Thales Martins Ponciano	E.O2.D3.3	Thiago Eduardo Bueno	M.P6.7
Thales Mascarelli	D.O3.D1.2	Thiago Fiuza	U.O3.D2.6
Thales Rafael Machado	D.O3.D1.3, G.P4.13, O.P7.15, S.P7.24	Thiago Galeote Tabuti	G.P6.14
Thalita Antoniassi Canassa	U.P6.45	Thiago Galvão da Costa	P.P1.33
Thalita Chiaramonte	S.O2.D1.1	Thiago Gonzalez-Llana Brito	V.O2.D3.3
Thalita Sani Taiariol	L.P3.69, U.O3.D1.6, U.P7.3	Thiago Ismael Torrano do Amaral Mello	U.P7.53

Thiago J. A. Mori	M.O1.D1.2, M.O3.D1.2, M.O3.D1.6, M.O3.D2.8, M.P6.20, M.P7.13, M.P7.18, M.P7.34	Thomas Frauenheim	G.P2.13, S.O3.D1.1, S.P5.19, S.P5.6
Thiago K Oenning	O.P7.11	Thomas Gabriel Rosauro Clarke	P.P1.25
Thiago Luiz de Almeida Cortiz	C.P6.64, G.P2.93	Thomas Jay Webster	B.P2.59, C.O1.D1.2, C.O1.D3.1
Thiago Marcel Dei Tós Vieira Nascimento	E.P3.24	Thomas Roulin	M.P7.23
Thiago Marinho Duarte	S.P7.3, S.P7.8	Thomaz Frazatto Carrara	T.P3.51, T.P3.52
Thiago Marques de Andrade	F.P2.7	Thorsten Schultz	V.O3.D3.4
Thiago Neves Machado	A.O1.D2.2, G.P4.18	Thuanny Moraes de Almeida	M.P7.50
Thiago Nunes Viana	X.P5.35	Tiago Alegretti Zucarelli	Q.P3.70
Thiago Oliveira Ferreira Correia	D.O3.D2.5	Tiago Augusto Ribeiro Rodrigues	B.P4.50
Thiago Pacagnan Cataldi	X.P5.24	Tiago Cesar Gimenes	G.P4.43, T.P3.53
Thiago Pereira	O.O1.D3.2	Tiago de Freitas Damasceno da Rocha	U.P7.60
Thiago P. M. Ferreira	B.P2.40	Tiago de Sousa Araújo Cassiano	G.P4.8, V.P1.40
Thiago Regis Longo Cesar Paixão	U.O1.D1.1	Tiago Dos Santos Aragão	X.P5.49
THIAGO RICHARD SENA RIBEIRO	L.P3.1	Tiago Dutra Galvão	A.P4.45, L.P3.68
Thiago Roberto Felisardo Cavalcante	P.O3.D2.1	Tiago Falcade	D.P4.34, L.P3.56
Thiago Rubio	J.P5.11, J.P5.36	Tiago J. M. Fraga	U.O2.D1.1, U.O2.D1.4
Thiago Sequinel	G.P2.61, G.P6.45	Tiago Leal	M.O3.D2.6, M.P7.36
Thiago Soares Lima	C.P2.25	Tiago Maurício Francoy	B.P2.41, B.P2.60
Thiago Tallysson Freire Costa	D.P5.31	Tiago Nunes da Costa	L.P3.33, P.P1.37
Thiago Tibúrcio Vicente	M.O2.D1.2, M.P7.49, M.P7.6, M.P7.7	Tiago Pinheiro Braga	B.P4.51, N.P5.38
Thiago Vargas Acunha	F.P4.15	Tiago Serodre	V.P1.41
Thiara Francis Mateus Rodrigues	R.P7.2	Tianyi Zhang	V.O1.D2.2
Thiene Couto	X.P5.42	Tibebe Lemma	A.P4.50
Thiers Massami Uehara	A.P4.47	Tiberiu MINEA	U.O3.D1.4
Thissiana da Cunha Fernandes	G.O1.D1.1	Ticiane Sanches Valera	U.P7.36
Thomas Antonio Cardozo Martins	G.P6.48	Tiego José Cardoso de Oliveira	B.P4.52
Thomas Benjamin Eberle	B.O1.D4.1	Tim Johansen	M.O3.D1.1
Thomas Crouzier	B.O3.D3.7, B.P2.72	Tingting Wu	B.O3.D1.1
		Tobias Fey	G.P4.21
		Tobias Gustmann	X.O3.D1.1
		Tomás Jeferson Alves Mélo	L.P3.36, L.P3.37

