11th International Conference on Advanced Materials
VIII Encontro da SBPMat

Scientific Program
Rio de Janeiro – RJ
September 20 - 25, 2009
Welcome Address

The International Conference on Advanced Materials (ICAM) is one of the prestigious conferences of the International Union of Materials Research Societies (IUMRS) and is held on alternate years. The earlier conferences in this series were held in Beijing, China (1999), Cancun, Mexico (2001), Yokohama, Japan (2003), Singapore (2005) and Bangalore (2007). The ICAM 2009 is organized together with the VIII Brazilian MRS Meeting. This event is held in Rio de Janeiro, Brazil, from 20 to 25 September 2009.

In this conference the Program includes nine plenary lectures, delivered by world class materials scientists, and twenty eight technical symposia. Each symposium will feature invited talks, contributed oral and poster presentations. In addition, a special technical program will run in parallel involving an IUMRS energy forum, a Global Nanotechnology network workshop, an Innovation in Advanced Materials and Devices workshop and a Commercial Exhibition.

The call for papers motivated an excellent response from the scientific community. The program committee has reviewed about 2000 abstracts submitted to the different symposia and all accepted abstracts are scheduled in this program. As a result of the scientific and technical program, a range of topics at the frontiers of material research and of contemporary importance for science, technology and engineering will be highlighted and discussed throughout the conference. A high concentration of...

Since the ICAM 2009 will be held in conjunction with the Brazilian MRS meeting an intensive interaction of distinguished scientists with Brazilian young researchers and students is expected, making this a memorable event for the material research community in our country.

A conference of this magnitude could be accomplished because of the active involvement of the symposia organizers to whom we express our gratitude. We also acknowledge the financial support of our sponsors who made this event possible, namely the Brazilian funding agencies CAPES, CNPq, FINEP, FAPERJ, FAPESP, MCT, Petrobras and the two host institution PUC-Rio and CBPF. SBPMat provided important contribution for the final event accomplishment.

Rio de Janeiro is an exuberant and cosmopolitan city with very pleasant weather in September. Easy access from all over the world, allows participation of delegates from all the IUMRS affiliate societies to come to friendly Rio. On behalf of the ICAM 2009 Organizing Committee, we would like to extend to all participants our wishes for a fruitful and innovative event and pleasant stay in Rio de Janeiro.
Conference Organization

Honorary President
Sergio M. Rezende (State Ministry of Science and Technology, Brazil)

Conference Chairman
Guillermo Solórzano (PUC-Rio)

Program Chair
Elisa Baggio Saitovitch (CBPF-Rio)

Local Arrangements Committee
Ana Maria Rocco (EQ, UFRJ)
Andre Pinto (IME)
Andrea Latge (IF, UFF)
Ado Jorio de Vasconcelos (INMETRO/UFMG)
Marcos Cremona (FIS, PUC-Rio)
Patricia Lustosa de Souza (CETUC, PUC-Rio)
Sérgio de Souza Camargo Jr. (COPPE, UFRJ)

IUMRS International Advisory Committee
Anthony K Cheetham (Cambridge, UK)
BVR Chowdari (Singapore)
Boyun Huang (C-MRS, China)
Gan-Moog Chow (NUS, Singapore)
Christian Colliex (Orsay, France)
C. N. R. Rao (Bangalore, India)
David Cockayne (Oxford, UK)
David Wilkinson (McMaster, Canada)
Ernesto Calvo (U. Buenos Aires, Argentina)
Fernando Ponce (ASU, USA)
Fernando Lund (U. Chile, Chile)
Gema Gonzalez (IVIC, Venezuela)
Giovanni Marletta (Catania, Italy)
Hans Grimmeisn (Sweden)
Howard Katz (Johns Hopkins, USA)
In-Hoon Choi (South Korea)
Jong-Min Liu (Taiwan)
Jose Reyes-Gasga (UNAM, Mexico)
Masao Doyama (Japan)
Merrilea J. Mayo (The National Academies, USA)
Miguel Jose-Yacaman (Texas, USA)
Mildred Dresselhaus (MIT, USA)
Paul Siffert (Strasburg, France)
Peter A Glasow (Germany)
Robert J. Nemanchi (ASU, USA)
Subra Suresh (MIT, USA)
S Somiya (Japan)
Yafang Han (C-MRS, China)

National Advisory Committee
Aldo Craievich (USP)
Aloísio Nelmo Klein (UFSC)
Angelo Padilha (USP)
Celso Mello (UFPE)
Celso Santilli (UNESP)
Cid B. Araújo (UFPE)
Douglas Soares Galvão (Unicamp)
Dulce Maria de Araújo Melo (UFRN)
Edgar Zanotto (UFSCar)
Elisa B. Saitovitch (CBPF)
Elson Longo (Unesp)
Fernando Galebeck (Unicamp)
Fernando Lázaro Freire Jr. (PUC-Rio)
Henrique E. Toma (USP)
José A. Eiras (USFSCar)
Ivo A. Hummelgen (UFPR)
João Jornada (INMETRO)
José Arana Varela (UNESP)
José A. M. Agnelli (UFSCar)
Livio Amaral (UFGRS)
Luis H. Capparelli Mattoso (EMBRAPA)
Mario Norberto Baibich (MCT)
Margarethe Spangler Andreade (CETEC)
Marilia Caldas (USP)
Osvaldo L. Alves (Unicamp)
Paulo Fichtner (UFGRS)
Paulo R. Rios (UFF)
Renato F. Jardim (USP)
Roberto Mendonça Faria (USP)
Roberto Villas Boas (CETEM)
Teresa D. Z. Atvars (Unicamp)
Umbelino Gomes (UFRN)
Walter J. Botta Jr. (UFSCar)
Wander L. Vasconcelos (UFMG)
Wido H. Schereiner (UFPR)
Younes Messaddeq (UNESP)

Brazilian MRS Executive Board

President
Fernando Lázaro Freire Junior (PUC - Rio)

Administrative Director
Osvaldo Novais de Oliveira Junior (USP Sao Carlos)

Financial Director
Sérgio de Souza Camargo Junior (UFRJ)

Scientific Directors
Aldo Felix Craievich (USP)
Paulo Fernando Fichtner (UFGRS)
Margarethe Spangler Andreade (CETEC)
Antonio Eduardo Martinelli (UFRN)
Scientific Program Committee

**NANOSCIENCE AND NANOTECHNOLOGY**
Ado Jorio (UFMG, Brazil)
Alan Schwartzman (MIT, USA)
David C. Bell (Harvard, USA)
Gustaaf Van Tendeloo (EMAT - University of Antwerp, Belgium)
Maria-Elena Gómez (CENM, Colombia)
Paulo Ferreira (U. of Texas, USA)

**HEALTH AND BIOLOGICAL MATERIALS**
Gema Gonzalez (IVIC, Venezuela)
Robert Sinclair (Stanford University, USA)
Valtencir Zucolotto (USP, Brazil)

**ENERGY AND ENVIRONMENT**
Ali Sayir (NASA / Case Western, USA)
Enrico Traversa (MANA - National Institute for Materials Science (NIMS), Japan)
Fernando A. Ponce (Arizona State University, USA)
Fernando Galembeck (Unicamp, Brazil)
M. G. (Grace) Burke (Betis Atomic Power, USA)
Paulo Roberto Bueno (UNESP, Brazil)

**FUNCTIONAL AND ELECTRONIC MATERIALS**
Alberto Salleo (Stanford University, USA)
C. Barry Carter (U. of Connecticut, USA)
Edwin L. Thomas (MIT, USA)
Fernando Lázaro Freire Jr. (PUC-Rio, Brazil)
Roberto Mendonça Faria (USP, Brazil)

**STRUCTURAL MATERIALS**
Dachamir Hotza (UFSC, Brazil)
Fernando Lund (U. of Chile, Chile)
Leonardo Godefroid (Federal University of Ouro Preto, Brazil)
Walter José Botta Filho (UFSCar, Brazil)

**THEORY AND PHENOMENA**
Hélio Goldenstein (USP, Brazil)
Krishna Rajan (Iowa State University, USA)

**GENERAL INTEREST**
Carlton Anthony Taft (CBPF, Brazil)
John E. E. Baglin (IBM Almaden, USA)

Sponsors

Support
<table>
<thead>
<tr>
<th>SYMPOSIUM FLOOR</th>
<th>DAY / ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>09.21</td>
</tr>
<tr>
<td></td>
<td>Monday (2)</td>
</tr>
<tr>
<td>PLENARY</td>
<td>ALHAMBRA I e II</td>
</tr>
<tr>
<td></td>
<td>09.22</td>
</tr>
<tr>
<td></td>
<td>Tuesday (3)</td>
</tr>
<tr>
<td>A / 1st</td>
<td>ALVORADA I</td>
</tr>
<tr>
<td>B / 1st</td>
<td>ALVORADA I</td>
</tr>
<tr>
<td>C / 1st</td>
<td>ALVORADA II</td>
</tr>
<tr>
<td>D / 2nd</td>
<td>ALVORADA II</td>
</tr>
<tr>
<td>E / 2nd</td>
<td>SEGOVIA III</td>
</tr>
<tr>
<td>F / 2nd</td>
<td>ORIENTE</td>
</tr>
<tr>
<td>G / 1st</td>
<td>IMPERIAL</td>
</tr>
<tr>
<td>H / 2nd</td>
<td>SEGÖVIA II</td>
</tr>
<tr>
<td>I / 2nd</td>
<td>CATETE</td>
</tr>
<tr>
<td>J / 1st</td>
<td>ITAMARATY</td>
</tr>
<tr>
<td>K / 1st</td>
<td>ITAMARATY</td>
</tr>
<tr>
<td>L / 2nd</td>
<td>EL PARDO II</td>
</tr>
<tr>
<td>M / 1st</td>
<td>EL PARDO II</td>
</tr>
<tr>
<td>N / 2nd</td>
<td>IMERIAL</td>
</tr>
<tr>
<td>O / 1st</td>
<td>ARANJUEZ</td>
</tr>
<tr>
<td>P / 2nd</td>
<td>BANDEIRANTES</td>
</tr>
<tr>
<td>Q / 1st</td>
<td>LIBERDADE</td>
</tr>
<tr>
<td>R / 2nd</td>
<td>LIBERDADE</td>
</tr>
<tr>
<td>S / 2nd</td>
<td>SEGÖVIA II</td>
</tr>
<tr>
<td>T / 2nd</td>
<td>SEGÖVIA IV</td>
</tr>
<tr>
<td>U / 2nd</td>
<td>EL PARDO I</td>
</tr>
<tr>
<td>V / 2nd</td>
<td>SEGÖVIA III</td>
</tr>
<tr>
<td>W / 1st</td>
<td>SEGÖVIA III</td>
</tr>
<tr>
<td>X / 2nd</td>
<td>SEGÖVIA I</td>
</tr>
<tr>
<td>Y / 1st</td>
<td>SEGÖVIA I</td>
</tr>
<tr>
<td>Z / 1st</td>
<td>SEGÖVIA I</td>
</tr>
<tr>
<td>AA / 1st</td>
<td>SEGÖVIA I</td>
</tr>
<tr>
<td>BB / 2nd</td>
<td>SEGÖVIA I</td>
</tr>
<tr>
<td>GNN</td>
<td>WINDSOR</td>
</tr>
<tr>
<td>Energy Forum</td>
<td>TOP FLOOR</td>
</tr>
<tr>
<td>Innovation</td>
<td>ALHAMBRA I e II</td>
</tr>
<tr>
<td>DAAD</td>
<td>ALHAMBRA I e II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SYMPOSIUM FLOOR</th>
<th>DAY / ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>09.24</td>
</tr>
<tr>
<td></td>
<td>Thursday (5)</td>
</tr>
<tr>
<td>PLENARY</td>
<td>ALHAMBRA I e II</td>
</tr>
<tr>
<td>A / 1st</td>
<td>ALVORADA I</td>
</tr>
<tr>
<td>B / 1st</td>
<td>BANDEIRANTES</td>
</tr>
<tr>
<td>C / 1st</td>
<td>ALVORADA II</td>
</tr>
<tr>
<td>D / 2nd</td>
<td>SEGOVIA IV</td>
</tr>
<tr>
<td>E / 2nd</td>
<td>SEGOVIA III</td>
</tr>
<tr>
<td>F / 2nd</td>
<td>ARANJUEZ</td>
</tr>
<tr>
<td>G / 1st</td>
<td>CATETE</td>
</tr>
<tr>
<td>H / 2nd</td>
<td>EL PARDO II</td>
</tr>
<tr>
<td>I / 2nd</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>J / 1st</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>K / 1st</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>L / 2nd</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>M / 1st</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>N / 2nd</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>O / 1st</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>P / 2nd</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>Q / 1st</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>R / 2nd</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>S / 2nd</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>T / 2nd</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>U / 2nd</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>V / 2nd</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>W / 1st</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>X / 2nd</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>Y / 1st</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>Z / 1st</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>AA / 1st</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>BB / 2nd</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>GNN</td>
<td>SEGOVIA II</td>
</tr>
<tr>
<td>Energy Forum</td>
<td>ALHAMBRA I e II</td>
</tr>
<tr>
<td>Innovation</td>
<td>ALHAMBRA I e II</td>
</tr>
<tr>
<td>DAAD</td>
<td>LIBERDADE</td>
</tr>
</tbody>
</table>

8 9
General Program

<table>
<thead>
<tr>
<th>Time</th>
<th>09.20 Sunday</th>
<th>09.21 Monday</th>
<th>09.22 Tuesday</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30 - 09:00 h</td>
<td>PLENARY</td>
<td>PLENARY</td>
<td></td>
</tr>
<tr>
<td>09:00 - 09:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:30 - 10:00 h</td>
<td>SYMPOSIA</td>
<td>SYMPOSIA</td>
<td></td>
</tr>
<tr>
<td>10:00 - 10:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:30 - 11:00 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00 - 11:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:30 - 12:00 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00 - 12:30 h</td>
<td>SYMPOSIA</td>
<td>SYMPOSIA</td>
<td>POSTER</td>
</tr>
<tr>
<td>12:30 - 13:00 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13:00 - 14:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:30 - 15:00 h</td>
<td>SYMPOSIA</td>
<td>SYMPOSIA</td>
<td>REGISTRATION</td>
</tr>
<tr>
<td>15:00 - 15:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:30 - 16:00 h</td>
<td>SYMPOSIA</td>
<td>SYMPOSIA</td>
<td></td>
</tr>
<tr>
<td>16:00 - 16:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16:30 - 17:00 h</td>
<td></td>
<td></td>
<td>COFFEE BREAK</td>
</tr>
<tr>
<td>17:00 - 17:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17:30 - 18:00 h</td>
<td>PLENARIES</td>
<td>PLENARIES</td>
<td></td>
</tr>
<tr>
<td>18:00 - 18:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18:30 - 19:00 h</td>
<td>POSTER</td>
<td>POSTER</td>
<td></td>
</tr>
<tr>
<td>19:00 - 19:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19:30 - 20:30 h</td>
<td>WELCOME</td>
<td>RECEPTION</td>
<td></td>
</tr>
<tr>
<td>20:30 - 21:00 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21:00 - 22:00 h</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>09.23 Wednesday</th>
<th>09.24 Thrusday</th>
<th>09.25 Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30 - 09:00 h</td>
<td>PLENARY</td>
<td>PLENARY</td>
<td>PLENARY</td>
</tr>
<tr>
<td>09:00 - 09:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:30 - 10:00 h</td>
<td>SYMPOSIA</td>
<td>SYMPOSIA</td>
<td>SYMPOSIA</td>
</tr>
<tr>
<td>10:00 - 10:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:30 - 11:00 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00 - 11:30 h</td>
<td></td>
<td></td>
<td>COFFEE BREAK</td>
</tr>
<tr>
<td>11:30 - 12:00 h</td>
<td>SYMPOSIA</td>
<td>SYMPOSIA</td>
<td>SYMPOSIA</td>
</tr>
<tr>
<td>12:00 - 12:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:30 - 13:00 h</td>
<td>POSTER</td>
<td>POSTER</td>
<td></td>
</tr>
<tr>
<td>13:00 - 14:30 h</td>
<td></td>
<td></td>
<td>LUNCH BREAK</td>
</tr>
<tr>
<td>14:30 - 15:00 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:00 - 15:30 h</td>
<td>SYMPOSIA</td>
<td>SYMPOSIA</td>
<td>SYMPOSIA</td>
</tr>
<tr>
<td>15:30 - 16:00 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16:00 - 16:30 h</td>
<td>SYMPOSIA</td>
<td>SYMPOSIA</td>
<td></td>
</tr>
<tr>
<td>16:30 - 17:00 h</td>
<td>FREE</td>
<td>COFFEE BREAK</td>
<td>CLOSING</td>
</tr>
<tr>
<td>17:00 - 17:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17:30 - 18:00 h</td>
<td>PLENARIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18:00 - 18:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18:30 - 19:00 h</td>
<td>POSTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19:00 - 19:30 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19:30 - 20:30 h</td>
<td>CONFERENCE</td>
<td>DINNER</td>
<td></td>
</tr>
<tr>
<td>20:30 - 21:00 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21:00 - 22:00 h</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Symposia Auditorium
1st floor

* Tela de projeção - screen

Code: DAY + SYMPOSIUM
2- Monday
3- Tuesday
4- Wednesday
5- Thursday
6- Friday

Example: 6M = Friday, Symposium M
Symposia Auditorium
2nd floor

* Tela de projeção - screen

Code: DAY + SYMPOSIUM
2- Monday
3- Tuesday
4- Wednesday
5- Thursday
6- Friday

Example: 2BB = Monday, Symposium BB
Presentation Directions to the Authors

POSTER

All the Posters will be exhibit at Louvre Auditoriums I, II, III and IV, in the ground floor close to the Exhibitors area and the Registration Desk. Posters will have a maximum allocated space of 140cm (width) x 100cm (height); there will be a place to hang big poster and double face tapes will be given to fix the separate sheets.

Morning Poster Sessions: There will be 3 (three) sessions (Tuesday, Wednesday and Thursday), starting at 11:30h. These sessions will occur in parallel with the Symposia. Authors are request to set up their posters before the morning Coffee Break (11h) on the assigned day, and to remove them before the afternoon Coffee Break (16:30h) in the same day.

Afternoon Poster Sessions: There will be 4 (four) sessions (Monday, Tuesday, Thursday and Friday), starting at 18:30h. Authors are request to set up their posters by the end of afternoon Coffee Break (17h) on the assigned day, and to remove them before 21h in the same day.

ORAL

Plenary talks will have 40 minutes, plus 5 minutes for discussions, Invited talks will have 25 minutes, plus 5 minutes for questions and Oral contributions will have 12 minutes, plus 3 minutes for questions.

There will be a Media Desk, 2nd Floor, indicated in the map, near to Aranjues room, in front of the plenary lecture room. The authors can copy the presentation that will be forward directly to the conference room. Authors are also advised to check their presentations for computer compatibility. Speakers using their own Notebook should arrive in the schedule room 20 minutes before the start of the presentation, to connect the Notebook to the audio-visual equipment, in order to avoid unnecessary delays.