tomaz ishikawa ishikawa	H.O1.D1.1, H.O1.D1.2, H.O1.D1.3, H.O1.D1.4, H.O3.D1.1, H.O3.D1.6, H.O3.D1.8, H.P3.10, H.P3.14, H.P3.9
Tome Mauro Schmidt	S.O3.D1.1
Tom Gregorkiewicz	A.P5.23
Tommaso Del Rosso	C.O2.D3.1, U.P7.54
Toncler Silva	D.P5.23
Tsutomu Morimoto	D.P5.9
Tuany Kasiorowski	C.O3.D2.5
Túlio Begena Araújo	F.P6.39, U.P7.48
Túlio C. R. Rocha	M.O1.D1.2, M.P7.13, M.P7.34
Tung Ba Thanh To	F.O3.D1.7
Turner M. Reed	V.P1.36

## U

Ubirajara Coletto Junior	G.P4.22
Ubirajara Pereira Rodrigues Filho	C.P2.33, D.O3.D1.2, F.P2.47
Ubirajara Pereira Rodrigues-Filho	J.P5.4
Údine Rodrigues Oliveira	U.P7.55
Udi Sarig	C.O2.D3.3
Uéslen Rocha Silva	A.P5.43, A.P5.44, A.P5.45
Uesley A. Stival	F.P6.45
Uílame Umbelino Gomes	E.P3.40, E.P3.67, J.P5.21, R.P7.24
Uilian Gabaldi Yonezawa	B.P2.43
Ulisses Magalhães Nascimento	D.P5.39
Urbano Díaz	N.P5.26
Uta Kühn	X.O3.D1.1
Uyime Donatus	P.P1.19

## V

VAEUDO VALDIMIRO OLIVEIRA	B.P2.48
Vagner Alexandre Rigo	S.O3.D2.1
Vágner Braga	O.O1.D3.7, O.P7.13, O.P7.16
Vagner Luiz Oliveira de Freitas	K.P7.18, K.P7.19
Vagner Roberto Batistela	D.P4.42
Vagner Romito de Mendonça	D.P5.40, G.P4.20, G.P6.40, G.P6.49
Vagner Santos	T.P3.10, T.P3.14, T.P3.46, T.P3.54, T.P3.60
Vagner Zeizer Carvalho Paes	M.P7.51
Valberto Pedruzzi Nascimento	M.P6.7, M.P7.16
Valcilaine Teixeira Barbosa	T.P3.55
Valdeci Bosco dos Santos	E.P3.1, G.P6.2
Valdecir A. Paganin	L.P3.43
Valdeir Arantes	B.P2.50
Valdemar Lacerda Júnior	U.P7.50
Valderes Drago	M.P7.57, U.P6.4
Valdirene Aparecida da Silva	L.P3.61, P.P1.83, P.P1.84
Valdirene Resende	V.P1.41
Valdirene Sullas Teixeira Peressinotto	K.O3.D3.2
Valdirlei Fernandes Freitas	C.P6.2
Valdivânia Albuquerque do Nascimento	A.P4.43, A.P4.48, B.P4.53, C.P6.65, C.P6.66, C.P6.69, E.P3.74, G.P2.94, G.P2.95, G.P2.97, H.P3.15, I.P7.15, I.P7.16, J.P5.37, M.P7.52, M.P7.53, P.P1.81, P.P1.85, R.P7.47, T.P3.56
Valdomiro Vagner de Souza	A.P5.58
Valeria Del Campo	L.P3.65
Valéria Denise Barros Nunes	B.P2.25, B.P2.26
Valéria Matos Lima	G.P2.56
Valeria Spolon Marangoni	A.O2.D1.1
Valerie Bouquet	D.P4.16