Poster Sessions Schedule

Auditorium Louver I, II, III and IV
Morning Session: 11:30 to 13:30
Evening Session: 18:30 to 20:30

Symposium A Wednesday, September 23rd, Morning session
Symposium B Wednesday, September 23rd, Morning session
Symposium C Monday, September 21st, Evening session
Symposium D Thursday, September 24th, Evening session
Symposium E Tuesday, September 22nd, Morning session
Symposium F Monday, September 21st, Evening session
Symposium G Monday, September 21st, Evening session
Symposium H First half: Tuesday, September 22nd, Evening session
Second half: Wednesday, September 23rd, Morning session
Symposium I Tuesday, September 22nd, Morning session
Symposium J Tuesday, September 22nd, Morning session
Symposium K Thursday, September 24th, Morning session
Symposium L Thursday, September 24th, Morning session
Symposium M Tuesday, September 22nd, Morning session
Symposium N Monday, September 21st, Evening Session
Symposium O Monday, September 21st, Evening Session
Symposium P Thursday, September 24th, Morning session
Symposium Q Tuesday, September 22nd, Evening session
Symposium R Thursday, September 24th, Evening session
Symposium S Tuesday, September 22nd, Evening session
Symposium T Monday, September 21st, Evening session
Symposium U Thursday, September 24th, Morning session
Symposium V Monday, September 21st, Evening session
Symposium W Wednesday, September 23rd, Morning session
Symposium X Thursday, September 24th, Evening session
Symposium Y Tuesday, September 22nd, Evening session
Symposium Z Wednesday, September 23rd, Morning session
Symposium BB First quarter: Monday, September 21st, Evening session
Second quarter: Tuesday, September 22nd, Evening session
Third quarter: Thursday, September 24th, Morning session
Fourth quarter: Thursday, September 24th, Evening session
Plenary Lectures

Sunday, September 20
19h – Professor Sergio Rezende, Ministry for Science and Technology
“Science, technology and innovation for national development”

Monday, September 21
8 30h – Professor Subra Suresh (Dean, MIT School of Engineering, USA)
“Nanotechnology and materials science perspectives to probe connections between human diseases and cell behavior”
9:15h – Professor Akihisa Inoue (President, Tohoku University, Japan)
“Recent Development and Applications of Bulk Glassy Alloys”
17:00h – Professor Miguel Jose Yacaman (U. Texas, USA)
“New insights on the physics and Chemistry of Nanocrystals”

Tuesday, September 22
8:30h – Professor C.N.R. Rao, F.R.S. (Linus Pauling Professor & JNCASR President, India)
“Graphene: The new nanocarbon”
17:00h – Professor Knut Urban (Forchungszentrum Julich, Germany)
“Aberration-corrected electron microscopy – solving materials problems on the atomic level”
17:45h – Somiya Award

Wednesday, September 23
8:30h – Professor Jacques Amouroux (Université Pierre et Marie Curie, France)
“Carbon dioxide: a New Material for Energy Storage”

Thursday, September 24
17:00h – Professor Stuart S. P. Parkin (Director, IBM-Stanford SpinAps, USA)
“The Spin on Electronics”

Friday, September 25
08:30h – Professor Henrique Toma (IQ – University of Sao Paulo, Brazil)
“Supramolecular Hetero-Hybrid Materials and Devices”

Special Events

Global Nanotechnology Network (GNN) Workshop
Tuesday, September 22
Auditorium: Windsor – Top floor

IUMRS Energy Forum
Wednesday, September 23
Auditorium: Alhambra

Innovation Workshop on Advanced Materials and Devices
Thursday, September 24
Auditorium: Alhambra
**Symposia and Organizers**

**NANOSCIENCE AND NANOTECHNOLOGY**

**A - Advances on Nanocomposites: Synthesis and Applications**
David C. Bell (Harvard, USA)
Wolfgang Jager (U. Kiel, Germany)
Luiz Henrique C. Mattoso (EMBRAPA, Brazil)

**B - Mechanical Properties of Materials at the Nanometer Length Scales**
Alan Schwartzman (MIT, USA)
Rodrigo Prioli (PUC-Rio, Brazil)
Junya Inoue (U. of Tokyo, Japan)
Jim Smith (Micro Materials, Ltd., UK)

**C - Carbon Nanostructures: From properties to Applications**
Ado Jorio (UFMG, Brazil)
Mauricio Terrones (IPICYT, Mexico)
Rávio Orlando Plentz Filho (UFMG, Brazil)
A. John Hart (U. of Michigan, USA)

**D - Synthesis, Characterization and Properties of Inorganic Nanoparticles**
Paulo Ferreira (U. of Texas, USA)
Jeff de Hosson (U. of Groningen, Netherlands)
Katsuhiro Sasaki (Nagoya University, Japan)
Dulce Araujo Melo (UFRN, Brazil)

**E - Magnetic Materials at the Nanoscale**
Maria-Elena Gómez (CENM, Colombia)
Axel Hoffmann (Argonne National Laboratory, USA)
Elisa Saitovitch (CBPF, Brazil)
Jose Luis Vicent (U. Complutense, Spain)
Yvan Bruynseraede (K. U. Leuven, Belgium)

**F - Solving Nanostructures through Electron Microscopy**
Gustaaf Van Tendeloo (EMAT - University of Antwerp, Belgium)
Guillermo Solórzano (PUC-Rio, Brazil)
Uli Dahmen (NCEM, USA)
Carla Bittencourt (University of Mons, Belgium)

**HEALTH AND BIOLOGICAL MATERIALS**

**G - Medical Applications of Nanotechnology**
Robert Sinclair (Stanford University, USA)
Mark Welland (U. of Cambridge, UK)
Vinayak Dravid (Northwestern University, USA)
Marcos Farina (UF RJ, Brazil)

**H - New Developments in Biomaterials**
Gema Gonzalez (IVIC, Venezuela)
Rudolf Reichelt (U. of Münster, Germany)
Carlos Graeff (UNESP, Brazil)
Yannis Missirlis (U. of Patras, Greece)

**I - New Materials and Processes for Sensing and Biosensing**
Valtencir Zucolotto (USP, Brazil)
Santiago Sanchez-Cortes (CSIC, Spain)
Sanjeev Manohar (U. of Massachusetts, USA)
Lauro Tatsuo Kubota (Unicamp, Brazil)

**ENERGY AND ENVIRONMENT**

**J - Materials for Portable Energy Sources**
Paulo Roberto Bueno (UNESP, Brazil)
Roberto Manuel Torresi (USP, Brazil)
Claude Gabrielli (UPMC, France)
José Mauricio Rosolen (USP, Brazil)

**K - Innovation in Fuel Cells: from Materials to Novel Devices**
Enrico Traversa (MANA - National Institute for Materials Science (NIMS), Japan)
Marcelo Linardi (IPEN, Brazil)
Reginaldo Muccillo (IPEN, Brazil)
Eric D. Wachsman (U. of Florida, USA)
Ernesto R. Gonzalez (USP, Brazil)

**L - Environmentally Benign Materials**
Fernando Galembeck (Unicamp, Brazil)
Márcia Maria Rippel (Unicamp, Brazil)
Khosrow Ghavami (PUC-Rio, Brazil)
Alain Dufresne (INPG, France)
M - Frontiers in Photonic and Photovoltaic Materials and Processes
Fernando A. Ponce (Arizona State, USA)
Hiroshi Amano (Meijo University, Japan)
Edson Roberto Leite (UFSCar, Brazil)
Martha C. Lux-Steiner (Helmholtz Center, Germany)
Ana Flávia Nogueira (Unicamp, Brazil)

N - Materials for Nuclear Power Generation
M. G. (Grace) Burke (Betis Atomic Power, USA)
Raul Versaci (CNEA, Argentina)
Andre Costa e Silva (IBQN/UFF, Brazil)

O - Materials for Direct Energy Conversion Systems
Ali Sayir (NASA / Case Western, USA)
Thierry Caillat (Caltech, USA)
Marie-Helene Berger (Centre des Materiaux, France)
Carlos G. Levi (UCSB, USA)
Hugo Sandim (FAENQUI, Brazil)

FUNCTIONAL AND ELECTRONIC MATERIALS
P - Designer Polymeric Nano and Micro-Structures
Edwin L. Thomas (MIT, USA)
Maria do Carmo Gonçalves (Unicamp, Brazil)
Christopher Ober (U. Cornell, USA)
Julius Vancso (U. of Twente, Netherlands)

Q - Materials and Processes for Large-Area Electronics
Alberto Salleo (Stanford University, USA)
Martin Heeney (Queen Mary, UK)
Ana Claudia Arias (PARC, Palo Alto, USA)
Lucimara Stolz Roman (UFPR, Brazil)

R - Protective Coating: Advanced Surface Engineering
Fernando L. Freire Jr. (PUC-Rio, Brazil)
Yip-Wah Chung (Northwestern, USA)
Israel J. R. Baumvol (UFRGS, Brazil)

S - Current Trends in Oxide Materials
C. Barry Carter (U. of Connecticut, USA)
Giuseppina Padeletti (CNR, Italy)
Hans-Ulrich Habermeier (Max-Planck, Germany)
José Antonio Eiras (UFSCar, Brazil)

T - Functional Materials For Organic Electronic and Nanotechnology
Roberto Mendonça Faria (USP, Brazil)
Marco Cremona (PUC-Rio, Brazil)
Giovanni Marletta (U. of Catania, Italy)
Marcel Mayor (University of Basel, Switzerland)
Paolo Samori (Université Louis Pasteur, France)

STRUCTURAL MATERIALS
U - Advances in Structural Ceramics – from Processing to Applications
Dachamir Hotza (UFSC, Brazil)
Carlos P. Bergmann (UFRGS, Brazil)
Ralf Janssen (TUHH, Germany)
Paolo Colombo (UNIPD, Italy)
Joao Labrincha (UA/CICECO, Portugal)

V - Structures and Properties of Metastable Materials
Walter José Botta Filho (UFSCar, Brazil)
Dilson Silva dos Santos (UFRJ, Brazil)
Alain Reza Yavari (INPG, France)
Robert Schulz (Hydro-Québec, Canada)

W - New Developments in the Processing and Applications of Cu-ad Mo-Base Alloys
Fernando Lund (U. of Chile, Chile)
Luís Amestica (CIMAT, Chile)
Eduardo Brocchi (PUC-Rio, Brazil)
Hal Stillman (Int. Copper Association, USA)
Nicole Kinsman (International Molybdenum Association, UK)

X - Processing, structure and properties of advanced metallic materials
Leonardo Godfroid (Federal University of Ouro Preto, Brazil)
Luiz Carlos Rolim Lopes (Federal University of Volta Redonda, Brazil)
Charles Martins (ArcelorMittal Tubarão, Brazil)
Claudio Ruggieri (EPUSP – University of Sào Paulo, Brazil)
Túlio Magno Füzessy de Melo (Usiminas, Brazil)
Juan Perez Ipiña (Universidad Nacional del Comahue, Argentina)
THEORY AND PHENOMENA

Y - Computational Modeling and Data Driven Materials Discovery
Krishna Rajan (Iowa State University, USA)
Gonzalo Gutierrez (University of Chile, Chile)
Priya Vashishta (U. of Southern California, USA)
Humberto Terrones Maldonado (IPICYT, Mexico)
Jose Pedro Rino (UFSCar, Brazil)

Z - Phase Transformation in Metallic Systems: Current issues
Hélio Goldenstein (USP, Brazil)
Diana Farkas (Virginia Tech, USA)
James Howe (U. of Virginia, USA)
Yves Brechet (LTM, Grenoble, France)

GENERAL INTEREST

AA – Materials Education: Resources, Opportunities and Challenges
John E. E. Baglin (IBM Almaden, USA)
M. Grant Norton (Washington State U., USA)
Elizabete F. Lucas (UFRJ, Brazil)

BB – From Theory to Experiment: Advances in engineering materials
Carlton Anthony Taft (CBPF, Brazil)
William A. Lester, Jr. (U. of California, Berkeley, USA)
Julio Ricardo Sambrano (UNESP, Brazil)
Valérie Bouquet (U. of Rennes, France)
Armando Beltran (U. of Jaume, Spain)

SYMPOSIUM A

Advances on Nanocomposites: Synthesis and Applications

Auditorium: Alvorada I

Symposium Organizers:

David C. Bell (Harvard, USA)
Wolfgang Jager (U. Kiel, Germany)
Luiz Henrique C. Mattoso (EMBRAPA, Brazil)

Nanoscience and nanotechnology
Tuesday, September 22
Session chair: David C. Bell and Wolfgang Jager
09:30 - 10:00
PA1 (invited) - Polymer Based NanoMaterials for Photonics and Phononics
Edwin L. Thomas
10:00 - 10:15
A511 - Synthesis and characterization of organic acid doped poly(N-ethylaniline): A material for ammonia sensing application
Vasqat Vidayath Chabukswar, Sanjay Vijay Bhavsar and Aniruddha R Chabukswar
10:15 - 10:30
A546 - Nanostructured Epoxy Network Modified with Polybutadiene: Synthesis and Characterization
Bluma Guenther Soares, UFRj, Veronica Dionísio Lima, UFRJ and Karim Dahmouche, UEOZI
10:30 - 10:45
A600 - Influence of lamellar nanoclay in the transport properties of blown films of semi-crystalline polymers
Juliano Marini, PPG-CEM/UFSCar, Cesar Augusto Gonçalves Beatrice, PPG-CEM/UFSCar, Claudia Soares Isaac, PPG-CEM/UFSCar, Marcio Cristina Branciforti, DEMa/UFSCar, Rosa Maria Vercelino Alves, CETEA/ITAL and Rosario Elida Suman Bresta, PPG-CEM/UFSCar
10:45 - 11:00
A564 - Nanoindentation and Microscopic Studies of Calcium Silicate Hydrate–Poly(Vinyl Alcohol) Nanocomposite Materials
Fernando Peleixier, UNESC and Jean Gleize, UFSC
11:00 - 11:30
Coffee Break
Session chair: David C. Bell and Wolfgang Jager
11:30 - 12:00
PA8 (invited) - Ion Beam Applications to Fabricate Nanocomposites for Optical Properties
12:00 - 12:15
A551 - Nano-nanocomposites: An emerging class of materials
Pushan Ayyub
12:30 - 12:45
A509 - Quantum Dots Based Energy Transfer
Amitava Patra
12:45 - 13:00
A574 - Enhancement of Energy Release Rate of NanoEnergetic Composite Materials by Controlling Their Nanostructures
Soo Hyung Kim, Pusan National University
13:00 - 14:20
Lunch
Session chair: Wolfgang Jager and Luiz Henrique C. Mattoso
14:30 - 15:00
PA7 (invited) - Relationships Between Rheology and Structure in Clay Containing Polymer Nanocomposites
Supakas Sinha Roy, CSIR South Africa
15:15 - 15:45
PA9 (invited) - Nanocomposites for hydrogen storage: from synthesis to catalysis
Robin Gremaud, Empa, Swiss Federal Labor, Andreas Bongschulte, Empa, Swiss Federal Labor and Andreas Züttel, Empa
15:45 - 16:00
A502 - Removal of Pesticides from Water by Using Nanomagnetic filtration
Sulaiman Alfadul, KACST, A Alabdulaalaly (KACST), M Khan (KACST) and M Abdalla (KSU)
16:00 - 16:15
Coffee Break
Session chair: Wolfgang Jager and Luiz Henrique C. Mattoso
16:30 - 17:00
PA5 (invited) - Composition Measurements on the Atomic Scale: Complex Oxide Interfaces
Martina Lysberg (Research Center Jülich)
17:00 - 17:15
A559 - Opto-Mechanical coupling in polymer based carbon nanotube composites.
Benjamin Fragneaud, Columbia University and Jeffrey W Kysar, Columbia University
17:15 - 17:30
A602 - Synthesis and Characterization of Polyaniline / MultwallCarbon Nanotubes Composites Deposited onto ITO Substrates
Fábio Ruiz Simões, UFSCar Sorocabá, Marysleia Ferreira (UFSCar), Osvaldo Novais Oliveira Jr (USP), Luís Fernando Pereira Quintino Marchesi (NANFAEL - DO - UFSCar) and Ernesto Chaves Pereira (UFSCar)
17:30 - 18:45
A529 - In-situ Synthesis of Multi-wall Carbon Nanotubes on Portland Cement Clinker
Péter Ludwig, UFMG, Luiz Orlando Lodeira, UFMG, José Mário Calisto, UFMG, Ivan Cesar Pessoa Gaspar, UFMG and Valquiria Silva Melo, UFMG
18:45 - 21:00
A620 - Nonlinear optical responses of metallic nanoparticles dispersed in ionic liquids
Cássio Eráclito Alves Santos, UFAI, Maria André Rodrigues Cavalcanti, Alencar, UFAI, Luciane França Oliveira, UFRGS, Carla Weber Scheeren, UFRGS, Jairton Dupont, UFRGS and Jandir Miguel Hickmann, UFAI

Thursday, September 24
Session chair: Luiz Henrique C. Mattoso and Wolfgang Jager
09:30 - 10:00
PA2 (invited) - Inorganic nanostructured solar cells
Thomas Dittrich, Heilmoltz-Centre Berlin and Martha Lux-Steiner, Heilmoltz-Centre Berlin
10:00 - 10:15
A576 - Effect of titanium tetra-isopropoxide flow rate on SiO_x-TiO_y composite films by FHD
Jaspal P Bange, Gunma University, Japan, Lalit S Patil (North Maharashtra Univ) and Dinesh K Gautam (North Maharashtra Univ)
10:15 - 10:30
A655 - HPHT Sintering of Nanostructured Diamond Composite
Guerold Sergueevitch Bobrovnitchii, UEFN, Ana Lucia Diegues Skury, UEFN and Romulo Crespo Tardim, UEFN
A507 - In situ synthesis of poly(methyl methacrylate)/layered double hydroxides (LDHs) nanocomposites

Telma Regina Nogueira (UNICAMP) and Liliane Ferretrao Lona (UNICAMP)

A508 - Microstructure and Wear Properties of Pulsed Electrodeposition Ni-WC Nano Composite Coatings

Hamideh Aikhani and Ahmad Ali Amindehi

A509 - Crystallization Behavior of Polypropylene/Calcium Carbonate Nanocomposites

Daniel Dias (UFSCar) and Luiz Antonio Pessan (UFSCar)

A510 - Study of the point defects in Al2O3:Nd nano-strutled crystals through of analysis of impedance and luminescence results

Eduardo dos Santos Ferreira (Fatec-SP), Katia Alessandra Gonçalves (EPUSP), José Francisco Sousa Bitencourt (EPUSP) and Soni Hatsue Tatumi (Fatec-SP)

A511 - In situ synthesis of poly(ethylene oxide)/layered double hydroxides (LDHs) nanocomposites

Telma Regina Nogueira (UNICAMP) and Liliane Ferretrao Lona (UNICAMP)
oxygen catalyzed by Fe and Co macrocyclic complexes confined on gold modified with self-assembled monolayers of thiols

Ingrid Girao Ponce (USACH)

A544 - Barrier properties and morphology of cellulose acetate nanocomposites

Rafaelle Bonzanini Romero (UNICAMP), Rosa Maria Vercelino Alves (CETEA-ITAL) and Maria do Carmo Gonçalves (UNICAMP)

A545 - Synthesis and characterization of copper and cobalt containing kanemite

VAEUD VALDIMIRO DE OLIVEIRA (UNICAMP), RAMON KENNED SOUSA ALMEIDA (UNICAMP) and Claudio Airoldi (UNICAMP)

A547 - Preparation and Application of a Novel Hybrid Nanomaterial Based on Silesquioxane Cubic Newton Luiz Dias Filho (UNESP), Carla D Nunes (UNIV LISBOA), Pedro D Vaz (UNIV Lisboa) and Maria José Calhorda (UNIV Lisboa)

A548 - Synthesis and characterization of Cu-doped ceria nanoparticles

Branko Matovic (Vinca), Snezana Boskovic (Vinca), Marko Rosic (Vinca), Branka Babic (Vinca), Zorana D Dohicetc-Mitrovic (Institute of physics), Marko B Radovic (Institute of physics) and Zoran V Popovic (Institute of physics)

A549 - Synthesis of Multifunctional Nanocomposite for Bioimaging and Cell Separation

Shobhit Charan (Academia Sinica), Narender Singh (Academia Sinica), Mark Gries (Academia Sinica) and Pellin Chen (Academia Sinica)

A550 - Study of LbL films of natural rubber for biomaterials application

Mariseuma Ferreira (UFABC), Luiz Fernando Magri Dias Goldino (UFABC), Alessandra Rodrigues (UFABC), Osvaldo Novaes Oliveira Jr (IFSC-USP) and Mariseuma Ferreira (UFABC)

A552 - A multifunctional SBA-15 / P(N-IPAAm) / Fe3O4 hybrid system for biomedical application

Edesia Martins Barros Sousa (CDTN), Karvynne Cristina Souza (CDTN), Andreza Sousa (UFMG), Ricardo Geraldo Sousa (UFMG), Jose Domingos Ardisson (CDTN) and Waldemar Augusto de Almeida Macedo (CDTN)

A553 - Nanoparticles prepared by Sol-Gel method Used in the formation of nanocomposites with nylon, 6,12

Antonio Hortencio Munhoz Jr (UP-Mackenzie), Renato Meneghetti Peres (UP-Mackenzie), Nelson Batista de Lima (IPEN) and Leila Figueiredo de Miranda (Mackenzie)

A555 - Effect of ionizing radiation in nanocomposites of nylon 6,12 and pseudoboehmite

Antonio Hortencio Munhoz Jr (UP-Mackenzie), Leila Figueiredo de Miranda (Mackenzie), Marcela Nakashima (IPEN-Mackenzie) and Leonardo Gonclamin Andrade e Silva (IPEN)

A556 - Organofunctionalized mesoporous silicas SBA-15

Ramon Kenned Sousa Almeida (UNICAMP) and Claudio Airoldi (UNICAMP)

A557 - Selective optical TiN3 compounds obtained by RF magnetron sputtering

Kornel Grigoriev Grigoryev (ITA), Cicero Alves Cunha (ITA), Ivo de Castro Oliveira (ITA), Jay Amorim Filho (ITA), Marcos Massi (ITA) and Homero Santiago Maciel (ITA)

A558 - Study of Ferritic and Austenitic Steel Reinforced with 3wt%TaC Prepared by Powder Metallurgy

Leiliane Alves Oliveira (UFRN), Uiliane Umbelino Gomes (UFRN), Carlson Pereira Souza (UFRN), Marciano Furukawa (UFRN), Yuri Torres (UFRN) and Murilo Menna B Mello Jr (UFRN)

A561 - Preparation of polyamide nanocomposites optimized based on the clay modifier structure and processing conditions

Vivianne Nelly Dougnac (Universidad de Chile) and Raul Quijada (Universidad de Chile)

A562 - Synthesis of Silica Nanospheres of Differing Diameters and their Incorporation into Polypropylene Nanocomposites

Brian Charles Peoples (Universidad de Chile), Ricardo Alamilo (Universidad de Chile), Nonoy Velasco (Universidad de Chile), Vivianne Nelly Dougnac (Universidad de Chile) and Raul Quijada (Universidad de Chile)

A565 - Electronic States of InAsP Self-Assembled Quantum Dots

Gracely Elios dos Santos (UFPR), Igor Konieczniak (UFPR), Evaldo Ribeiro (UFPR) and Gilberto Medeiros Ribeiro (LNLs)

A566 - Use of poly(ethylene oxide) based macroRAFT agents as both stabilizer and control agent in the miniemulsion polymerization of styrene

Jose Carlos Moreira (EEL/USP), Fabio Henrique Franco (EEL/USP), Gизелда Maria Alves (EEL/USP), Marli Luiza Tebaldi Sordi (EEL/USP), Franz Dankost (LCPP/CRNS), Muriel Lansalot (LCPP/CRNS) and Amilton Martins Santos (EEL/USP)

A569 - Growth Mechanism of Novel Sodium Carbonate Ribbon-Like Nanostructures

Jacyna Valéria Dornelas da Silva Araújo (DQ/UFMG), Vânia Marcia Duarte Pasa (DQ/UFMG), Adio Aparecido Sabino (DQ/UFMG), Maria Irene Yoshida (DQ/UFMG), Karla Balzweitz (DF/UFMG), Maria Sylvia Silva Dantas (DEMET/UFMG) and José Mario Carneiro Vieira (UFABC)

A570 - Synthesis, characterization and properties of magnetic colloids supported on chitosan.

Christian Américo Cruzat (U de Concepcion), Galo Cárdenas (U de Concepción), Octavio Peña (U de Rennes 1), Judith Diaz (U de Concepcion) and Manuel Francisco Melendez (U de Concepcion)

A571 - Exfoliated graphite decorated with ZrO2 nanoparticles

Ivan Mikhailovich Afanasoy (Moscow State University), Olga Nikolaevna Shornikova (Moscow State University) and Gustaaf Van Tendeloo (University of Antwerp)

A572 - Nanocomposites of polypropylene based on halogen free flame retardants for fire protection and safety

Selma Barbosa Jaconis (Quattor Petroquimica SA), Antionio Carlos Quental (Quattor Petroquimica SA), Adair Rangel Oliveira Junior (Quattor Petroquimica SA), Regina Sandra Veiga Nascimento (UFRRJ) and Simone Pereira da Silva Ribeiro (UFRRJ)

A573 - Study of Electrical and Optical Properties of PMMA filled with Indium Tin Oxide Nanobelts

Elen Poliani Arindo (UNESP - ISA), Juliana Aparecido Lucindo (UNESP - ISA), Hermes Adolfo Aquino (UNESP - ISA) and Marcelo Ornaghi Orlandi (UNESP - Araquara)

A575 - Thermoluminencence using soda lime aluminosilicate glasses

Pamella Filenga Rosa Sanguy (UFJF), Zélia Maria da Costa Ludwig (UFJF), Linda Caídas (IPEN/IFUSP), Maria José Valenzuela Bell (UFJF), Virgilio Carvalho dos Anjos (UFJF) and Célia Regina da Costa (IFUSP)

A577 - Thermal and Morphological Properties of SBS Nanocomposites

Maria Jose de Oliveira C Guimaraes (EQ/UFRRJ), Marcia Parente Melo da Costa (EQ/UFRRJ), Tânia Mara Garcia (EQ/UFRRJ), Maria Elizabeth Ferreira Garcia (COPPE/UFRRJ) and Luiz Claudio Mendes (IMA/UFRRJ)

A578 - Study of Molecular Dynamics of poly(ethylene glycol) inside Intercalated Nanocomposites by 13C Solid-State NMR

Gerson Luiz Mantovani (UFABC), Roberto W A Franco (UENF), Carlos A Brasil (USP), Eduardo Ribeiro de Azvedo (USP) and Tito Jose Bonagamba (USP)

A579 - Processing and Thermal and Morphological Properties of Metallocene LDPE Nanocomposites

Daniele Pereira da Silva Dotta (EQ/UFRRJ), Maria Jose de Oliveira C Guimaraes (EQ/UFRRJ), Maria Elizabeth Ferreira Garcia (COPPE/UFRRJ) and Luiz Claudio Mendes (IMA/UFRRJ)

A580 - Application of Nanocomposite and Stereolithography to Fabrication Medical Models

Maria Ingrid Rocha Barbosa (UNICAMP), Maria Carolina Burgos Costa (UNICAMP), André Luiz Jardini (UNICAMP), Rodrigo Alvarenga Rezende (UNICAMP) and Rubens Maciel Filho (UNICAMP)

A581 - Study of the structural and magnetic properties of the BaFe2ZrOx complex perovskite in nanosized form

Laura Teresa Corredor Bohórquez (UFPE/Univ Nacional de Colombia), David Arsenio Landínez Téllez (Univ Nacional de Colombia), Jairo Roa Rojas (Univ nacional de Colombia), Jairo Roa Rojas (Univ Nacional de Colombia) and José Albin Oliveira de Aguiar (UFPE)

A582 - Nano-Nb Precipitates in Cu matrix: Synthesis and Characterization

Oscar Ferreira de Lima (IFGW-UNICAMP) and Rosário Lucas de Almeida (IFGW-UNICAMP)
FOR RECOVERY PRECIOUS METALS: EXPERIMENTAL AND THEORETICAL STUDIES
Alexander Carreño (Universidad Andres Bello), Ivanne Chavez (Pontificia Universidad Católica), Juan Manuel Manriquez (Pontificia Universidad Católica), Ramiro Arrieta Perez (Universidad Andres Bello), Ximena Zorate (Universidad Andres Bello) and Eduardo Shott (Universidad Andres Bello)

A585 – Resonant Raman of CdS nanoparticles synthesized by aqueous solution precipitation
Patricia Rodrigues Fragoso (Cinvestav), Gerardo Gonzalez de la Cruz (Cinvestav), Sergio Tomas Velázquez (Cinvestav) and Orlando Zelaya Angel (Cinvestav)

A588 – Quasicrystalline Phase Formation in the Mechanically Alloyed Al-Cu-Fe-Cr
Suzana Nóbrega de Medeiros (DFTE-UFRN), Emília Emiko Inukuchi (DFT-JEM), Andrea Paesano Junior (DFT-JEM) and Fernando Luiz de Araujo Machado (DFTE-UFPPE)

A590 – Synthesis, Characterization and Catalytic Activity of NiCo1-xAlxO4 Spinel
Alexandre Fontes Carvalho (UFRN), José Antonio Barros Leal Reis Alves (UFRN), Rodrigo Cesar Santiago (UFRN), Danilo Brasil Ribeiro (UFRN), Joana Farias Barros (UFCG) and Dulce Maria Araujo Melo (UFRN)

A591 – Preparation and Characterization of Nanocomposites Based on Colloidal Nickel and Laponite Clay
Claudio Bonometti Olivato (UNICENTRO), José Batista de Camargo Junior (UNICENTRO), Camila Alves de Lima (UNICENTRO), Fawzi Jaco Anaissi (UNICENTRO), Michele Aparecida Rocha (UNICENTRO), Danilo de Freitas Rosa (EMBRAPA/CNPDA) and Costa Araki (IQ-USP)

A592 – Application of Sol Gel Technology to Produce Aluminium Titanate
Humberto Graacher Rijella (UFSC), Elita Urano Fajnudlich (IPEN), Nivaldo Cabral Kuhren (UFSC) and Michelangelo Durazzo (IPEN)

A593 – Production of new Ziegler-Natta catalyst with Clay for Polypropylene Polymerization by chemical activation
Mônica Couto de Oliveira (UFRJ - IMA), Renata da Silva Cardoso (UFRJ - IMA), Maria de Fátima Vieira Marques (UFRJ - IMA) and Rafaela da Conceição (UFABC)

Nascimento (UFRJ - IMA)

A594 – Nanocomposites based on natural rubber and cellulose nanocrystals from coconut fibers.
Morysleide de Freitas Rosa (Embra), Eliton Souto Medeiros (WRRC, ARS-USDA), José Antonio Malmonge (UNESP), Deilah Wood (WRRC, ARS-USDA), Luiz Henrique Capparelli Mattoso (Embra), William John Orts (WRRC, ARS-USDA) and Syed Imam (WRRC, ARS-USDA)

A595 – Study of electrical conductivity of polythiophene/montmorillonite nanocomposites
Juliana Castro Macêdo - Fonsêca (UFPE) and Rosa Maria Souto-Maior (UFPE)

A596 – Synthesis and Characterization of cerium phosphate (CeP)–based nanocomposites
Rafaela Oliveira nascimento (UNI-CAMP), Carla Veríssimo (UNI-CAMP), Bartolomeu Cruz Viana (UFSC), Antonio Gomes Souza Filho (UFFC) and José Mendes Filho (UFSC) and Oswaldo Luis Alves (UNICAMP)

A597 – Cellulose nanocrystals from coconut fiber: Preparation and Characterization
Morysleide de Freitas Rosa (Embra), Eliton Souto Medeiros (WRRC, ARS-USDA), José Antonio Malmonge (UNESP), Deilah Wood (WRRC, ARS-USDA), Luiz Henrique Capparelli Mattoso (Embra), William John Orts (WRRC, ARS-USDA) and Syed Imam (WRRC, ARS-USDA)

A598 – Polypropylene nanocomposites with UV light absorption properties
Adair Rangel Oliveira Junior (Quattor Petroquimica), Selma Barbosa Jaconis (Quattor Petroquimica) and Antonio Carlos Quental (Quattor Petroquimica SA)

Gustavo Fragi Perotti (IQ-USP), Karen Tiemi Senra (IQ-USP) and Vera Regina Leopoldo Constantino (IQ-USP)

A601 – Synthesis and Characterization of Gold Nanoshells
Segundo Nilo Mestanza Muñoz (UFABC), Mariana Theresa Barbosa Miles (UFABC), Fabiana Duft (UFABC), Antonio Carlos Gomes Rocha (UFABC), Enver Fernandez Chillice (IGFW/UNICAMP) and Anderson Orzani Ribeiro (UFABC)

A603 – Mango Puree Edible Films Reinforced with Cellulose Nanofibers
Henriette Monteiro Cordeiro de Azeredo (Embra), Luiz Henrique Capparelli Mattoso (Embra), Roberto Jesus Avena-Bustillos (ARS-USDA) and Tara Habig McHugh (ARS-USDA)

A604 – Low frequency dispersion in ionic conduction of (1-x)(Nal-4AgI)-xAl2O3
Luís Alfredo Rodrigues (Universidade del Valle), Wilmer Osvaldo Bucheli (ICMM - CSIC), Fernando Correa (Universidade del Quindío), Jesus Evelio Diosia (Universidade del Valle) and Ruben Antonio Vargas (Universidade del Valle)

A606 – In situ synthesis of conducting polymer blends by a novel double interfacial polymerization method
Eliton Souto Medeiros (UFSCar), Marcelo Massayoshi Ueki (UFSCar), Rodrigo Andrade Martinez (UFSCar), Rinaldo Gregório Jr (UFSCar) and Luiz Henrique Capparelli Mattoso (EMBRAPA/CNPDA)

A607 – Nanocomposite of silica and acrylate as a platform for nanostructuring of materials
Lucas Natalio Chavero (UFSC), Tatiana da Silva (UFSC) and Maria Luisa Sartorelli (UFSC)

A608 – Morphological and structural effect of aluminum on Macroporous silicon layers
Danilo Roque Huancan (Escola Politécnica do USP) and Walter Jaimes Salcedo (Escola Politécnica do USP)

A609 – Mechanical Properties of Nanometric Powders of Sintered WC with 10%Co
Hugo Millward Luna (UFPB), Lidiane Hott de Fúcio Borges (UFPB) and Marcelo Filgueira (UFPB)

A610 – Preparation and spectroscopic properties of PMMA/GdAlO3:RE3+ (RE = Pr, Eu or Tb) composite films for application in scintillation devices
Higor Henrique de Souza Oliveira (UNESP, Araraquara, Brazil), Alison Abreu da Silva (UNESP, Araraquara, Brazil), Marco Aurélio Cebim (UNESP, Araraquara, Brazil) and Marian Rosaly Davolos (UNESP, Araraquara, Brazil)

A611 – In-situ polymerization of aniline covalently bound in the channels of MCM-41
Marcos Augusto Bizeto (UNIFESP), Roselena Faez (UNIFESP), Fernanda Ferraz Camilo (UNIFESP) and Marcelo Bruce (UNIFESP)

A613 – Preparation and Characterization of Bentonite Clays Modified with Vanadium Pentoxide
Jose Batista de Camargo Junior (UNICENTRO), Juan Carlo Vilalta (UNICENTRO), Fawzi Jaco Anaissi (UNICENTRO), Vitor de Moraes Zamarian (IQ-USP) and Henrique Esi Tomi (IQ-USP)

A614 – Influence of concentration and electrical field in the morphological properties of polyamide 6, 6 / MWMN nanofibers
Vitor Alexandre Godoy (PPG-CBM/UFSCar), Rosario Elida Suman Brestas (PPG-CBM/UFSCar), Marcia Cristina Branciforti (DEMA/UFSCar) and Livio Jackes Bruno da Silva (UFMG)

José Francisco Naime Filho (FC-CLRP-USP), Mariana Oliveira Ribeiro (FFCLRP-USP) and João Barros Valim (FFCLRP-USP)

A616 – Designed Pendant Chain Covalently Bonded to Analogue of Euclandite for Removal Divalent Toxic Metals from Aqueous Solution: Thermodynamic and Equilibrium Study
Denis Lima Guerra (UFMT), Rúbia Ribeiro Viana (UFABC), Alane Azevedo Pinto (UNICAMP) and Claudio Airoldi (UNICAMP)

A617 – Synthesis and characterization of the mesoporous AIM-CM-41 as catalyst for biodiesel
Francisco de Assis Rodrigues Pereira (UFPB), Maria Gardanira Fonseca (UFPB), Ana Elizabeth Silva (UFPE) and Maristela Alves da Silva (UFPE)

A618 – Immobilization of 5-amino-1,3,4-thiadiazole-thiol onto kanemite for thorium(IV) removal: Thermodynamics and equilibrium study
Denis Lima Guerra (UFMT), Marcos Carvalho (UFMT), Victor Luiz Leidens (UFMT), Alane Azevedo Pinto (UNICAMP), Rúbia Ribeiro Viana (UFMT) and Claudio Airoldi (UNICAMP)

A619 – Structural Charge Determination on Tartrated Magnetic Nanocolloids
A621 - Controlling colloidal gold nanoparticles’ optical properties
Mário André Rodrigues Cavalcanti (UFAL), Eduardo Jorge da Silva Fonseca (UFAL), Cásio Eráclito Alves Santos (UFAL), Janair Miguel Hickmann (UFAL), Sara Figueiredo de Alcantara Morais (UFAL), Marcos Alexandre Gelesky (UFAL) and Mario Roberto Meneghetti (UFAL)

A622 - Development of nano-composites of polypropylene and polyethylene with chitosan
Renata Cristina Gandolfi (UFABC), Mariséilma Ferreira (UFABC), Sergio Paulo Campana-Filho (USP) and Luiz Henrique Capparelli Mattoso (Embrapa)

A623 - Composites of HDPE and MMT modified by species of different chemical nature. Synthesis and evaluation of transport properties to hydrocarbons.
Fernanda Elena Moura de Jesus (INQUI-CONICET), Maria Antonia Toro (Faculdad Cs Exactas-UNSa), Elena Maria Erdmann (Faculdad Ingeniería-UNSa), Victor Jayme Roget Rodriguez Pita (IMA-UFAL), Marcos Lopes Dias (IMA-UFRJ) and Hugo Alberto Destéfanis (Faculdad Ingeniería-UNSa)

A624 - The role of curing rate on the growth of percolated networks in epoxy/MMNT nanocomposites under an electrical field
Sérgio Henrique Pozzini (UDESC), Celso Luiz Siquioli Risi (UDESC), Artur Ramos (UDESC), Lineu Hattenhauer (UDESC) and Luiz Antonio Ferreira Coelho (UDESC)

A625 - Spectroscopy and electrical characterization of Polyaniline – Ag Composite
Maria Elena Leyva González (UNIFEI), Filiberto González García (UNIFEI), Juvénio Bezerra Lioloi Junior (UNIFEI), Mateus Colli (UNIFEI) and Demétrio Artur Werner Soares (UNIFEI)

A626 - Preparation and Characterization of Epoxy – Silver Composite
Maria Elena Leyva González (UNIFEI), Filiberto González García (UNIFEI), Juvénio Bezerra Lioloi Junior (UNIFEI), Mateus Colli (UNIFEI) and Demétrio Artur Werner Soares (UNIFEI)

A627 - Influence of the surface treatment on the local structure of magnetic nanoparticles
Fernando Henrique Martins da Silva (Universidade de Brasília), Fábio Oliveira de Paula (Universidade de Brasília), Jerome Depeyrot (Universidade de Brasília), Juliano Alves Gomes (Universidade de Brasília), Francisco Augusto Tourinho (Universidade de Brasília) and Renata Aquino de Sousa (Faculdade UnB Planaltina)

A628 - Two-step sintering and dielectric properties of translucent nanocrystalline BaTiO3 ceramics
Ronaldo Santos da Silva (DFI - UFS) and Antonio Carlos Hernandez (IFSC - USP).

A629 - Current tunneling properties of anodized alumina
Alexandre Da Cas Viegas (UFSC), Erídio Dorico (UFSC), Thaise Ramos Fernandes (UFSC), Rene Chagas da Silva (UFSC), Douglas Langie da Silva (UFSC) and Andre Avelino Pasa (UFSC).

A630 - Stabilization of polypropylene with the addition of antioxidants in the polymerization reactor
Renato Jonas Oliveira (IMA - UFRJ) and maria de Fátima Vieira Marques (IMA-UFRJ) and Hugo Alberto Destéfanis (UNSa/INQUI-CONICET)

A631 - Micronized talc-epoxy resin composites
Cynthia Ferreira Alves (EEL USP), Simone dos Santos Afonso (EEL USP), Mariane Martins Sobrosa Passos de Abreu (EEL USP), Pedro Carlos de Oliveira (EEL USP), Carlos Alberto Baldwin (EEL USP), FEG Unesp), Ernesto Ruppert Filho (FECC Unicamp) and Carlos Yujiro Yujiro (EEL USP).