Valérie Bouquet	D.P5.45	Vania Emerich Bucco de Campos	A.P4.28
Valerie Demange	D.P5.45	Vania Rodrigues de Lima	A.P5.53
Valeri Vlassov Vladimirovich	P.P1.42	Vanusca Dalosto Jahno	D.P4.1
Valesca Ariane dos Santos Pizone	C.P6.67		F.O1.D4.6, F.O3.D2.8, F.O3.D3.1, F.P4.42, F.P4.43, F.P6.42, X.P5.50
Valmir Antonio Chitta	S.O2.D1.1, S.P5.26	VARLEI RODRIGUES	
Valmir Rodrigo da Silva	M.O2.D3.4, M.P7.54		
Valmor Roberto Mastelaro	D.P5.26, D.P5.60, G.P6.89, S.O2.D2.3, T.P3.15, U.P6.12	Venina dos Santos	C.P6.44
Valney Moura Silva	Q.P3.71	Vera Lucia Santos	I.O1.D3.7
Valquiria Cruz Rodrigues	F.P4.29, F.P6.46	Vera Lucia Vogel Faustino dos Santos	I.P7.17
		Vera Rosa Capelossi	L.P3.38
Valtencir Zucolotto	A.O2.D1.1, A.P4.29, A.P4.47, A.P5.25, A.P5.26, A.P5.4, A.P5.41, A.P5.5, A.P5.60, A.P5.61, A.P5.69, U.P7.41	Veridiana Gehrke	E.P3.28, E.P3.39, E.P3.49, E.P3.50, E.P3.59, E.P3.75
Valter José Fernandes Junior	E.P3.68	Verona Biancardi Oliveira	H.O3.D1.2, H.P3.10, Q.P3.27
Vanderlei Roncato	B.P4.38	VERONICA DE CARVALHO TEIXEIRA	G.O3.D3.1, G.O3.D3.5, G.P4.36, G.P6.50
Vanderlei Salvador Bagnato	A.P5.68, T.O3.D1.2, T.P3.7, T.P3.8	Veronica Maria de Araújo Calado	E.O2.D3.4, E.P3.45
Vanessa Carvalho	C.O2.D3.3	Verónica Montes-Garcia	F.O3.D3.4
vanessa castro de souza	N.P5.39	Verónica Puerto-Belda	O.P7.15, S.P7.24
Vanessa de Oliveira Arnoldi Pellegrini	T.P3.15	Veronica Segura-Perez	C.P2.49
Vanessa Lacerda Menzendes	G.P2.72	Veronica Silva Cardoso	A.P5.51
Vanessa Maruyama	A.P4.45, L.P3.68	Vicente Amigó Borrás	C.O3.D2.3
Vanessa Mosqueira	F.P6.37, G.P6.65, G.P6.66	Víctor Anthony García Rivera	G.P4.37
Vanessa Motta Chad	P.P1.26, P.P1.48, X.P5.14	Victor Buratto Tinti	E.P3.76
Vanessa Motta Vanessa	P.P1.86	Victor Carozo	V.O3.D2.3, V.P1.15
Vanessa Nascimento	A.P4.49	Victor Ciro Solano Reynoso	G.P6.31, G.P6.54, G.P6.84
Vanessa Oliveira Castro	F.P2.21, T.P3.6	Victor Cruz Mendes	M.P7.55
Vanessa Priscila Scagion	A.P4.47, T.P3.25	Victor Ferrinho Pereira	P.P1.66
VANESSA RAFAELA DE SOUZA	L.P3.70	Victor Hugo Ayusso	P.P1.66
		Victoria Blair	P.O1.D3.2
Vanessa Seriacopi	L.O2.D3.1, L.O2.D3.4, Q.O3.D3.2	Victoria Goulart	B.O3.D1.3, G.P6.85
Vanessa Solfa Santos Santos	B.P4.54	Victoria Lopes Abdo	C.P2.42
Vania Aparecida Vicente	A.O1.D2.2	Victória Oliveira Margarido	D.P5.58, J.P5.25
		Victória Vieira Kopp	E.P3.4
		Victorino Franco	K.O2.D3.1
		Victor José dos Santos Baldan	E.O2.D3.3