A632 - Chemorheological behavior of organophase clay-epoxy resin composites
Rafael Garcia Sarsevero dos Santos (EEL USP), Mariane Martins Sobrosa Passos de Abreu (EEL USP), Amilton Martins Santos (EEL USP), Carlos Alberto Baldwin (EEL USP), FEG Unesp), Ernesto Ruppert Filho (FECC Unicamp) and Carlos Yujiro Yujiro (EEL USP).

A633 - Characterization of Novel Hybrids based on Carbon Nanotubes and Polymer Blends for Biomedical Engineering
Herman Sander Mansur (UFMG) and Alexandra A P Mansur (UFMG).

A634 - Influence of preparation methodology on luminescent properties of the nanoporphor Y2O3: Er, Yb (2%, 1%)
Sabrina ALESSIO Camacho.

A635 - Synthesis and PTCR characterization of Ca-doped BaTiO3 ceramics by proteic sol-gel method
David Vieira Sampaio (DFI - UFS), Ronaldo Santos da Silva (DFI - UFS), Zélia Soares Macedo (DFI - UFS), Jerre Cristiano Alves dos Santos (DFI - UFS), Eduardo Antonelli (IFSC - USP), Jean-Claude M Peko (IFSC - USP) and Antonio Carlos Hernandez (IFSC - USP)

A637 - Nanocomposite Microreactor Fabricated by Indirect 3D Printing
André Luiz Jardini (FEQ/UNICAMP)

A639 - Preparation of polyurethane/montmorillonite polymeric nanocomposites by solution and characterization using low-field NMR
Marcos Anacleto Silva (UFRJ) and Maria Inês Bruno Tavares (UFRJ)

A640 - Gold nanoparticles colloids on natural rubber membranes
Aldo Elizio Job (UNESP/FCT), Nicholas Pieczonka (U WINDSOR), Carlos José Leopoldo Constantino (UNESP/FCT - Pres Prudente) and Flávio Camargo Cabrera (UNESP/FCT)

A642 - Energy Gap Evolution in a ferroelectric oxide belonging to the tetragonal tungsten bronze family
Felipe Silva Bellucci (FCT - UNESP), Gabriela Dias Silva (FCT - UNESP), Leandra Oliveira Salmazo (FCT - UNESP), Aldo Elizio Job (FCT - UNESP) and Marcos Augusto Lima Nobre (FCT - UNESP)

A643 - OBTAINING OF POLYCARBONETE/CLAY NANOCOMPOSITE AND CHARACTERIZATION BY NMR OF LOW-FIELD
Pedro Paulo Merat (UFRJ) and Maria Inês Bruno Tavares (UFRJ)

A644 - Modulation of Electrical Parameters of Multifunctional Nanofluids Based on the Control of the Fraction and of the Type of Nanoparticles
Leandra Oliveira Salmazo (FCT - UNESP), Priscila Castro Souza (FCT - UNESP), Felipe Silva Bellucci (FCT - UNESP), Aldo Elizio Job (FCT - UNESP) and Marcos Augusto Lima Nobre (FCT - UNESP)

A646 - High pressure–high temperature sintering of nanostructured superhard material
Ana Lucia Dieques Skury (UENF), Márcia Giardini Frazão (UENF), Eugenio Sergio Vinceti Battobontrich (UENF) and Sergio Neves Monteiro (UENF)

A648 - Nanocomposites as Anode Material for Lithium-ion Batteries
Lucia Helena Mascaro (UFSCar), Fabio Ricardo Bento (UFSCar), Ju Wang (ISEM) and Hu Liu (ISEM)

A650 - Reactive Blending of PP/ POSS Nanocomposites: Morphology and Dynamic-Mechanical Behavior
Sergio Gianetti Echeverriagay (UCS), Ricardo Vinceti Boal de Oliveira (UFROG) and Robinson Carlos Dudley Cruz (UCS)

Moema Martins (PEMM/CPPE/UFRJ) and Renata Antoun Simão (PEMM/CPPE/UFRJ)
A653 - Characterization of high density polyethylene/organoclay nanocomposites by low - field nuclear relaxation study
   Tatiane C. Rodrigues F. Lessa (IMA UFRJ), Maria Inês Bruno Tavares (IMA UFRJ) and Victor Jayme Roget Rodriguez Pita (IMA UFRJ)

A654 - Thermal and Mechanical Characterization of Epoxy Resin Containing Amorphous Co-B Particles
   Rodrigo de Farias Gomes (UFS), Fellipe Tavares Barreto (UFS), Marcelo Noboro Raim Miyazaki (UFS) and Marcelo Andrade Macedo (UFS)

A656 - Production of Tri-component Composites (Carbon fiber/Epoxy/Carbon nanotubes) by Resin Transfer Molding
   Alessandro Oliveira (UFRGS), Sandro Campos Amico (UFRGS), Celso Luiz Sigoli Risi (UDESC), Sérgio Henrique Pezzin (UDESC) and Luiz Antonio Ferreira Coelho (UDESC)

A657 - Conductive composite obtained by mixture of residue industrial of leather and natural rubber with carbon black
   Elton Aparecido Prado dos Reis (FCT-UNESP), Aguiaraldo Lenine Alves (FCT-UNESP) and Aldo Eloizo Job (FCT-UNESP)

A659 - Agglomeration and aggregation study of hydrous alumina nanoparticles during calcination induced by microwave heating
   Silvelene Alessandra Silva (INPE), Maria do Carmo Andrade (INPE) and Sergio Luiz Mineiro (INPE)

A660 - Influence of the organoclay addition system on the characteristics of the EVA/PS/SBS ternary blend nanocomposites.
   Victor Jayme Roget Rodriguez Pita (UFRJ), Flávio da Silva Francisco (UFRJ) and Ailton de Souza Gomes (UFRJ)

A662 - Porcelain tile surface modification with isocyanate coupling agent: interactions between EVA modified mortar and silane improving adherance
   Herman Sander Mansur (UFMG) and Herman Sander Mansur (UFMG)

A663 - Synthesis and Characterization of the Magnetic Properties of Fe3O4/PANI Magnetic Nanocomposite
   Anselmo Furtado Ruiz Rodriguez (UFRJ), Ana Claudia de Araujo (UFU), Walter Mendes de Azevedo (Departamento de Quimica s), Severino Alves Junior (Departamento de Quimica s), Ricardo Bentles de Azevedo (Universidade de Brasilia), Paulo Cesar Morais (Universidade de Brasilia) and Jorge Luis Lopez (UFMG)

A664 - Iron oxihydroxyde nanostructured in the clays montmorillonite
   Juan Carlos Vilalta (UNICENTRO) and Fauze Anaissi (UNICENTRO)

A665 - Polypropylene-Fatty Acid Functionalized Anionic Clay Nanocomposites: Synthesis and Characterization
   Renato Figueira da Silva (UFRGS), Ricardo Keitel Donato (UFRGS), Rafael Guzzatto (UFRGS), Celso Camilo Moro (UFRGS), Dimitrios Samios (UFRGS) and Henri Stephan Schrekker (UFRGS)

A666 - Effect of Organically Modified Silicate Layers on the Morphology and Mechanical Properties of a Poly (Butylene Adipate-co-Terephthalate) and Poly (Lactic acid) Blend
   Mahin Shahlari (Missouri S&T) and Sungyu Lee (Missouri S&T)

A667 - Synthesis and characterization of nanoscale interstratified particles composed by layered hexanoibate intercalated with hexadecyltrimethylammonium cations
   Alfredo Duarte (IQ-USP) and Vera Regina Leopoldo Constantino (IQ-USP)

A668 - Uniaxial Self-assembled Mesoporous Silica Films
   Kelly Cristine Camargo (IF-UFRGS), Alexandre Fassini Michels (IF-UFRGS), Cesar Liberato Petzhold (IQ-UFRGS), Eduarda de Oliveira da Silva (IQ-UFRGS), Paula Poli Soares (IQ-UFRGS) and Flávio Horowitz (IF-UFRGS)
Thursday, September 24

Session chair: Alan Schwartzman

09:30 - 10:00
PB1 (invited) – SIZE MATTERS: Nano-scale Plasticity in Single Crystals, Nanocrystalline Metals, and Amorphous Metallic Glasses
Wei (ASU), and Rodigo Prioli Menezes (PUC-Rio) and Fernando Dominguez-Rios (Coope-UFRJ) and Michael J Burek (University of Waterloo)

10:00 - 10:30
PB3 (invited) – Size effects on superelasticity in shape memory alloy submicron and micron-scale structures
Miyahara (Physics Dept, McGill U) and David Oliver (McGill University), Yoichi Umeda (U of the Basque) and Christopher Smith (ANU)

10:30 - 11:00
PB4 (invited) – Nanoindentation of Au(111) with atomically defined W(111) and (110) indents using simultaneous Scanning Tunneling Microscopy (STM) and Atomic Force Microscopy (AFM)
William Paul (Physics Dept, McGill U), Till Hagedorn (Physics Dept, McGill U), Mehdi El Ouali (Physics Dept, McGill U), David Oliver (McGill University), Yoichi Miyahara (Physics Dept, McGill U) and Peter Grutter (Physics Dept, McGill U)

11:00 - 11:30
Coffee Break

Session chair: Rodrigo Prioli

11:30 - 12:00
PB5 (invited) – Initial stages of nanoindentation in cubic semiconductors
Fernando Agustin Ponce (ASU), Clara Muniz Almeida (Inmetro), Qiyuan Wei (ASU), and Rodigo Prioli Menezes (PUC-Rio)

12:00 - 12:15
PB11 - Nanoindentation-induced phase transformation versus shear plasticity in tetrahedral semiconductors
David Oliver (McGill University), Jodie Bradby (ANU) and Jim Williams (ANU)

12:15 - 12:30
PB505 – Understanding phase-transformation-induced pop-out behaviour in Si under cyclic loading and elevated temperature indentation conditions
James Stanislaus Williams

12:30 - 12:45
PB25 – Fracture and remnant surface stress imaging of point-contacts in Si
Jeroen Schenaenker (CECS-UFABC), Stephan J Stranick (SMSD-NIST), Robert F Cook (MSEL-NIST) and Yvonne B Gerbig (MSEL-NIST)

12:45 - 13:00
PB44 – Effect of the native oxide mechanical deformation on GaAs nanoindentation
Clara Muniz Almeida (Inmetro), Rodigo Prioli Menezes (PUC-Rio) and Fernando Agustin Ponce (ASU)

13:00 - 14:30
Lunch

Session chair: Junya Inoue

14:30 - 15:00
PB2 (invited) – Opto-Mechanical coupling in carbon nanotube: from experiment to a model
Benjamin Fragneaud (Columbia University) and Jeffrey w Kysar (Columbia University)

15:00 - 15:15
PB17 - Physical and Mechanical Properties of Lymphocyte Adhesive Biopolymer Multilayer Films
Fernando da Cruz Vasconcelos (UNICAMP/MIT), Albert J Swiston (MIT), Adam S Zeiger (MIT), Krystyn J Van Vliet (MIT), Robert E Cohen (MIT), Marisa Masumi Beppu (UNICAMP) and Michael F Rubner (MIT)

15:15 - 15:30
B547 - Analysis of the asphaltic binder by Atomic Force Microscopy (AFM)
Érico Rodrigues Dorado (Coope-UFRJ) and Renata Aunton Simão (Coope-UFRJ)

15:30 - 15:45
PB26 – Ultra low load indentation studies of creep and time-dependent properties of elastomers and polymers
Philippe Kempre (CSM Instruments) and Ali Nezhad (CSM Instruments)

15:45 - 16:00
PB4 – Mechanical Performance of UV/Ozone-Treated PDMS by AFM and JKR Testing Across the Length Scales
Jing Song (University of Twente), Davide Tranchida (University of Siegen) and Julis G Vancso (University of Twente)

16:00 - 16:15
PB27 – Surface mechanical and time-dependent properties and tribological response of irradiated UHMWPE for medical applications
Laura Alejandro Fasce (INTEMA), Maria Del Grasso (TANDAR), Gerardo García Bermúdez (TANDAR) and Patricia Maria Frantini (INTEMA)

16:15 - 16:30
PB36 – Thermo-mechanical properties of nanobiocomposites of natural rubber and starch
Mayur Chintamani Valodkar (MS University) and Sonal Ishit Thakore (MS University)

Friday, September 25

Session chair: Rodrigo Prioli

09:30 - 10:00
PB6 (invited) – Nanomechanical Properties of Lamellar Materials
Carlos Mauricio Lepienski (UFPR) and Alexandre Mikowski (UFPR)

10:00 - 10:30
PB4 (invited) – Nanoindentation response of NiTi shape memory thin films
Ainissa Ramirez (Yale University)

10:30 - 10:45
PB10 – Measurement of the Elastic Properties and Intrinsic Strength of Monolayer Graphene
Xiaoqing Wei (Columbia University), Changyu Lee (Columbia University), Benjamin Fragneaud (Columbia University), Jeffrey W Kysar (Columbia University) and James Hone (Columbia University)

11:00 - 11:30
Coffee Break

Session chair: Ainissa Ramirez

11:30 - 12:00
PB8 (invited) – Characterization of films, coatings and nanocomposite materials by nanoindentation
Sergio de Souza Camargo Jr. (Unifed do Rio de Janeiro)

12:00 - 12:15
PB30 – Estimation of Mechanical Properties of coatings Ni-B using Nanoindentation
Carlos Dominguez – Rios (CIMAV-Chihuahua), Abel Hurtado-Macias (CIMAV-Chihuahua), Juan Muñoz-Saldáña (CINVESTAV-Querétaro) and Jesús González-Hernández (CIMAV-Chihuahua)

12:15 - 12:30
PB502 – Enhancement of mechanical properties by using a TiCN/TiN/CNn multilayer system
Julio Cesar Coixedo (Universidad del Valle), cesar amaya (Univalle; Cali, Colombia), Maria Elena Gomez (Universidad del Valle), Gustavo Adolfo Zambrano (Universidad del Valle), Josefina Alvarado (Cinvestav México), Juan Muñoz (Cinvesav México) and Pedro Antonio Prieto (Centro de Excelencia en N)

Poster Session B
Mechanical Properties of Materials at the Nanometer Length Scales
Room: Louvre
Wednesday, September 23
11:30 to 13:00

B503 – Stability Loss in Nanotube Reinforced Composites
Vladimir Anatolievich Dekret and Alexander Nikolaevich Guz

B505 – A new acoustic microscope based on evanescent waves
Raul José da Silva Camara Mauricio da Fonseca (Instituto de Fisica, UFRJ), Jacques Attal (MIRA, IES, UM2), Gilles Despaux (MIRA, IES, UM2) and Bernard Cretin (l3 Institut FEMTO ST)

B507 – Solvent Effect on the Morphology of the Bee – Structure Observed by AFM on Bitumen Sample
Bianca de Sousa Pizzorno (UFRJ/ COPPE/ PEMM), Renata Antoun Simão (UFRJ/ COPPE/ PEMM) and Leni Mathias Leite (PETROBRAS/ CENPES)

B509 – Surface displacement of indented thin films: Comparison study of TEM microstructure and triangular dislocation loop model
Shinji Murakami (Tokyo Tech), Naoya Kondo (Tokyo Tech) and Masaaki Takaya (Tokyo Tech)

B512 – Mechanical Properties of Nitrile Rubber (NBR)–Clay mixture obtained by Co-coagulation of the NBR Latex and Clay Aqueous Suspension
Raquel Soares Reis (UFRJ/ IMA e Nitriflex), Elisson Brum (Nitriflex), Diego Holanda Souza (UFRJ - IMA), Ailton de Souza Gomes (UFRJ - IMA) and Regina Célia Reis Nunes (UFRJ - IMA)

B519 – Bragg Surface Diffraction as probe for studying surface/ interface defects in optoelectronic devices grown on GaAs(001) substrates
Raul Oliveira Freitas (University of Guelph), Stefan Valenty Kycia (University of Guelph), Alain André Quivy (Universidade de Sao Paulo) and Sérgio Luiz Morethalo (Universidade de Sao Paulo)

B521 – Study of fracture processes and structural properties of kyanite and kaolinite using instrumented indentation
Fabiana Cristina Nascimento (UFGP), Alexandre Mikovski (UFRJ), Carlos Mauricio Lepienski (UFRJ), Paulo Cesar Soares Junior (PUICPR) and Fernanda Wyzych (UFRJ)

B522 – Digital pulsed force mode (DPFM) used to probe local mechanical properties of graphene layers
Clara Muniz Almeida (Inmetro), Erlon Henrique Martins Ferreira (Inmetro) and Carlos Alberto Achete (Inmetro/ Coppe)

B523 – Mechanical Deformation of Gold Atomic-Size Wires
Maureen J. Lagoa (UNILS), Daniel Ugarte (Unicamp), Douglas Galvão (Unicamp) and Fernando Sato (Unicamp)

B524 – The nature of plastic deformation of zincblend semiconductors resulting from AFM scratches
Rodrigo Prioli Menezes (PUC-Rio), Paula Galvão Coldas (PUC-Rio), Clara Muniz Almeida (Inmetro), Henrique Duarte Fonseca Filho (UNIFAP) and Fernando Agustín Ponce (ASU)

B528 – Comparative analysis of instrumented indentation hardness and viscoelastic behavior of different polymers after gamma radiation
Elaine Cristina Azevedo (UTFPR), Salvador Claro Neto (USP), Gilberto Chterice (USP) and Carlos Mauricio Lepienski (UFRJ)

B529 – Development of a tuning fork based sensor for in-situ force measurements during nanomanipulation inside a high resolution SEM.
Vitor Toshiyuki Akedo Oikawa (IFGW – UNICAMP/LNLS), Bruno Vieira da Cunha Martins (IFGW – UNICAMP), Varlei Rodrigues (IFGW – UNICAMP) and Daniel Mario Ugarte (IFGW – UNICAMP)

B531 – Nanomechanical Surface Characterization using Scanning Tunneling Microscopy with Berkovich Diamond Tip
Oleg Lysenko (ISM), Athanasios Mavromatis (ISM) and Nikolai Novikov (ISM)

B532 – Mechanical and tribological properties of a DLC-coated aluminium–silicon alloy
Marco Polo Ara Stanato Santos (UFRJ/DEMM), Marcia M Maru (INMETRO), Jaitlon C Damasceno (INMETRO) and Sérgio Álvaro de Souza Camargo Júnior (UFRJ/DEMM)

B533 – Mechanical properties of Silicone/carbon nanotubes/carbon felt composite
Elaine Yoshiho Matsubara (University of Sao Paulo), Maria Isabel Felsberti (UNICAMP) and José Mauricio Rosolen (University of S. Paulo)

B537 – Influence of the surface finishing of a stainless steel substrate on the hardness measurement of an oxide film deposited by electrochemical process
José Maria Carneiro Vieira (CETEC), Célia Regina Oliveira Loureiro (CETEC), Margareth Spangler Andrade (CETEC), Rosa Maria Rabelo Junqueira (CETEC) and Ana Paula Andrade Manfridini (CETEC)

B539 – Preparation and properties of nanocomposites based on Nitrile rubber and Acrylic rubber (NBR/ACM) blends
Michiei Lucia Celestino (UFRJ/IMA) and Bluma Guenther Soares (UFRJ/IMA)

B541 – Relaxation of nanodeformations induced in polycarbonate thin films as a function of temperature: a comparative study
Rafael Torres Leal (UFROG), Claudia Telles Souza (PUCRS), Marcos Rodrigo Silva (PUCRS), Ricardo Meurer Papaléo (PUCRS), Zahra Fakraai (Toronto) and James Forrest (Waterloo)

B542 – Effects of nanodiamond adition on the mechanical properties of polycrystalline diamond
Ana Lucia Dieques Skuary (UENF), Geroold Serguevich Bobrovntichii (UENF), Sergio Neves Monteiro (UENF) and Marcia Giardinieri Azevedo (UENF)
**Tuesday, September 22**

**Session chair:** R. Saito

**09:30 - 10:00**

**PC6 (invited) – Mass Production, Applications and Safety Issue of Multi-Walled Carbon Nanotubes**

*Marinobu Endo (Shinshu University), Takuya Hayashi (Shinshu University) and Yoong Ahm Kim (Shinshu University)*

**10:00 - 10:15**

**C539 – Multiwalled Carbon Nanotubes and Nanofibers: Similarities and Differences from Structural, Electronic and Chemical Concepts; Chemical Modification for New Materials Design**

*Sergey V Savilov (MSU), Nikolay B Cherkasov (MSU), Valerija S Razina (MSU), Marina N Kinkova (MSU), Anton S Ivanov (MSU) and Valery V Lunin (MSU)*

**10:15 - 10:30**

**C505 – Nanoindentation Behavior of UV-Curable Epoxy/Multi-Walled Carbon Nanotubes Composites**

*Luiz Antonio Ferreira Coelho (UDESC), Fernando Humel Lafraita (UDESC), Sérgio Henrique Pozzin (UDESC), Carlos Vinícius Opelt (UDESC), Marcos Nuno dos Santos (UDESC) and Carlos Mauricio Lepienski (UFPR)*

**10:30 - 10:45**

**C504 – Influence of humidity on the tribological behaviour of W-alloyed DLC:H coatings**

*Carlos Wagner Silva (REDEMAT), Jose Tavares Branco (CETEC), Tomas Polcar (University of Coimbra) and Albano Cavaleiro (University of Coimbra)*

**10:45 - 11:00**

**C509 – Graphene From Two Chemical Routes: Synthesis and Characterization**

*Sergio Venturinelli Jannuzzi (University of Campinas), Sergey Dubin (University of California), Jonathan Wassei (University of California), Matthew James Allen (University of California), Stanislav A Moshkalev (University of Campinas) and Richard B Kaner (University of California)*

**11:00 - 11:30**

**Coffee Break**
15:00 – 15:15
CS31 – Carbon–nanostructures/cadmium–sulphide Hybrid Heterostructures Formation
Andrea Cortes (USM), ELDRIR SVA-SAND (USM), Vladimir Lavayen (USM), Rodrigo Segura (UV) and Patricio Haverle (USM)

15:15 – 15:30
CS53 – Influence of thermal treatment on porosity formation on carbon fiber
Jossana Saldanha Marcuzzo (ITA), Chuyu Otani (ITA), Heitor Aguilar Poldoro (Multi Vacuo) and satika Otani (Multi Vacuo)

15:30 – 15:45
CS26 – Morphological Control of Aerosol Carbon Nanotubes
Son Hyung Kim (Pusan National University), Whidong Kim (Pusan National University) and Youngkyun Moon (Pusan National University)

15:45 – 16:00
CS40 – Praseodymium–cerium oxide nanoparticles directly grown on CNTs walls: technological application in gas sensing
Carla Veríssimo (CCS-UNICAMP), Aliereza Abbaspourrad (CCS-UNICAMP), Rogério V Gelamo (CCS-UNICAMP), Francisco P Rouxinol (CCS-UNICAMP), Oswaldo Luis Alves (IQ-UNICAMP) and Stanislav A Moshkalev (CCS-UNICAMP)

16:00 – 16:15
CS44 – Defects in Inorganic Hybrid Nanostructures
Vladimir Lavayen (USM), Colm D’Wyer (UJL), Guillermo Gonzalez (Uchile), Carlos Diaz (Uchile) and Oscar Rodrigues (UFSM)

16:15 – 16:30
CS49 – Production of reactive oxygen species assisted by new [60]fullerene photosensitizers
Mauricio Brant Pinheiro (UFMG)

Wednesday, September 23
Session chair: M. A. Pimenta

09:30 – 10:00
PCS (invited) – Exciton Environment-metal effect on Raman spectroscopy of single wall carbon nanotubes
Ricchiori Saito (Tohoku University), Ahmad Ridwan Tresna Nugraha (Tohoku University), Kentaro Sato (The University of Tokyo), Ado Jorio (UFMG), Paulo Araujo (UFMG), Gene Dresselhaus (MIT) and Mildred Dresselhaus (MIT)

10:00 – 10:15
CS58 – Universal response of single-wall carbon nanotubes to radial compression
Ana Paula Moreira Barboza (UFMG), Helio Chacham (UFMG) and Bernardo Ruegger Almeida Neves (UFMG)

10:15 – 10:30
CS59 – Natural Torsion in Small Diameter Carbon Nanotubes
Eduardo Bedê Barros (UFC), Daniel Gomes Vercosa (UFC), Antonio Gomes Souza Filho (UFC), Georgy G Samsonidze (UCl at Berkeley), Ricchiori Saito (Tohoku University) and Mildred S Dresselhaus (MIT)

10:30 – 11:00
PC3 (invited) – Theoretical modeling of carbon nanostructure for energy storage and nanoelectronics applications
Vincent Meunier (ORNL)

11:00 – 11:30
Coffee Break
Session chair: A. Ferrari

11:30 – 12:00
PC1 (invited) – Accessing the electronic and optical properties of metallicity-selected and functionalized single-walled carbon nanotubes
Paola Ayala (University of Vienna)

12:00 – 12:30
PC7 (invited) – High pressure Raman scattering studies on doped double wall carbon nanotubes
Antonio Gomes Souza Filho (Univ Fed Ceara), Eduardo Bedê Barros (Univ Fed Ceara), Acrisio Lins Aguiar (Univ Fed Ceara) and Afonso San Miguel (Univ Lyon 1)

12:30 – 12:45
CS11 – Study of doped carbon nanotubes by Raman spectroscopy
Indhira Oliveira Maciel (UFMG), Neil Anderson (ROCHESTER), Jessica Campos-Delgado (IPICYT), Lukas Novotny (ROCHESTER), Mauricio Terrones (IPICYT), Apparao Rao (CLEMSON) and Ado Jorio (UFMG/INMETRO)

12:45 – 13:00
CS56 – Heme B-like defects in N-doped carbon nanotubes.
James Monroe de Almeida (UFABC), Alexandre Reily Rocha (UFABC), Adalberto Fazzio (UFABC-USP) and Antônio José Roque da Silva (USP)

Thursday, September 24
Session chair: V. Meunier

09:30 – 10:00
PC2 (invited) – Environmental Green Chemistry Applications of Nanoporous Carbons
Juan Matos (IVIC), Andreina Garcia (IVIC), Jean-Marc Chovelon (IRCELYON) and Corinne Ferronato (IRCELYON)

10:00 – 10:15
CS42 – Improvement of DLC antibacterial activity by addition of TiO2 nanoparticles
Fernando Roberto Marciano (INPE/ITA), Deiter Antonio Lima-Oliveira (INPE), Newton Soares Da-Silva (Univap), Evaldo Jose Corat (INPE/ITA) and Vladimir Jesus Trava - Airoldi (INPE)

10:15 – 10:30
CS53 – Hydrocarbons Gas Storage on Activated Carbon
Sonia Ben Yahia (researcher doctorant) and Abdelmo Ttaleb Ouederni

10:30 – 10:45
CS303 – Hydrocarbons Gas Storage on Activated Carbon
Sonia Ben Yahia (researcher doctorant) and Abdelmo Ttaleb Ouederni

10:45 – 11:00
CS15 – Surface and Interface Properties of Carbon-Based Materials for Future Nanotechnologies
Syed Imad-Uddin Ahmed (TU Ilmenau), Roland Joachim Koch (TU Ilmenau), Thomas Haensel (TU Ilmenau), Mikhail Kosinskiy (TU Ilmenau), Stefan Krischok (TU Ilmenau), Jing Kong (MIT) and Jürgen Alois Schaefer (TU Ilmenau, MSU)

11:00 – 11:30
Coffee Break
Session chair: A. Ferrari

11:30 – 12:00
PC1 (invited) – Accessing the electronic and optical properties of metallicity-selected and functionalized single-walled carbon nanotubes
Paola Ayala (University of Vienna)

12:00 – 12:30
PC7 (invited) – High pressure Raman scattering studies on doped double wall carbon nanotubes
Antonio Gomes Souza Filho (Univ Fed Ceara), Eduardo Bedê Barros (Univ Fed Ceara), Acrisio Lins Aguiar (Univ Fed Ceara) and Afonso San Miguel (Univ Lyon 1)

12:30 – 12:45
CS11 – Study of doped carbon nanotubes by Raman spectroscopy
Indhira Oliveira Maciel (UFMG), Neil Anderson (ROCHESTER), Jessica Campos-Delgado (IPICYT), Lukas Novotny (ROCHESTER), Mauricio Terrones (IPICYT), Apparao Rao (CLEMSON) and Ado Jorio (UFMG/INMETRO)

12:45 – 13:00
CS56 – Heme B-like defects in N-doped carbon nanotubes.
James Monroe de Almeida (UFABC), Alexandre Reily Rocha (UFABC), Adalberto Fazzio (UFABC-USP) and Antônio José Roque da Silva (USP)

CS12 – Making and characterizing nanostructures on HOPG
Marcia Maria Lucches (Unipampa/Inmetro), Suzana Bottega Peripoli (Inmetro), Carlos Alberto Achete (Inmetro/Coppe) and Ado Jorio (UFMG)

CS13 – Multi-walled carbon nanotubes functionalized with silver nanoparticles
DUNIESKY ROBERTO GONZALEZ (PUC-Rio), FERNANDO HENRIOU MONTEIRO (PUC-Rio), MARCELO EDUARDO HUGUELIN MAIA DA COSTA (PUC-Rio) and FERNANDO LAZARO FREIRE JUNIOR (PUC-Rio)

CS14 – Raman spectroscopy of carbon nanotube serpentines
Jaqueline dos Santos Soares (UFMG), Ana Paula Moreira Barboza (UFMG), Denise Basso Nakabayashi (UFMG), Bernardo Ruegger Almeida Neves (UFMG), Mari Sório de Carvalho Mazzoni (UFMG), Ernesto Joselewitsch (Weizmann Inst. of Science) and Ado Jorio (UFMG/INMETRO)

CS16 – The effect of different chemical treatment on the structure and dispersion of multi-walled carbon nanotubes
Enyo Guimardes Castro (UFPR), Rodrigo Alves Morais (UFPR), Kassia dos Santos (UFPR), Marcela Mohallem Oliveira (UFPR), Wido Herwig Schreiner (UFPR) and Aldo José Gargotti Zarbin (UFPR)

CS18 – Kohn anomaly near the K point of bilayer graphene
Daniela Lopes Maçã (UFMG), Leandro Moreira Malard (UFMG), Johan Nilsson (Universtité Leiden), Han Hooon (Los Alamos National Labor), Stephen Doorn (Los Alamos National Labor), Antonio Castro Neto (Boston University) and Marcos Assunção Pimenta (UFMG)

CS19 – Making Graphene and Graphene Layers Visible on ITO
Victor Carazo (UFRJ/Inmetro), Erlon Henrique Martins Ferreira (Inmetro), Cristianó Legnani (Inmetro), Cecilia Viliani (Inmetro), Fernando Stavale (UFRJ/Inmetro) and Carlos Alberto Achete (UFRJ/Inmetro)

C520 – Alternative method for the production of Carbon nanoparticles by a Laser–furnace technique
Carolina Macias (FEO-UNICAMP), Carlos Alberto Gordillo (FEO-UNICAMP), Roisin Luiz Ferreira (FEO-UNICAMP), Paula Sbaite (FEO-UNICAMP), André Luiz Jardim (Unicamp) and Rubens
C521 - Single-Walled Carbon Nanotubes By Arch Discharge: Optimization and Computational Simulation
Jose Roberto Vega-Baudrit (Lanotec)

C524 - Purification of Single Walled Carbon Nanotubes based on Fenton's Chemistry
Sírlaine D F Brandão (CDTN/CNEN), Ana Paula de Carvalho Teixeira (CDTN/CNEN), Daniel M Andrade (CDTN/CNEN), Regis F Gontijo (CDTN/CNEN), Cristiano Fantini (CDTN/CNEN), Adelina Pinheiro Santos (CDTN/CNEN) and Clascidia Aparecida Furtado (CDTN/CNEN)

C525 - Gap Opening by Asymmetric Doping in Graphene Bilayers
Marcos G Menezes (UFRJ), Jorge L B Faria (UFMT) and Rodrigo Barbosa Capaz (UFRJ)

C527 - Copper electrodeposition of on boron doped diamond by cyclic voltammetry
Laura Camila Diniz Santos (INPE), Jorge Matsushima (INPE), Andréa Boldarini Couto (INPE), Maurício Ribeiro Baldon (INPE) and Naidenêi Gomes Ferreira (INPE)

C528 - Carbon nanotubes synthesis on FeMo/MgO catalysts monitored by a TPRE system
Ana Paula de Carvalho Teixeira (CDTN/CNEN), Bruno Rocha Santos Lemos (UFMG), Leandro Assis Magalhães (CDTN), Rachel Monteiro Lago (UFMG), Clascidia Aparecida Furtado (CDTN/CNEN) and Adelina Pinheiro Santos (CDTN/CNEN)

C529 - Synthesis of carbon nanotubes by CVD using Fe/MgO and Fe-Mo/MgO system as catalysts
Ana Paula de Carvalho Teixeira (CDTN/CNEN), José Domingos Ardisson (CDTN/CNEN), Clascidia Aparecida Furtado (CDTN/CNEN), Waldemar Augusto de Almeida Macedo (CDTN), Luiz Orlando Ladeira (UFMG) and Adelina Pinheiro Santos (CDTN/CNEN)

C532 - A Phenomenological Model for the D-Band in Disordered Carbon Materials
Marcus Vinícius de Oliveira Moutinho (UFRJ), Ado Jorio (UFMG) and Rodrigo Barbosa Capaz (UFRJ)

C533 - Starch and Carbon Nanotube Nanocomposite Thin Films
ANDERSON MAIA PERES (UFMG)

C534 - Growth and fabrication of devices based on carbon nanotubes and graphene for sensor applications
Ive Silvestre Almeida (UFMG), rcos Henrique Diniz Guimaraes (UFMG), Além-Mar Bernandes Gonçalves (UFMG), Evandara Morais (UFMG), Leonardo Cristino Campos (UFMG) and Rodrigo Gribel Lacerda (UFMG)

C535 - Nitrogen Incorporation to MWCNT Produced by Spray-Pyrolysis
renato barbosa de oliveira (PUC-Rio) and FERNANDO Lázaro FREIRE JÚNIOR (PUC-Rio)

C536 - Control over the wettability of vertically-aligned multi-walled carbon nanotubes films in a large range from hydrophobicity to super-hydrophobicity
Sandra Cristina Ramos (INPE), getulio vasconcelos (IFE), Erica Freire Antunes (ITA/INPE), Anderson Oliveira Lobo (ITA/INPE), Evaldo Jose Corat (INPE/ITA) and Vladimir Jesus Trava-Aroládi (INPE)

C537 - Growth of gold nanostructures inside carbon nanotubes
Rodrigo Segura do Rio (Universidade de Valparaíso), Andrea Cortes (USP), Hilsina de Valparaíso), Andrea Cortes (USP), Rodrigo Segura del Río (Universidad de Valparaiso), Andrea Cortes (USP) and Vladimir Jesus Trava-Aroládi (INPE)

C539 - Influence of experimental conditions on the CNTs nucleation process: multiple nucleation sites on the catalyst particle
Carla Verissimo (CCS-UNICAMP) and Stanislav A Moshkalev (CCS-UNICAMP)

C545 - Surfaces analysis of different carbon films using Wettability, AFM and Raman
Glauer Z. (INPE), Divani Carvalho Barbosa (INPE), Evaldo Jose Corat (INPE/ITA), Adriana Faria Azevedo (INPE), Naidenêi Gomes Ferreira (INPE) and Maurício Ribeiro Baldon (INPE)

C546 - Elastic, electronic and lattice dynamical properties of SiC
Valeimir Ludwig (UFRJ), Zélia Maria da Costa Ludwig (UFJF), Maria José Valenzuela Bell (UFJF) and Virgilio Carvalho dos Anjos (UFJF)

C547 - Synthesis of Glassy Polymeric Carbon Modified with Metallic Ions
TELIANA PENAGUEIREDO (UFMG), SERGIO DE OLIVEIRA (UFMG), RICARDO GERALDO SOUSA (UFMG) and ANDRE SANTAROSA FERLAUTO (UFMG)

C550 - Electronic Structure of Graphene Islands and Ribbons Embedded in Graphene Oxide
Marcos Henrique Diniz Guimaraes (UFMG), Rodrigo Gribel Lacerda (UFMG) and Mario Sérgio de Carvalho Mazzoni (UFMG)

C551 - PREPARATION AND CHARACTERIZATION OF WATERBORNE POLYURETHANE AND MULTI-WALLED CARBON NANOTUBE NANOCOMPOSITES
Luciana Oliveira Melo (UFMG), Claura Goulart Silva (UFMG) and Elísângela Silva Pinto (UFMG)

C552 - Vertically Aligned Carbon Nanotubes on Carbon Fibers for Gas Sensor Applications
Evandro Augusto de Morais (UFMG), Diego Carvalho Barbosa Alves (UFMG), Viviany Geraldo de Morais (UFMG), Rodrigo Gribel Lacerda (UFMG), Andre Santarosa Ferlauto (UFMG) and Luiz Orlando Ladeira (UFMG)

C554 - The effect of different chemical treatment and presence of surfactant on the stability of multi-walled carbon nanotubes aqueous dispersion
Carolina Ferreira de Matos (UFRJ), Aldo José Gorgatti Zarbin (UFPR) and Fernando Galembeck (Unicamp)

C555 - Application of the Keldysh formalism to heat pumping through nanostructures
Leandro Romão Fernandes Lima (IF-UFRJ), Caio Henrique Lewenkopf (IF-UFRJ) and Francisco Fiorina Neto (IF-UFRJ)

C557 - Modification of pyrolised oil shale to increase of phenol adsorption capacity
Janevilede Rosendo da Amaral (UFRJ), Dulce Maria Araujo Melo (UFRJ), Marcos Antônio Freitas Melo (UFRJ), Ary Leonildio de Carmo Assunção (UFRJ), Renata Martins Braga (UFRJ), Rodrigo Cesar Santiago (UFRJ) and Danilo Brasil Ribeiro (UFRJ)

C558 - Synthesis and Characterization of carbon-sepiolite composite obtained by Pechini Method
Leijane Silva Barreto (UFS), Gabriela Borin Zarbin (UFS), Thalita Silva Bispo (UFS) e Carlos Alberto Paskocimas (UFS)

C561 - Synthesis and characterization of fluid magnetic nano-graphite
Nicolau Silva de Souza

C563 - Functionalization of Multi-walled Carbon Nanotubes with alquilamines
Kaya Oliveira Vieira (UFSJ), Poliana Lima da Silva (UFSJ), José Luiz Aarestrup Alves (UFSJ) and Marco Antonio Schiavon (UFSJ)

C564 - MOLECULAR DYNAMICS STUDY OF METHANE AND HYDROGEN NITROGEN IN A C Clash of Doped SINGLE WALL CARBON NANOTUBE
Gilmão Patrocínio Thim, Bruno Cecarelli (ITA), Flaviano Williams Fernandes (ITA), Deborah Brunelli (ITA) and Chooyu Otani (ITA)

C565 - Synthesis and characterization of composite absorbent to removal of phenol in aqueous solutions
André Rangel Ribeiro (UFRN), Elida Natasche de Medeiros Gurgel Pinto (UFRN), Dulce Maria Araujo Melo (UFRN), Marcellus Antonio de Freitas Melo (UFRN), Rodrigo Cesar Santiago (UFRJ), José Antonio Barros Leal Reis Alves (UFRN) and Alexandre Fonse Carvalho (UFRN)

C566 - Bilayer graphene device: Fabrication and characterization of the electronic transport properties
Jorge Leon Farias (UFRJ), Emilio Salomão Alves (UFMG), Flavio Orlando Pentez (UFMG), Daniel Cunha Elias (UFRN), Leandro Moreira Malard (UFMG) and Bernardo Almeida Neves (UFMG)