Victor Leibnitz Hipólito	T.P3.57	Vinicius Gomes da Costa	A.P4.49, S.P5.29
Victor Leone Rabito Chaves	P.P1.48, P.P1.86	Madriaga	
	O.O1.D3.4,	Vinicius Gomes de Paula	M.P7.56
Victor Lira Chastinet	O.O1.D3.5, X.O3.D1.4	Vinicius Karlinski de Barcellos	Q.P3.75
Victor Manuel García-Suárez	S.O2.D1.1		D.P5.59, E.O1.D4.5, N.O3.D1.2
Victor Oliveira Ferreira	Q.P3.37	Vinicius Litrenta Medeiros	
Victor Rezende Moreira	D.P4.23	Vinicius Lourenço Dias Ferro	F.P2.54
Victor RR Aquino	M.O2.D1.1	Vinicius Machado Mansur	O.O1.D3.7
Victor Schumachtemberg	M.P7.57	Vinicius Mariani Lenart	A.P4.41, G.P6.71
	M.P6.36, M.P6.37, S.P7.12, S.P7.19, S.P7.41, S.P7.42	Vinicius Martins Pedrosa	P.O3.D2.8
Victor Yuudi Suzuki		Vinicius Matheus de Souza	D.P5.61
Victor Zamora Castañeda	D.O3.D2.4	Vinicius Moretti	Q.P3.6
Vidiany Aparecida Queiroz Santos	C.O1.D3.2, C.P6.37	Vinicius Pereira Guimarães	O.O1.D3.9
Vijayendra Kumar Garg	M.P7.58	Vinicius P. S. Caldeira	N.P5.40
Vilany Santana Pereira	E.P3.77	Vinicius Ramos Zanchin	F.O3.D2.6
Vincenzo Esposito	E.P3.76	Vinicius Rodrigues Henriques	C.P6.53, P.P1.87, P.P1.88
Vinh Ta-Phuoc	S.O2.D2.2		G.O3.D2.8, O.P7.15, S.P5.32, S.P7.1, S.P7.10, S.P7.43
Vinicius Alves Bastos	F.P6.47	Vinicius Teodoro	
Vinicius Antonio de Oliveira	Q.P3.72	Virgílio Antônio Greco Baptistella	C.P6.68
Vinicius Aranda	H.P3.16, H.P3.7	Virginia da Conceição Amaro Martins	C.P2.33
Vinicius Augusto Machado Nogueira	F.P4.24	Virginia Monteseguro	L.O1.D4.4
Vinicius Cardoso da Rocha	Q.P3.75	Vishnu Mogili	G.O3.D2.3, G.O3.D2.6
Vinicius Claudio Zoldan	A.O3.D2.4		T.P3.10, T.P3.14, T.P3.46, T.P3.54, T.P3.60
Vinicius Danilo Nonato Bezzon	B.O1.D4.2, G.P2.61, G.P6.45, G.P6.46	Vison Silva Nascimento	
Vinicius Dantas de Araújo	J.O3.D2.6	Vitor Alexandre Maraldi	U.P7.56
Vinicius de Leles Almagro	B.P4.49	VITOR CEZAR BROETTO PEGORETTI	E.P3.64, L.P3.70
Vinicius de Menezes Schiefferdecker	T.P3.58	VITOR DE ALMEIDA DE ALMEIDA	G.P4.49
Vinicius de Oliveira Castro Silva	O.P7.17	Vitor Estolano	U.O3.D1.7
	K.O2.D3.2, K.P7.14, K.P7.18, K.P7.19	Vitor Goetzke	G.P2.40, G.P2.41, G.P2.42
Vinicius de Sousa		Vitor Hugo Meura	O.P7.10
Vinicius Dias Silva	T.P3.59	Vitória Domingues Galante	D.P5.46
Vinicius do Nascimento da Rocha	G.P6.86	Vitória Marçal	D.P5.7, M.P7.12, M.P7.9
Vinicius Ferraz Majaron	B.P4.40, B.P4.55	Vitória Maria Rodrigues Vasconcelos	G.P2.96, G.P6.32
Vinicius Ferreira Lopes	C.P6.60		
Vinicius Fonseca Hernandes	G.O1.D2.2, G.P2.9		