C604 - Longitudinal Cutting of Pure and Doped Carbon Nanotubes to Form Graphitic Nanoribbons Using Metal Clusters as Nanoscalps
Ana Laura Elias-Ariaga (Rio University/ IPI/CT), Daniel Ramirez Gonzalez (IPICyt), Emilio Munoz-Sandoval (IPICYT), Lijie Ci (Rice University), Pulickel M Ajayan (Rice University), Humberto
C569 – Heat treated graphitic nanoribbons: electron microscopy and Raman spectroscopy characterization
Jessica Campos - Delgado (IPICYT, Mexico), Hootan Farhat (MIT, USA), Y A Kim (Shinshu University), Morinobu Endo (Shinshu University), Humberto Terrones (IPICYT), Mildred S Dresselhaus (MIT) and Mauricio Terrones (IPICYT)

C570 – Spin polarized conductance due to arrays of defects in carbon nanoribbons for electronic applications
Andres Rafael Botello - Mendez (IPICYT), Eduardo Cruz-Silva (ORNL), florentino López Urias (IPICYT), Bobby Sumpter (ORNL), Vincent Meunier (ORNL), Humberto Terrones (IPICYT) and Mauricio Terrones (IPICYT)

C571 – Composite of epoxy and multi-walled carbon nanotubes produced from camphor/ferrocene pyrolysis: dynamic mechanical thermal properties
Erica Freire Antunes (INPE/ITA), Elilton Rodrigues Edwards (Universidade Estadual Pau), Michel Milon (Instituto Nacional de Pes), Edson Cocchieri Botelho (Universidade Estadual Pau), Evaldo Jose Corat (Instituto Nacional de Pes) and Marcos Massi (Universidade Estadual Pau)

C572 – Production of Single-Walled Carbon Nanotubes by the Electrical Arc Method under Low Pressure
Viviany Geraldo de Morais (UFMG), SERGIO DE OLIVEIRA (UFMG), Evandro Augusto de Morais (UFMG), Rodrigo Gribel Lacerda (UFMG), Andre Santarosa Ferlauto (UFMG) and Luiz Orlando Ladeira (UFMG)

SYMPOSIUM D
Synthesis, Characterization and Properties of Inorganic Nanoparticles

Auditorium: Segóvia IV

Symposium Organizers:
Paulo Ferreira (U. of Texas, USA)
Jeff de Hosson (U. of Groningen, Netherlands)
Katsuhiko Sasaki (Nagoya University, Japan)
Dulce Araujo Melo (UFRN, Brazil)
Thursday, September 24

Session chair: To be informed

09:30 - 10:00

PD8 (invited) – Atomic Structure of Inorganic Nanoparticles: Challenges and Opportunities
Jinayue Liu (University of Missouri)

10:00 - 10:30

PD10 (invited) – On the Shapes and Crystal Structure of Metal Nanoparticles: A New Vision Using Cs Corrected TEM-STEM
Miguél Yacaman (University of Texas)

10:30 - 10:45

D525 - Aberration-Corrected Scanning Transmission Electron Microscopy for Site Occupancy in M1 Selective Oxidation Catalyst
Douglas Allen Blom (University of SC), William Pyrz (University of Delaware), Thomas Vogt (University of SC), Douglas Buttry (University of Delaware), Masahiro Sadakane (Hiroshima University), Wataru Ueda (Hokkaido University), Velimir Radmilovic (Central North Carolina University), and Thomas Duden (National Center for E)

10:45 - 11:00

D579 - DSTEM: A Parallel Diffraction technique applied to Nanoparticles
Jai Garees Kameswaran (UT-Austin), Masa Kawasaki (JEL, USA), Jiping Zhou (UT-Austin) and Paulo Ferreira (U of Texas at Austin)

11:00 - 11:30

Coffee Break

Session chair: To be informed

11:30 - 11:45

D523 - Platinum nanoparticles obtained by two-phase method: synthesis, characterization and electro-catalytic properties.
Eryza Guimaraes Castro (UFPR), Rodrigo Villegas Salvaterra (UFPR), Marcela Mohallem Oliveira (UFPR), Wido Herwing Schreiner (UFPR) and Aldo Jose Gorgatti Zarbin (UFPR)

11:45 - 12:00

D557 - Nanodeposit of metallic copper in spinel oxides and its catalytic behavior in steam re-forming of methanol and dimethyl ether
Kajornsak Faungnawakij, Nawin Viriya-empikul, Ryuji Kikuchi and Koichi Eguchi

12:00 - 12:30

PD5 (invited) – Pt/Pd core/shell nanoheterostructures

Velimir Radmilovic (National Center for E), Susan Habas (Molecular Foundry, LA) and Thomas Duden (National Center for E)

12:30 - 13:00

PD9 (invited) – Low Cost, Palladium-based Nanoalloy Catalysts for Fuel Cells
Arunugam Manthiram (Univ of Texas - Austin)

12:30 - 12:45

D570 - TiO2 Nanostructured materials: Synthesis and Characterization of new photocatalyst
Paulo dos Santos Batista (LAFOT-UFRJ), Danielle Fernanda de Melo Oliveira (LAFOT-UFRJ), Valdemir Velani (NANOBRAZ), Hosana Maciel Velani (NANOBRAZ) and Antonio Eduardo da Hora Machado (LAFOT-UFRJ)

12:45 - 13:00

D502 – XDR and UV-Vis-NIR spectroscopy characterization of gamma ray irradiated and non-irradiated quartz nanoparticles to be used in solar cells encapsulation
Jorg Alessandro Silva Carvalho (CE-TEC), Vitor Gouveia (CE-TEC), Belinazir do Espirito Santo (CE-TEC), Fernando Soares Lameiras (CDTN) and Jose Tavares Branco (CE-TEC)

13:00 - 14:30

Lunch

Session chair: To be informed

14:30 - 15:00

PD2 (invited) – In-situ TEM Observation of Nano-particulate Gold Catalysts under Reaction Gas and Non-reaction Gas Environments
Tadahiro KAWASAKI and Takayoshi TANUI

15:00 - 15:30

PD3 (invited) – In-situ TEM observation of electronic-excitation-induced structural changes in III-V compound nanoparticles
Hidehiro Yasuda (Kobe Univ), Masaki Imamura (Kobe Univ), Noriko Nitta (Kobe Univ) and Hiroto Mori (Osaka Univ)

15:30 - 15:45

D550 – Deformations in nanosized metallic glass systems
Jeff T De Hasson (Un Groningen), ChangQiang Chen (Un Groningen) and Yufan Pei (Un Groningen)

15:45 - 16:00

D568 – Size Effects on Melting of Silver Nanoparticles: In-situ TEM Observations
Michael Asoro Adewunmi (U of Texas at Austin), John Damiano (Protochips Inc) and Paulo Ferreira (U of Texas at Austin)

16:00 - 16:15

D615 – Synthesis and characterization of Pb nanoislands at the SiO2/Si interfaces via ion implantation and high temperature annealing
Felipe Kremer (IF - UFRGS), Shay Rebh (IF - UFRGS), Marcel Eduardo Staats (Escola de Eng - UFRGS), Fernando S Silva (Escola de Eng - UFRGS), Terri Engel (Escola de Eng - UFRGS), Paulo Fernando Papaleo Pitchner (IF - UFRGS) and Fernando Claudio Zawislak (IF - UFRGS)

16:15 - 16:30

D566 – New And Straightforward Synthesis Route To Prepare Cds Quantum Dots
Walter Mendes de Azevedo (UFPE), Ana Claudia Vaz de Araujo (UFPE) and Frederico Menezes (UFPE)

16:45 - 17:15

D576 – Atomic Structure of Oxidation-Resistant Copper Nanoskin
Kiyonobu Ida (Nagoya Univ), Kat-suhiro Sasaki (Nagoya Univ), Yasuyuki Sugiyama (Nagoya Univ), Yuki Chuyu (Nagoya Univ), Masanori Tonomomi (Ishahara Sangyo Kaisha), Tomharu Tokunaga (Nagoya Univ) and Kotaro Kuroda (Nagoya Univ)

17:15 - 18:15

Coffee Break

Session chair: To be informed

18:15 - 19:00

Friday, September 25

Session chair: To be informed

09:30 - 10:00

PD1 (invited) – Organic-Inorganic Hybrid Liquid Crystals: Innovation towards “Superhybrid Material” by Utilization of Size- and Shape-Controlled Inorganic Nanoparticles
Kiyoshi Kanie (Tohoku University)

10:00 - 10:30

PD6 (invited) – Morphological Transformations of Gold Nanorods Morphological Transformations of Gold Nanorods
Jose Benito Rodriguez (University of Vigo), Marek Grzegczak (University of Vigo), Maria Fernanda Cardinal (University of Vigo), Enrico Carbo-Arribay (University of Vigo), Jorge Perez-Juste (University of Vigo), Isabel Pastora-Santos (University of Vigo) and Luis Manuel Liz-Marzan (University of Vigo)

10:30 - 10:45

D601 – Synthesis, characterization, and dynamic of formation of gold nanorods face to different amounts of surfactant
Mario Roberto Meneghetti (UFAL), Monique Angelo da Silva (UFAL), Fabio Vieira Junges (UFAL), Simoni Plentz Meneghetti (UFAL), Ruisene Monteiro de Almeida (UFAL) and Marcos Alexandre Gelesky (UFAL)

10:45 - 11:00

D545 – TEM Characterization of Oxidation-Resistant Copper Nanoparticles Covered by Biopolymer Nanoskin
Kiyonobu Ida (Nagoya Univ), Kat-suhiro Sasaki (Nagoya Univ), Yasuyuki Sugiyama (Nagoya Univ), Yuki Chuyu (Nagoya Univ), Masanori Tonomomi (Ishahara Sangyo Kaisha), Tomharu Tokunaga (Nagoya Univ) and Kotaro Kuroda (Nagoya Univ)

11:00 - 11:30

Coffee Break

Session chair: To be informed

11:30 - 11:45

D503 – Synthesis and Characterization of ZnO nanotubes
Noemi Elisabeth Walsoe (CINSO) and Mario Bianchetti (CINSO)

11:45 - 12:00

D509 – Hydrothermal growth of Zirconia Nanostructures
Víctor Manuel Fuenzalida (U de Chile), Claudio Gonzalez (U de Chile), Donavan Enrique Diaz-Droguett (U de Chile) and Rodrigo Espinoza (U de Chile)

12:00 - 12:15

D616 – Doped assemblies of Au nanoparticles: structural and electronic properties
Jonathan da Rocha Martins (UFMG), Ronaldo Junio Campos Batista (UFOP) and Helio Cacharn (UFMG)

12:15 - 12:30

D576 – A Chemometric study of iron oxide nanoparticles synthesis
Ana CLAUDIA ARAUJO (UFPE), Ingrid Tavares Weber (UFPE), Severino Alves
Poster Session D
Synthesis, Characterization and Properties of Inorganic Nanoparticles
Room: Louvre
Thursday, September 24
18:30 to 20:30
D501 - BiFeO3 multiferroic nano oxide: Synthesis and Characterization
JAIRO ALBERTO GÓMEZ (UNIVERSIDAD NACIONAL DE C), JESÚS SIGIFREDO VALENCIA (UNIVERSIDAD NACIONAL DE C) and JUAN BAUTISTA CARDA (UNIVERSIDAD JAUME I)
D502 - XDR and UV-Vis-NIR spectroscopy characterization of gamma ray irradiated and non-irradiated quartz nanoparticles to be used in solar cells encapsulation
Jagor Alessandro Silva Cardalho (CETEC), Vitór Gouveia (CETEC), Belinizao do Espírito Santo (CETEC), Fernando Soares Lameiras (CDTN) and Jose Tavares Franco (CETEC)
D505 - Structural and Electrical Characterization of Nanostructured SrTi1-xFe0.3O3
Luís Fernando da Silva (IFSC/USP), Eduardo Antonegli (IFSC/USP), Maria Inês Basso Bernardi (IFSC/USP), Lauro June Queiróz Maia (UFU) and Valmor Roberto Mastelaro (IFSC/USP)
D506 - Synthesis of Anisotropic Gold Nanoparticles in a Water-soluble Polymer
Mantuwanenkis Chhil (University of Zululand) and Neerish Revarapassu (University of Zululand)
D511 - Synthesis and Characterization of Nanoparticles from the System Ce1-xO2-MxO (M = Cu, Co)
Vinícius Dantas Araújo (IFSC - USP) and Maria Inês Basso Bernardi (IFSC - USP)
D537 - Nanoparticles of Copper Nitrozapides: A New route for obtaining electroactive nanocomposites
Uruja de Oliveira Bicalho (FEISUNESP), Devaney Ribeiro do Carma (FEIS-UNESP), Marcelo Medina de Souza (FEIS-UNESP) and Suelino Gabriel Junior (FEIS-UNESP)

D540 - Analysis of a new sun-screen active ingredient based on ß-FeTCP nanoparticles
Tatiana Santos de Araujo (UFS), Susana Oliveira de Souza (UFS), Edsies Martins Barros Souso (CDTN) and Walter Miyakawa (IEAV)

D542 - Gold nanoparticles obtained in PAH/PAA-based multilayers: Synthesis and Characterization
Nicole Dal Acqua (UCS), Rosiana Boniatti (UCS), Janaina da Silva Crespo (UCS), Marcelo Giovanella (UCS), Sergio Ribeiro Teixeira (UFRRGS), Liane Marcia Ribeiro Teixeira (UFRRGS), Maritza Paez Collio (USACh), Abel Arrieta (USACh) and Leslie Diaz (USACh)

D543 - Synthesis nano powder of SmCo3+α-Fe for nanocomposite magnet
Fanthevang Park (RIST), Jorgil Park (RIST), Jong-val Kim (Hanyang University) and Soon-Ju Kwon (POSTECH)

D544 - NANOCRYSTALLINE ZrO2 POWDERS PREPARED BY SOL-GEL METHOD: THE ROLE OF PYROLYTIC CARBON ON THE PHASE STABILIZATION
José Renato Jurkevitz Delben (UFMS), Sérgio Marcondes (UFMS), Marlene de Barros Coelho (EMBRAPA), Fábio Simões de Vicente (UIC) and Angela Sanches Tardivo Delben (UFMS)

D546 - Hybrid circonia sol-gel films modified with silver nanoparticles and silver complexes: Antimicrobial activity comparison
Esteban Vargas Rojas (USACH), Manuel Ignacio Azocar (USACH), Nicolás Duran (USACH), Marttza Pérez Collio (USACH), Abel Arrieta (USACH) and Leslie Diaz

D547 - Correlation of magnetic properties, morphology and structural parameters in Mn70Zr10Fe3O19 nanoparticles
Johan Emanuel Prado (Univalle), Javier Alonso Lopez (Universidad del Valle), Oscar Marin (UNL), Aminta Mendoza (UNAL), Maria Elena Gomez (Universidad del Valle) and Pedro Prieto (CENM; Cal, Colombia)

D548 - Synthesis and characterization of inorganic nanotubes and fullerene-like nanoparticles
Heider Jose Cerajjuli (UNICAMP), Vitor Baranauskas (UNICAMP) and Alfredo Carlos Peterlevit (UNICAMP)

D551 - Gel-Combustion synthesis to obtain Co3O4 powders for solar selective surfaces
Maria Celeste Gardey Merino (CIOPE-NTU,FRM), Rodrigo Belda (CIOPE-NTU,FRM), Gustavo Enrique Loscolea (LISAMEN, CCT-CONICET), José Miguel Martín Martinez (Atea Lab, Univ of Alicante) and Patricia Vázquez (CINDECA, CCT-CONICET)

D552 - Synthesis and characterization of HfO2:Eu3+ phosphor nanoparticles by polyl process
Maricela Villanueva Ibarzé (UPP), María de los Ángeles Hernández-Pérez (ESIQE IPN) and Marco Antonio Flores González (UPP)

D553 - UV-induced photocatalytic degradation of Rhodamine B by ZnO particles
Georgia Virginia da Fonseca Santos (UFPE), Cauê Ribeiro de Oliveira (Embrapa), Tania Regina Giraldi (Embrapa) and Ingrid Tâvora Weber (UFPE)

D554 - The effect of chemical modifications of 1-D alkali titanate nanomaterials on their stability in acidic aqueous suspension
Paula Montes Jardim (PUC-Rio), Bojan A Marinkovic (PUC-Rio), Juliana Mesquita de Andrade (PUC-Rio), Fernando Rizzo (PUC-Rio), Marco Antonio S. Abreu (Petrobgas SA/CENPES) and Edisson Morgado Jr (Petrobras SA/CENPES)

D558 - Sol-gel Nanostructured Titania: A Phase Transformation Study from beta-TiO2-Anatase-Rutile
Javier Arturo Montes de Oca Vávere (CICATA-IPN Unidad Qro), Antonietta Garcia Murillo (CICATA-IPN Unidad Alt), Luis David Gómez Lerma (CICATA-IPN Unidad Alt), Héctor Javier Dorantes Rosales (ESIQE-IPN, D.F., MEXICO), Nickolas Cayetano (UNAM, D.F., MEX), Rosendo López (UAM-Iztapalapa, D.F., MEX) and Ricardo Gómez (UAM-Iztapalapa, D.F., MEX)

D560 - High density gas aggregation nanoparticle gun applied to the production of SmCo clusters
Gabriel Teixeira Landi (IFUSP), Antonio Domingues dos Santos (IFUSP), Sergio Antonio Romero (IFUSP) and André Hirata (IFUSP)

D561 - MORPHOLOGIC PROPERTIES OF FERRITES NANOPARTICLES APPLIED TO HETEROGENEOUS CATALYSTS
Cesar Carvalho Arruda (UFSCar), Tania Regina Giraldi (Embrapa) and Cauê Ribeiro de Oliveira (Cnpdia-Embrapa)

D562 - A combined XPS and PA study of gold nanoparticles deposition on ceria/zirconia mixed oxides
Hadma Sousa Ferreira (UFBA), Antônio Ferreira da Silva (UFBA), Lui Pepe (UFBA), Alberto Albornoz (IVC, Venezuela) and Maria do Carmo Rangel (UFBA)

D563 - Synthesis, optical and structural characterization of fluororescent water soluble CdSe/CdS quantum dots
Antonio Gomes de Castro Neto (UFPE), Adriana Fontes (UFPE), Beate Saegesser Santos (UFPE), Denise Patricia Lins de Azevedo Tenório (UFPE), Jamil Saade (UFPE) and Patricia Maria Albuquerque de Farias (UFBA)

D564 - Evaluation of the photocatalytic property of flame-sprayed ZnO powder
Rafael Mello Trommer (UFRRGS), Rafael Hubert Silva (UFRRGS), Anelise kopp Alves (UFRRGS) and Carlos Perez Bergmann (UFRRGS)

D567 - Synthesis the Nanotubes Solid-Solution Formation
Silvania Lanfredi (FCT - UNESP), Samara Araújo Dantas (FCT - UNESP), Silvania Lanfredi (FCT - UNESP), José Fernando Castro Lanfredi (UFABC), José Fernando Queiruga Rey (UFABC) and Renato Figueiredo Jardim (UFABC)

D568 - Structural Characterization of Sr2NaNbO6 Nanopowder Powders
Silvania Lanfredi (FCT - UNESP), Samara Araújo Dantas (FCT - UNESP), Caroline Polini (FCT - UNESP), Alan Rodrigues Queiruga (UFABC) and Marcos Augusto Lima Nobre (FCT - UNESP)

D578 - Preparation of La-Ca-Mn polymeric resins to produce nanostructured perovskite oxides
Marcia Tsuyama Escote (UFABC), Jacqueline Fernandes Pacheco (UFABC), Helmut Vigo Cotrina (UFABC), Alessandra Zenatti (UFABC), Alexandre Castro Lanfredi (UFABC), José Fernando Queiruga (UFABC) and Renato Figueiredo Jardim (UFABC)

D574 - Production and Characterization of Small Metallic Clusters
Giulia Di Domenicoantoni (IFGW - UNICAMP), Artur Domingues and Varlei Rodrigues (IFGW - UNICAMP)

D575 - Controlled Growth and Positioning of Metal Nanoparticles via Scanning Probe Microscopy
Elsángela Silva Pinto (UFGM), Bernardo Ruegger Almeida Neves (UFGM), Ana Paula Gomes (UFGM), Marcos Assunção Pimenta (UFGM), Carlos Basilio Pinheiro (UFGM) and Luiz Orlando Ladeira (UFGM)

D577 - Coalescence and Sintering of Platinum Nanoparticles: In-situ Observation by Aberration-Corrected HAADF STEM
Michael Asoro Adewunmi (U of Texas at Austin), Desiderio Kovar (U of Texas at Austin), Yang Shao-Horn (MIT, Cambridge MA), Larry Allan (Oak Ridge National Lab) and Pedro Ferreira (U of Texas at Austin)

D578 - Silica capped CdS/Cd(Oh) Quantum dots for biological applications
Claudilene Ribeiro Chaves (UFPE), Diogo Burigo Almeira (UNICAMP), Adriana Fontes (UFPE), Carlos Lenz Cesar (UNICAMP), Beate Saegesser Santos (UFPE) and Patricia Albuquerque Farias (UFPE)

D580 - Structural Characterization of Sr2NaNbO6 Nanopowder Powders
Silvania Lanfredi (FCT - UNESP), Samara Araújo Dantas (FCT - UNESP), Caroline Polini (FCT - UNESP), Alan Rodrigues Queiruga (UFABC) and Marcos Augusto Lima Nobre (FCT - UNESP)

D583 - Transesterification of Castor Oil: Synthesis and Characterization of Polyols
Silvania Lanfredi (FCT - UNESP), Elisa Reis Santos (FCT - UNESP), Silvania Lanfredi (FCT - UNESP), José Fernando Queiruga Rey (UFABC) and Renato Figueiredo Jardim (UFABC)

D582 - Transesterification of vegetable oils catalyzed by oxide nanoparticles
Giovanni Pimenta Mambrini (CNP-DIA-Embrapa), Gabriela Santilli do Nascimento (DO-UFSCar), Guilherme Calmon Mantovani Monteiro (UFSCar), Cauê Ribeiro de Oliveira (Cnpdia-Embrapa) and Luiz Alberto Colnago (Cnpdia-Embrapa)
D584 - Syntheses of nano-ZnO powders by different routes of Pechini method
Renata Martins Braga (UFRN), Dulce Maria Araujo Melo (UFRN), Marcus Antonio de Freitas Melo (UFRN), Flavia de Medeiros Aquino (UFRN), Filipe Silva Oliveira (UFRN), Rodrigo Cesar Santiago (UFRN) and Gislane Pinto Oliveira (UFRN)

D585 – Synthesis and characterization of MeFe2O4 (Me=Ni,Co) nanoparticles obtained by a gelatin-based sol-gel method
Igor Frata Vasconcelos (UFU), Nizomar Souza Gonçalves (UFU), Manoel Ribeiro da Silva (UNIFEI) and José Marcos Sasaki (UFC)

D586 – Ce ion-exchanged titanate nanotubes decorated with ceria nanoparticles
Bartolomeu Cruz Viana (UnB), Odair Pastor Ferreira (Unicamp), Antonio Gomes Souza Filho (Univ Fed Ceará), Carolina Martins Rodrigues (Unicamp), Josué Mendes Filho (Univ Fed Ceará) and Oswaldo Luis Alves (Unicamp)

D587 – Hydrolysis of copper (II) ions inside natural chrysotile nanotubes
Adriana Linhares Drummond (UnB), Ana Carolina Campos Santana (UnB), Maria José Araujo Sales (UnB), Marcelo Henrique Sousa (UnB) and Geraldo José da Silva (UnB)

D588 – Influence of surfactants on the stability and physicochemical properties of nanofluids
Eveline De Robertis (INMETRO), Isabêl Bulhões Aranha (INMETRO), Andrea Porto Campos (INMETRO), Sandra Marcela Landi (INMETRO), Alexei Yu Kuznetsov (INMETRO), Rogerio Machado (INMETRO) and Carlos Alberto Achaté (INMETRO)

D592 – Synthesis and characterization of TiO2 nanotubes from electrochemical oxidation of titanium substrate
Ana Maria Racco (EQUFRJ) and Jorge Trota Filho (EQUFRJ)

D593 – Synthesis of LnNiO3 (Ln = La and Pr) System for Catalytic Applications
Filipe Silva Oliveira (UFRN), Flavia de Medeiros Aquino (UFRN), Patricia Mendonça Pimentel (UFRN), Renato Martins Braga (UFRN), Romero Gomes da Silva Araujo Filho (UFRN) and Dulce Maria Araujo Melo (UFRN)

D594 – Hydrothermal synthesis of 1-D layered titanate (A2TinO2n+1-) like nanomaterials from natural ilmenite sand
Paula Mendes Jorãim (PUC-Rio), Bojan A Marinkovic (PUC-Rio), Lidija Mancic (Institute of Technical Sc), Olívera Milosevic (Institute of Technical Sc) and Fernando Rizzo (PUC-Rio)

D596 – Nanostructured Ni/SiO2 Catalyst and its Activity for Non-Oxidative Methane Activation
Silvia Fernanda Moya (PEQ/COPE), Université, Ruth Leibsohn Martins (PEQ/COPE, Université) and Martin Schmal (PEQ/COPE, Université)

D598 – A Study of the Radio-luminescent Properties of ZnO Nanopowder Synthesized by Proteic Sol-Gel Process
Nelson dos Santos Ferreira (UFS), Daniel Augusto de Andrade Santos (UFS) and Marcelo Andrade Macedo (UFS)

D600 – Characterization of nanocrystalline TiO2 powders for heterogenous photocatalytic degradation: surface charge and high surface area
Klaus Wilhelm Krambrack (UFMG), E Morgado Jr (PETROBRAS), M A S de Areu (PETROBRAS), J B Viohl (UFRJ), Cristiano M S da Costa (UFRJ), Ariete Righi (UFRJ) and Mauricio Veloso Brant Finheiro (UFRJ)

D602 – Heating rate effect on the Synthesis of alumina nanoparticles
Letícia de Oliveira Campos (UFRN), Dulce Maria Araujo Melo (UFRN), Patrícia Mendonça Pimentel (UFRN), Marcus Antonio de Freitas Melo (UFRN) and Antonio Eduardo Martinelli (UFRN)

D603 – Fabrication of Ceria Nanowires by Inorganic hydrothermal growth
Muhammad Anis – ur – Rehman (COMSATS I I T, Pakistan) and Ali Abdullah (COMSATS I I T, Pakistan)

D605 – The template-guided synthesis of silica and organosilicate nanotubes obtained by the sol-gel process
Sabrina Gomes Faria (UFSJ), Juliana Souza Silva (UFSJ), Ana Lucía Exner Godoy (IPEN), Patricia Benedine Martelli (UFSJ) and Marco Antonio Schiavin (UFSJ)

D608 – Preparation of stable dispersions of Co and Pd nanoparticles using an imidazolium ionic liquid
Dagoberto de Oliveira Silva (UFRGS), Cristina de Garcia Venturini (UFRGS), Adriana Raffin Pohlmann (UFRGS) and Jairton Dupont (UFRGS)

D610 – Small angle X-ray study of nanostructured samaria-doped ceria
Eduardo Caetano Souza (IPEN), José Fernando Queiruga Rey (UFABC) and Eliana Novarro dos Santos Muccillo (IPEN)

D611 – Synthesis and characterization of phosphate and carbonate nanoparticles doped with manganese for applications as active centers in sunscreens
Tatiana Santos de Araújo (UFS), Susana Oliveira de Souza (UFS), Edesia Martins Barros Sousa (CDTN) and Walter Miyakawa (IEAV)

D612 – Tin citrate particles as precursors for nanoparticles of SnO2: the study of Tin Citrate particles growing
Hamilton Magalhães Viana (FAEN/CIFASA), Douglas Gouveia (POLI-USP), Daliana Gomes Burges (POLI-USP), Rafael Takabatake Gomes (FAEN/CIFASA) and Carola Castilho Loschiavo

D614 – Dielectric Loss Analysis of Nanoparticles of Zinc-Nickel Ferrite in a Polar Nanofluid
Marcos Augusto Lima Nobre (FCT - UNESP), Felipe Silva Bellucci (FCT - UNESP), Aldo Eloizo Job (FCT - UNESP) and Leandra Oliveira Salzano (FCT - UNESP)

D618 – Al2O3-based pigments synthesized by the proteic sol-gel method
Ronaldo Santos da Silva (DFI-UFS), Michely Santos Araújo (DFI-UFS) and Zélia Soares Macedo (DFI-UFS)

D625 – Synthesis and Characterization of oxides of nickel and zinc obtained by sol-gel
Taynara Lima Valentin (UFPA), RENAN MENEZES QUEIROZ (UFPA), MELINA DANIELE PINHEIRO (UFPA), José Roberto Zamian (UFPA), Geraldo Narciso Rocha Filho (UFPA) and Carlos Ememson Ferreira da Costa (UFPA)

D626 – Preparation and Characterization of SnO2–Fe3O4 photo-conductive film by Spray Pyrolysis
Victor Ciro Solano Reynosa (UNESP-Ilha Solteira), Anderson José Silva Maurity (UNESP-Ilha Solteira), Fabrícia Roberto Lunas (UNESP-Ilha Solteira) and Cláudio Luís Carvalho (UNESP-Ilha Solteira)

D630 – Effects of YDZ:SDC ratio on ionic conductivity of a solid electrolyte
Mersha Elizabeth Campos (USB), Aurora Molina (USB), Angel Castro (USB), Jackelin Quiñones (UCV), Jesus Rodriguez (USR) and Adalberto Rosales (USB)

D633 – characterization of nanoporous alumina films and photocatalytic properties
Míriam Estrada (IPN – ESIOIE), Carmen Reza (IPN – ESIOIE) and Lucía Díaz Barriga (IPN)

D634 – Photo-reactive surfactant mediated synthesis of nanoparticles
André Gajembek (UFPE) and Rodrigo José de Oliveira (CETENE)

D635 – Raman Spectroscopy Properties of Layer by Layer Trithium-Benzimidazolium Clusters and Gold
Jairman Julival dos Santos (IQ-USP), Sergio Hiroshi Toma (IQ-USP), Henrique Eisi Toma (IQ-USP) and Koiti Araki (IQ-USP)

D637 – Synthesis and Characterization of Erbium Nano Particle (Universidad del Cauca), Ducinei Garcia (UFSCar) and Ruth H G A Kiminami (UFSCar)
doped High k Dielectric Thin film for Novel device Applications
vikram singh (CEERI, Pilani), Satinder Kumar (IIT, Kanpur), Dinesh Kumar (Kurukshetra University) and Rajender Kumar Nahar (CEERI, Pilani)

D639 – Synthesis and Characterization of ZnO/CTAB Nanoflowers
Juliana de Jesus Rocha Pardauil (UFPA), Luiz Kleber Carvalho de Souza (UFPA), José Roberto Zamian (UFPA), Geraldo Narciso da Rocha Filho (UFPA) and Carlos Emmerson Ferreira da Costa (UFPA)

D641 – Association of organic–inorganic filters and its potential as a hybrid sunscreen
Sheila Pasqualotto (UNESP, Araraquara), Marian Rosaly Davolos (UNESP, Araraquara, Brazil), Marco Aurélio Cebim (UNESP, Araraquara, Brazil) and Juliana Flor (natura)

D642 – A new hybrid organic–inorganic sunscreen filter with Uvinul A Plus and ZnO nanoparticles
Mariana Bizari (UNESP), Sheila Pasqualotto (UNESP), Marco Aurélio Cebim (UNESP) and Marian Rosaly Davolos (UNESP)

D643 – Study of the Thermal Properties Solution-Dissolved TiO₂ Nanoparticles
Gregório Mendoza Alvarez (UPITA-IPN), Jose Francisco Sanchez-Ramirez (CICATA-IPN), Alfredo Cruz-Orea (Cinvestav-IPN), Jose Angel Pescador-Rojas (CICATA-IPN), Carlos Jacinto da Silva (Univ Federal de Alagoas), Gregorio Mendoza Alvarez (Cinvestav-IPN) and Feliciano Sanchez-Sinencio (CLAF/Cinvestav-IPN)

D644 –Focused Ion Beam Templating and Doping of Si/Ge Quantum Dot Nanostructures
Jeremy Franklin Graham (University of Virginia), Copeland David Kell (University of Virginia), Jerry A Flora (University of Virginia) and Robert Hull (Rensselaer Polytech Inst)

D645 – An X-ray diffraction study of the growth kinetics and structure of nanocrystalline ZnO particles synthesized by a newly modified proteic sol–gel process
Nilson dos Santos Ferreira (UFS), Daniel Augusto de Andrade Santos (UFS), Jose Airon Paiva (UFS) and Marcelo Andrade Macedo (UFS)

D646 – Study of structural, optical properties and the Eu³⁺ site distribution in Eu³⁺-doped BaWO₄ nanoparticles prepared by a wet chemical route
João Henrique Saska Romero (UNESP, Araraquara), Gisele Fidelis Altoé (UNESP, Araraquara), Higor Henrique de Souza Oliveira (UNESP, Araraquara, Brazil), Marco Aurélio Cebim (UNESP) and Marian Rosaly Davolos (UNESP, Araraquara, Brazil)

D647 – Characterization and Modeling of Silica Nanoparticles Transport Flow for Enhanced Oil Recovery
Cigdem Medim (Univ Texas at Austin-USA), Caetano Rodrigues Miranda (UFABC – Brazil) and Quoc P Nguyen (Univ Texas at Austin-USA)

D648 – Free-standing, highly aligned and transparent sheets of Silicon Oxide and Silicon Nitrite Nanotubes
Marcio Dias Lima (NanoTech Institute), Xavier Lepro (NanoTech Institute) and Ray H Baughman (NanoTech Institute)

D649 – Rapid synthesis and characterization of CeMCM-41
Luiz Kleber Carvalho de Souza (UFPA), Juliana de Jesus Rocha Pardauil (UFPA), José Roberto Zamian (UFPA), Geraldo Narciso da Rocha Filho (UFPA) and Carlos Emmerson Ferreira da Costa (UFPA)

SYMPOSIUM E
Magnetic Materials at the Nanoscale

Auditorium: Segóvia III

Simposium Organizers:

Maria-Elena Gómez (CENM, Colombia)
Axel Hoffmann (Argonne National Laboratory, USA)
Elisa Saitovitch (CBPF, Brazil)
Jose Luis Vicent (U. Complutense, Spain)
Yvan Bruynseraede (K. U. Leuven, Belgium)

Nanoscience and nanotechnology
Wednesday, September 23

Session chair: Seikanth

09:30 - 10:00
PE13 (invited) - Quantum control of spin qubits in silicon
  Belita Koiller

10:00 - 10:30
PE9 (invited) - Get perpendicular: the spin microstructure in Fe-FePt bilayers
  Kristiaan Temst (KULeuven), Bart Laenens (KULeuven), Nikie Planckaert (KULeuven), Joost Demeter (KULeuven), Cornelius Stromer (ESRF), Rudolf Rueffer (ESRF) and Andre Vantomme (KULeuven)

10:30 - 11:00
PE5 (invited) - Electric and magnetic properties of multiferroic BiFeO₃, YMnO₃, and BiMnO₃ thin films
  Pedro Prieto (CENM, Cali, Colombia)

11:00 - 11:30
Coffee Break

Session chair: Temst

11:30 - 12:00
PE7 (invited) - Medical and environmental applications of magnetic nanomaterials
  Paulo Cesar Morais (UnB)

12:00 - 12:30
PE15 (invited) - Magnetic particles as labeling material for advanced biological applications
  Liesbet Logae (IMEC), T Stakenborg (IMEC), J Trekker (IMEC), Jian Ye (IMEC), S Peeters (IMEC), C Liu (IMEC) and F Cole (IMEC)

12:30 - 12:45
E530 - Biomimetic inertial sensor based on nanowires and magnetoresistance
  Hubert Brückl (AIT), Philipp Schroeder (AIT), Thomas Burchhart (VUT) and Alois Lugscheider (VUT)

12:45 - 13:00
E581 - Control of Magnetic Properties in Metallo-Organic Thin Films
  Vincent G Harris (Northeastern University)

Thursday, September 24

Session chair: Fischer

09:30 - 10:00
PE6 (invited) - Vortex Dynamics in Confined Magnetic Nanodots
  Song - Koo Kim (Seoul National University)

10:00 - 10:30
PE12 (invited) - Spin Torque Oscillators
  Johan Akerman (University of Gothenburg)

10:30 - 10:45
E604 - Vortex-Antivortex Assisted Vortex Core Reversal in Magnetic Nano Dots
  Bartel Van Waeyenberge (Ghent University/MPI), Arne Vansteenkiste (Ghent University), Markus Weigand (Max Planck Institute), Michael Cucic (Max Planck Institute), Kiang Wei Chou (Advanced Light Source), Georg Wolsendorf (Regensburg University) and Hermann Stoll (Max Planck Institute)

10:45 - 11:00
E556 - Zero field microwave emission in spin torque oscillators
  Mauricio Manfrini, Sven Cornelsen, Thibaut Devolder, Joo-Von Kim, Claude Chappert, Wim Van Roy and Liesbet Logae

11:00 - 11:30
Coffee Break

Session chair: Prieto

11:30 - 12:00
PE14 (invited) - Novel magnetic materials for energy efficient technologies
  Julia Lyubina (IFW Dresden) and Oliver Gutfleisch (IFW Dresden)

12:00 - 12:30
E511 (invited) - Design and processing of nanoparticle ferrites for ultrahigh frequency applications
  Vincent G Harris (Northeastern University)

12:30 - 12:45
E619 - First-order-reversal-curve investigation of Pr-Fe-B-based exchange spring magnets
  Frank Patrick Missell (UCS), Daniel Reinaldo Cornejo (IFUSP), Thiago R F Peixoto (IFUSP), Paulo Fernanda Papaleo Fitchner (UFGRS), Shy Reboh (UFGRS), Valquiria Villos-Boas (UCS) and Vinicius C de Franco (UCS)

12:45 - 13:00
E591 - Microstructure and high-frequency soft magnetic properties of nanocrystalline (Feₓ₆₀Coₓ₆₀)ₓ₃CuₓNbₓS₁₃₆₈ alloys
  Yuxin Wang (Tongji University), yang li (Tongji University), biao yan (Tongji University) and wei lu (Tongji University)

13:00 - 14:30
Lunch

Session chair: Macedo - Sort

14:30 - 14:45
E559 - Generation of Angular Momentum and Dynamical Coupling in Ferromagnetic Nanolayers
  Ali R Kovmaz (UTA), Sezeh Demirtas (UTD) and Myron B Salamon (UTD)

14:30 - 14:45
E602 - Differences between in-plane and out-of-plane magnetoresistance: a texture or finite-size effect?
  Maria Luisa Sartorelli (UFSC), Edna Regina Spada (UFSC), Alexandre Silvestre da Rocha (UFSC), Luzeli Moreira da Silva (Unicamp), Flavio César Guimarães Gandra (Unicamp), Alberto Passos Guimarães (CBPF) and João Paulo Sinnecker (CBPF)

14:45 - 15:00
E539 - First-order-reversal-curve investigations of Pr-Fe-B-based exchange spring magnets
  Frank Patrick Missell (UCS), Daniel Reinaldo Cornejo (IFUSP), Thiago R F Peixoto (IFUSP), Paulo Fernanda Papaleo Fitchner (UFGRS), Shy Reboh (UFGRS), Valquiria Villos-Boas (UCS) and Vinicius C de Franco (UCS)

15:00 - 15:15
E527 - Bulk and Interface Effects in Exchange Bias Systems
  Luis Eugenio Fernandez – Outon (CDTN), Gonzalo Vallejo-Fernandez (University of York) and Kevin O'Grady (The University of York)

15:15 - 15:30
E551 - Magnetization Reversal in Template-Grown [Nife/Cu] x n Multilayered Nanowires
  Horia Chiriac (NIRDTP), Oana-Georgeana Dragos (NIRDTP), Marian Grigoras (NIRDTP), Gabriel Ababei (NIRDTP), Spyros Krimpalias (NIRDTP et UAMC) and Nicoleta Luta (NIRDTP)