Vitoria Regina Sousa Bispo	A.P4.43, C.P6.69, G.P2.97, P.P1.81	Wagner André Santos Conceição	E.O1.D3.2, F.P2.18
Vitoria Stuani Favini	D.P4.27	Wágner Batista Silva	H.O3.D1.2, H.P3.10, H.P3.3, H.P3.9
Vitor J. P. Vilar	G.P6.72	Wagner Benicio Bastos	S.P7.44
Vitor Luiz Sordi	P.O3.D2.7, Q.O3.D3.5	Wagner Bielefeldt	Q.P3.75
Vitor Santaella Zanuto	G.P6.46	Wagner da Nova Mussel	A.O1.D2.1, A.O2.D2.1
Vitor Santos Ramos	C.P6.30, C.P6.40	wagner da silveira	J.P5.38
Vitor Sena Koserá	D.P4.30	Wagner Dias Macedo Junior	F.P4.25
Vittorio Basso	K.P7.11	Wagner Ferreira da Silva	A.P5.44
Víttor Paulo Vieira Costa	B.P4.3	Wagner Luiz Polito	B.P4.20, B.P4.38, B.P4.55, G.P4.38
Vivek B. Shenoy	V.O3.D3.4	Wagner Reis da Costa Campos	Q.P3.40
Vivian Andrade	K.O3.D3.1	Wagner Silva França	F.P6.40
Viviana Possamai Della Sagrillo	E.P3.41, E.P3.42	Waldeci Paraguassu	P.O1.D3.2
Vivian Dias de Araújo de Mattos	X.P5.6	Waldek Wladimir Bose Filho	P.O3.D2.1, P.P1.21, P.P1.43, Q.P3.10, Q.P3.32
Viviane Alves Escócio	X.P5.33	Waldemar Augusto de Almeida Macedo	A.O2.D2.1, D.P5.36, D.P5.9, M.O3.D2.2, M.P7.43
Viviane - Dalmoro	L.O1.D4.3, L.P3.6	Waldir Avansi Junior	G.P6.6
Viviane do Nascimento Bianchi	D.P4.32	Waldomiro Paschoal Jr.	F.P4.44, F.P4.45
Viviane do Socorro da Costa	C.O2.D3.2	Wallace Rosado Rolim	A.P4.3, C.O3.D1.3
Viviane Lilian Soehte	P.P1.77, Q.P3.8	Wallance Moreira Pazin	A.P4.50, B.P2.53, F.P4.25
Viviane Lima Freitas da Silva	C.P6.70	Wallas Alves Pires dos Santos	E.P3.78
Viviane Maciel Almeida	S.P5.2	Wallison C. Costa	F.P4.4, F.P6.48, I.P7.18
Vivian Inês dos Santos	B.O3.D3.6	WALMIR ENO POTTKER	M.P6.36, M.P6.37, S.P7.19, S.P7.41, S.P7.42
Vivian Maria Andrade	K.O2.D3.3	Walter José Botta	H.O1.D1.1, H.O1.D1.2, H.O1.D1.4, H.O3.D1.2, H.O3.D1.6, H.O3.D1.8, H.P3.1, H.P3.10, H.P3.14, H.P3.16, H.P3.3, H.P3.5, H.P3.7, Q.P3.61
Vladimir Gaál	X.P5.50	Walter Jose Gomes Juste Faria	J.P5.39
Vladimir Henrique Baggio-Scheid	R.O3.D3.6, R.P7.39		
Vladimir Jesus Trava-Airoldi	A.P5.28, A.P5.32, C.P2.14, C.P6.55, D.P5.51, L.O1.D3.3, L.O3.D3.5, L.P3.23, L.P3.69, R.O2.D3.1, R.P7.21, U.O3.D1.6, U.P6.1, U.P6.37, U.P7.3, U.P7.7		
<b>W</b>			
Wagner André dos Santos Conceição	K.P7.8		

Walter Mendes de Azevedo	G.O1.D4.6, M.O2.D3.3, O.O1.D3.3, V.O2.D2.3	Weslayne Luzia Rodrigues Miranda	L.P3.4
Walter Orellana	S.O2.D1.2	Wesley Radtke Schwartz	G.P2.17, G.P2.65, G.P2.86, G.P6.88
Walter Ricardo	V.P1.6	Wesley Renato Viali	J.O2.D2.2
Walter Ruggeri Waldman	L.O3.D3.7, R.O3.D3.3, R.P7.6	Wesley Renzi	F.P4.26, G.P4.55, G.P6.20
Walter Sydney Dutra Folly	M.P6.11	Wesley Rodrigues de Sousa	D.P5.25
Wander Luiz Vasconcelos	E.P3.31, N.P5.13, N.P5.20, N.P5.25, N.P5.3, N.P5.30	Wesley Xavier Santana	B.O3.D3.3
Wanessa Lima Oliveira	G.P6.37	Wessler Schmidt	M.P7.28
Wangner Barbosa Costa	Q.P3.73	Wesley Luiz da Silva Assis	Q.O1.D3.3, Q.P3.53, Q.P3.54, S.P5.18
Wanison André Gil Pessoa Júnior	E.P3.53, E.P3.69	Weverson Capute Batalha	X.P5.47
Wanius José Garcia da Silva	B.P2.52	Weverton Alison dos Santos Silva	D.P5.26, D.P5.60, U.P6.12
Wanley Eduardo Lopes Junior	E.P3.79	Wido Herwig Schreiner	G.P4.18
Washington Luiz Esteves Magalhães	B.P2.11, B.P2.47, B.P4.11, B.P4.22, B.P4.8, B.P4.9, D.P5.32, R.O3.D3.8, U.P6.23	William Boschetti	D.O3.D2.6
Watson Loh	B.O3.D1.5	William Ferreira da Cunha	F.P4.38, G.P4.9
Wdeson Pereira Barros	G.P6.51, M.P7.35, M.P7.59	Wilian Aita	C.P6.58
Wedja Maciel dos Santos	G.P4.52	Wilker Caetano	B.P2.77, T.O2.D1.3
Welber Gianini Quirino	F.O3.D3.2, F.P2.53, F.P2.56, F.P2.9, F.P6.14, F.P6.15, F.P6.30	William Bariviera	L.P3.43
Wellisson de Pontes Silva	F.P2.45, F.P6.49	William de Paula Santos	Q.P3.74
Wellen Stieven	R.P7.48	William Imamura	K.O3.D3.4, K.P7.1, K.P7.10, K.P7.4, K.P7.7, K.P7.8, K.P7.9
Wellington Alves dos Santos	P.P1.62	William Rafael Stegall dos Santos	D.P5.61
WELLINGTON MARCOS MASCULINO SILVA	A.O3.D1.3, A.P5.34	William Renan Basso Bassoli	M.P7.57
Wellisson Pires Lima	V.P1.42	Willian Azevedo e Paiva Marques	C.O1.D3.3
Wenceslau Fernandes das Neves	E.P3.18	Willian Fernando Zambuzzi	C.O3.D1.8
Wenchao Xiang	B.O3.D1.7, B.P4.32	Willian Hideki Takarada	B.O1.D3.2
Wendel Andrade Alves	A.P5.42, B.O2.D2.3, B.P2.22, S.P7.29	Willian Martins Pasini	Q.P3.75
Wendell Simões Silva	M.O1.D1.2	Willian Rafael de Oliveira	R.P7.20, R.P7.8
Werick Alves Machado	G.P6.87	Willian Robert Caliman	B.P4.56
		Wilson Acchar	M.P6.13, M.P7.3
		Wilson Aires Ortiz	M.O3.D1.1, M.O3.D2.1, M.P7.39
		Wilson Alves de Oliveira júnior	E.P3.1
		Wilson Grava	N.P5.14



# Sponsorship Gold

**HORIBA**  
Scientific

# Sponsorship Silver



# Support



Zwick / Roell