15:15 - 15:30
E508 - MAGNETISM OF DISORDERED NANOMATERIALS
  Mohammad Ghafari (FZK, Germany), Ajay Mishra (FZK, Germany), Richard Brand (FZK, Germany) and Horst Hahn (FZK, Germany)

15:30 - 15:45
E560 - Dynamics of superconducting vortices in Nb/Co superlattices
  Julio Guimbel (Centro Atomico Bariloche), Gustavo Grinblat (Instituto Balseiro), Néstor Ghienzi (Instituto Balseiro) and Carlos Monton (Centro Atomico Bariloche)

15:30 - 15:45
E577 - Magnetic nanocomposite films of CoFe₂O₄ nanoparticles and conducting polymers
  Gustavo Broa Alcântara (UnB), Leonardo Giordano Paterno (UnB), Fernando Joseperti Fonseca (EPUSP), Emília Celma de Oliveira Lima (UFG), Sônia Nair Bao (UnB), Paulo CesarMorais (UnB) and Maria Aparecida Godoy Soler (UnB)

15:30 - 15:45
E589 - Vortex velocity and vortex lattice configuration in nanostructured magnetic/superconducting hybrids.
  David Perez de Lara (Universidad Complutense), Elvira Marie Gonzalez (Universidad Complutense), Alejandro Alaja (Universidad Oviedo), Jose Ignacio Martin (Universidad Oviedo), Maria Velez (Universidad Oviedo) and Jose Luis Vicent (Universidad Complutense)

15:45 - 16:00
E595 - Spontaneous vortex glass transition in Pb/Co nanocomposites
  Luis Eugenio Fernandez – Outon (CDTN), Gonzalo Vallejo-Fernandez (University of York) and Kevin O’Grady (The University of York)
Friday, September 25

Session chair: Schuller

10:30 - 10:45
E536 - Study of spin valve structures with weak and strong interlayer coupling
    William Alonso Rodriguez (CBPF), Yutao Xing (CBPF) and Elisa Maria Baggio Saitovitch (CBPF)
10:45 - 11:00
E567 - RESIDUAL GAS AND SELF-BIAS VOLTAGE EFFECT IN MgO TUNNEL BARRIERS IN BOTTOM SPIN VALVE SYSTEMS
    Ramis Mustafa Oksuzoglu (Department of Material Sc), Mustafa Yildirim (Department of Material Sc) and
    Hakan Cinar (Department of Material Sc)
11:00 - 11:30
Coffee Break

PE4 (invited) - Polarized neutrons for the analysis of magnetic thin films and superlattices
    Hartmut Zabel (Ruhr-University Bochum), Katharina Theis-Broehl (U Appl Sci Brammerhaven), Kirill Zhernekov
    (Ruhr-University Bochum) and Boris P Toperverg (Ruhr-University Bochum)
10:00 - 10:30
PE16 (invited) - Pinning Effects by Arrays of Magnetic Dots on Superconductors
    Javier V Villalobos (Universite de Paris Sud), Elvira Gonzalez (Universidad Complutense), Jose Luis Vicent
    (Universidad Complutense), Amos Sharoni (UCSD), D. Perez de Lara (Universidad Complutense), Ivan Kohn Schuller
    (UCSD) and Yaniv J Rosen (UCSD)
13:00 - 14:30
Lunch
E521 - Magnetic ordering in the anion-deficient La_{0.70}Sr_{0.30}Mn_{0.00-\gamma} manganites. Sergei Valentinovich Trukhanov (Scientific-Practical Mate), Alexey Valentinovich Trukhanov (Scientific-Practical Mate) and Anatoly Ivanovich Beskovnyi (Joint Institute for Nuclear Research).

E522 - Phase transition of the Spin- 1/2 Ising Ferromagnetic Thin Films. Sergio Machado Rezende (UFPE) and Eduardo Padrón Hernández (CETENE), Laudemir Carlos Varanda (IQSC-USP) and Miguel Jafelicci Jr (IQAr-UNESP).

E524 - Nature and enhancement of the magnetic surface contribution in model NiO nanoparticles. Surender Kumar Sharma (unicamp, brazil), J M Vargas (unicamp,brazil), E de Biasi (CAB, Argentina), M Knobel (unicamp, brazil), C T Meneses (ufsc,Itaibaio/SE), Pascoal G Pagliusol (unicamp,brazil) and Carlos Rettori (unicamp,brazil).

E526 - Magnetic properties of single nanowires and nanodisks. Luiz sampiao (CBPF), Tiago Machado (CBPF), Alberto Passos Guimarães (CBPF), Tatiana Rappoport (UFRJ) and Renato Silva (CBPF).

E528 - Magnetic domain cross-over in FePt thin films. Edwin Salica Leva (Centro Atómico Bariloche), Sergio Rosdhestvensky (UTN-Resistencia), Renato Valente (Centro Atómico Bariloche), Marcelo Vásquez Mansilla (Centro Atómico Bariloche) and Alejandro Butera (Centro Atómico Bariloche).

E532 - Site specific magnetic frustration in oxygen vacancy ordered La_{1-x}Sr_{x}Mn_{2}O_{5} manganites. A neutron powder diffraction study. Leopoldo Suescun (Univ of Uruguay), Stanislav Kolesnik (NIU) and Bogdan Dobrowski (NIU-Angonne Natl Lab).

E534 - Perpendicularly oriented self-assembled L10-FePt nanorods directly synthesized. Leopoldo Suescun (Univ of Uruguay), Stanislav Kolesnik (NIU) and Bogdan Dobrowski (NIU-Angonne Natl Lab).

E535 - Magnetic anisotropy in hexagonal nanowire arrays. Eduardo Patrón Hernández (CETENE), Sergio Machado Rezende (UFPE) and Antonio Azevedo (UFPE).

E537 - Synthesis and quantitative metal content by complexometric analysis and X ray diffraction in (Ni, Cu, Co)_{1-x}Mn_{x}O_{y} nanosize samples. Rafaél Aparecido Ferreira (PosMat Unesp-Bauru), Cássio Morilla Santos (Posmat Unesp-Bauru) and Paulo Noronha Lisboa Filho (DF-FC-Unesp-Bauru).

E538 - Controlling the properties of magnetic vortices in nanostuctures. Flávio Garcia (LNLS), Érico Raimundo Pereira Novaes (CBPF), Jeroen Schoemaker (UFABC), Antonio Domingues dos Santos (IFUW), Edson José de Carvalho (LNLS), Antônio Carlos Seabra (Poli-USP) and Alberto Passos Guimarães (CBPF).

E541 - Hysteresis loops shifts in magnetite nanoparticles. Johan Mazo - Zuñiga (U de Antioquia, COl), Johans Restlepo (U de Antioquia, COl), José Mejía-López (Pontificia U Católica,CHI) and Francisco Muñoz (Pontificia U Católica,CHI).

E542 - Two-magnon damping in thin films in the case of cant magnetization: Theory versus Experiment. Jürgen Lindner (U Duisburg-Essen), Dr. J'nr. Chaudhuri (U of New Mexico), C. T. Meneses (UFSM) and Douglas L Mills (UC Irvine).

E543 - Magnetic properties of ordered arrays of pseudo-one-dimensional nanostructures with modulated diameters. Juan Escrig (Universidad de Santiago), Cristópher Morales (Universidad de Santiago), Kristina Pitzschel (University of Hamburg), Ole Albrecht (University of Hamburg), Julien Bachmann (University of Hamburg) and Kornelius Nielsch (University of Hamburg).

E544 - Asymmetrical magnetic dots: A way to control chirality and coercivity. Dora Altúr (Universidade de Santiago), Nicolás Vargas (Universidad de Santiago), Boris Leighton (Universidad de Santiago), Sebastián Allende (Universidad de Chile), Juan Escrig (Universidade de Santiago), José Mejía-Lópeze (P Universidad Católica) and Ivan K Schuller (University of California).

E545 - Barkhausen noise in thin magnetic films. Félix Bohn (CBPF), Marcio Assölin Corrêa (EDES-UFFRJ) and Rubem Luis Sommer (CBPF).

E547 - Influence of Pb-doping on critical parameters in La_{1-x}Pb_{x}MnO_{3} perovskites. Long The Phan (Chungbuk National University), Kwang Kwyun You (Chungbuk National University), Jiang Bing Zhi (Chungbuk National University), Suik Kun Oh (Chungbuk National University) and Seong Cho Yu (Chungbuk National University).

E549 - Diameter influence on local and global in-plane magnetization of FePt antidot array. Fanny Béron (UNICAMP), Kleber Roberto Pirata (UNICAMP), Viktor Vega (UNIOVI), Agustín Antonio Fernández (UNIOVI), Víctor Manuel Prida (UNIOVI), Blanca Hernando (UNIOVI) and Marcelo Knobel (UNICAMP).

E550 - Collective magnetic behaviors in Fe_{x}Ag_{100-x} granular thin films (20 < x < 50). Javier Alonso (Universidad de País Vasco), María Luisa Fernández-Gubieda (Universidad de País Vasco), José Manuel Barandiarán (Universidad de País Vasco), Luis Fernández Barquín (Universidad de Cantabria), Imanol de Pedro (Universidad de Cantabria), Orihaki Orue (Universidad de País Vasco) and Andréy Svalov (Universidad de País Vasco).

E552 - The Characterization of Interaction Effects in Nd-Fe-B-based Nanocomposite Hard Magnets Prepared by Spark Plasma Sintering. Nicoleta Lupu (NIRDTP), Marian Grigorescu (NIRDTP), Mihaela Lostun (NIRDTP), Marius Leoreanu (NIRDTP), Cristopher Morales (Universidad de Santiago) and Juan Escrig (Universidad de Santiago).


E557 - MAGNETIC AND ELECTRIC PROPERTIES OF MAGHEMITE/PANI COMPOSITES STUDIED USING PROBABILITY DENSITY FUNCTIONS. Fernando Gomes de Souza Junior (IMA / UFRJ), Séssica Alves Marins (IMA / UFRJ) and José Carlos Pinto (COPPE / UFRJ).

E564 - Using Speciation Diagrams to Improve the Design of Magnetic Nanosorbents for Environmental Applications. Alej Fabiano Cortez Campos (IFP - UnB), Luiz Eduardo Celino Benedito (UFRN) and Jerome Depeyer (IF - UnB).

E565 - Structure and magnetic analysis of chemically synthesized Bi_{1-x}MnO_{3} nanoparticles. Luiz Augusto Sousa de Oliveira (IFUFRRJ), João Paulo Sinnecker (CBPF), Miguel Domingues Vieira (IQ-UFFRJ) and Célia Machado Ronconi (IQ-UFRJ).

E568 - BILINEAR AND BIQUADRATIC COUPLING IN FeCr/FeMgO (100) THIN FILMS GROWN BY DC-SPUTTERING. Thayara Freire de Souza (UFRN), Charlie Salvador Gonçalves (UFRN), Marco Assolin Corrêa (EC), Claudionor Gomes Bezerra (UFRN) and Carlos Chesman Feitosa (UFRN).

E569 - Structure and magnetism of Co films on MgO(100). Waldemar Augusto de Almeida Macedo (CDTN), Manoel José Mendes Pires (INMETRO), Alexandre Alberto Chaves Cotta (CDTN) and Maximiliano Delany Martins (CDTN).

E570 - Ab initio study of the magnetic stability of Mn nanostuctures on Fe(001). Ricardo Noboru Igarashi (IFUSP - São Paulo), Angela Burlamaqui Klautau (UFPA - Belém) and Helena Maria Petrilli (IFUSP - São Paulo).
E571 - Raman characterization of bulk ferromagnetic nanocrystalline graphite

Helena Pardos, Stanisław Kolesnik, Ricardo Faccio (Facultad de Qu m Udelar), Leopoldo Suescun (Univ of Uruguay), Cecilia Goyenola (Facultad de Qu m Udelar), Luciana Fernandez (Facultad de Qu m Udelar) and Alvaro Mombru (Facultad de Qu m Udelar)

E572 - Evaluation of colloidal stability of maghemite-based magnetic fluids for transformer application

Wesley Renato Vialli (UFJG), Luiza Adriana Teles do Reino (UFJG), Patricia Pomme Confessori Sartoratto (UFJG) and Paulo Cesar Morais (UnB)

E573 - Domain wall motion on ferromagnetic nanotubes

Pedro Landeros (UTFM) and Álvaro Sebastián Nuñez Vásquez (Universidade de Chile)

E574 - Magnetic behavior of interacting nanoparticles in a face-centred cubic lattice

Antonio Weißenmann (UFSC) and Wagner Figueiredo (UFSC)

E575 - Magnetic behavior of interacting nanoparticles in a face-centred cubic lattice

Pedro Landeros (UTFM) and Álvaro Sebastián Nuñez Vásquez (Universidade de Chile)

E576 - Computational study of the magnetic behavior of metal DNA structures

Marcos Bruno Gonçalves (IF-USP Brasil), Rosa de Felice (NFM-CN Italy) and Helena Maria Petrelli (IF-USP Brasil)

E577 - Oscillatory behavior of Exchange Bias Field in NiFe/IrMn/Co System

Miguel Tafur (CBPF), Valberto Pedruzzi, Nascimento (UFES) and Elisa Maria Baggio Saitovitch (CBPF)

E578 - Fe-doping Effect on Morphologic and Magnetotransport Properties of La0.7Ca0.3Fe1-xMnxO3-

Thin Films

Oscar Luis Arnaohe Olimos (Universidade de Antioquia), Árni Amichay Giraldo Lozano (Universidad de Antioquia), Axel Hoffmann (Argonne National Laborato) and Maria Elena Gomez (Universidad del Valle)

E579 - Nano-Ni Addition to MgB2: Effects on the Superconducting Properties

Oscar Ferreira de Lima (IFGW-UNICAMP), Kleber Betini Vieira (IFC-UNICAMP), Edson Moschim (IFC-UNICAMP), Veer Pal Singh Awana (NPL-India) and Hari Kishan (NPL-India)

E580 - Influence of the 3d-metal doping on the magnetic properties of SnO2 nanoparticles

Jose A H Coaquira (IF/UlB), Fermin H Aragon (IF/UlB), Pilar Hidalgo (POLI/USP), S. I. M Britto (POLI/USP) and Douglas Gouvea (POLI/USP)

E581 - Structural and magnetic properties of the mixed oxide CoFe2O4 and MnO

VICENTE S SAGREDO (Universidad de los Andes), GERSON MARQUEZ (Universidad de los Andes), CLARA MARQUINA (ICMA), GERARDO F GOUVÊA (INA) and MANUEL P IRARRA (ICMA)

E582 - Effect of Fe Doping on Ferroelectric and Ferromagnet-Properties of Sr2Ba1-Nb2-FeO6 Ceramics

Sonja Gaona Jurado (UdeC), William Arvey Molano (UdeC), José Rodrigo Muñoz (UdeC), Alberto Cancano (CAF) and Aimé Peloix (UdeH)

E583 - MAGNETOELECTRIC RESPONSE OF La0.7Ca0.3MnO3 (LCM0) OBTAINED BY PECHINI METHOD

Sandra Viviana Briceño (UdeC), Jorge Enrique rodríguez-páez (UdeC), Sonja Gaona Jurado (UdeC), Gilberto Bolaños (UdeC), Álvaro María Camargo (Uonal) and Paula Andrea García (Unal)

E584 - Structural and Magnetic properties of the Nanocrystalline Perovskites La1-xSr2-xFe3O12 Thin Films

Oscar Luis Arnaohe Olimos (Universidade de Antioquia), Árni Amichay Giraldo Lozano (Universidade de Antioquia), Axel Hoffmann (Argonne National Laborato) and Maria Elena Gomez (Universidad del Valle)

E585 - Magnetic Interactions in Pulsed-DC Sputtered Specular Bottom Spin Valve with Cu-Oxide spacers

Ramis Mustafa Oksuzoglu (University Anadolu), Mustafa Yıldırım (University Anadolu), Hakan Cinar (University Anadolu), Erwin Hildebrandt (University Darmstadt), Lambert Wendelin Alf (University Darmstadt) and Hartmut Fues (University Darmstadt)

E586 - Corrosion of amorphous and nanocrystalline Fe-based alloys on the synergistic effect of NaCl and H2SO4

xiang li (Tongji University), yuanxiang li, (Tongji University), yuxin wang (Tongji University), wei lu (Tongji University) and biao yan (Tongji University)

E587 - Magnetic Interactions in Pulsed-DC Sputtered Specular Bottom Spin Valve with Cu-Oxide spacers

Rami Mustafa Oksuzoglu (University Anadolu), Mustafa Yildirim (University Anadolu), Hakan Cinar (University Anadolu), Erwin Hildebrandt (University Darmstadt), Lambert Wendelin Alf (University Darmstadt) and Hartmut Fues (University Darmstadt)

E588 - Ferromagnetic Nanotubes as a Magnetic Nanomaterial

Lauro Aparecido Ferreira (UFRN), Luciana Fernandez (UFRN), Marcio Assolin Corrêa (UFRN), Amanda Da Cés Viagas (UFSC) and Rubem Luís Sommer (CBPF)

E589 - AC - Susceptibility study of La0.7Ca0.3MnO3 samples

Javier Alberto Olarte (Universidad Distrital FIC) and Álvaro María Camargo (Universidad Nacional)

E590 - Rectifier Effects in Superconducting/Magnetic Hybrids Based on Ratchet Effects

David Perez de Lara (Universidad Complutense), Elvira Maria Gonzalez (Universidad Complutense), Jose Virgilio Anguita and Jose Luis Vicent (Universidad Complutense)

E591 - Magnetic Behavior of Cluster-Assembled Materials

Artur Dominques (IFGW - UNICAMP), Giulia Di Domenicantonio (IGFW - UNICAMP) and Varlei Rodrigues (IFGW - UNICAMP)

E592 - Magnetic behavior of interacting nanoparticles in a face-centred cubic lattice

Antonio Weißenmann (UFSC) and Wagner Figueiredo (UFSC)

E593 - Microstructure and magnetic properties of Fe95CuM2V5S13B5 (M=Nb2Mo) nanocrystalline alloys

wei lu (Tongji University), xiang li (Tongji University), yuanxiang li, (Tongji University), yuxin wang (Tongji University) and biao yan (Tongji University)

E594 - PREPARATION OF A MAG-NEITITE FERROFLUID STABILIZED WITH A NATURAL POLYMER

Jeaneth Patricia Urquiza (UdeA), Álvaro Luis Morales (UdeA), Herley Fernando Casanova (UdeA) and Javier Garces (UdeA)

E595 - Resistivity anomaly near the superconducting transition temperature of Pb/Co nanocomposite

Yutao Xing , Hans Micklitz (CBPF), Tatiana Rapoport (UFRJ) and Elisa Maria Baggio Saitovitch (CBPF)

E596 - Effect of Ag and Cu spacers on the magnetopendence of permalloy-based multilayers

Antonio Marcos Helqueiro de Andrade (UFSM), Marcio Assolin Corrêa (UFRN), Alexandre Da Cés Viagas (UFSC) and Rubem Luís Sommer (CBPF)

E597 - Evaluation of colloidal stability of maghemite-based magnetic fluids for transformer application

Wesley Renato Vialli (UFJG), Luiza Adriana Teles do Reino (UFJG), Patricia Pomme Confessori Sartoratto (UFJG) and Paulo Cesar Morais (UnB)

E598 - Magnetic dopant atoms in ZnO powders prepared by mechanical work

Laura Cristina Damonte (IFLP-FCE UNLP), Marcos Meyer (IFLP-FCE UNLP) and Luis Mendoza Zelis (IFLP-FCE UNLP)

E599 - Magnetoconductivity of nanomagnets

Álvaro Sebastián Nuñez Vásquez (Universidade de Chile) and Sebastián Díaz (Universidade de Chile)

E600 - Current induced magnetic interactions on nanomagnets

Álvaro Sebastián Nuñez Vásquez (Universidade de Chile) and Sebastián Díaz (Universidade de Chile)

E601 - Study of dynamic magnetic susceptibility of strontium ferrite nanoparticles

Ghasemi Ali

E602 - Electrodeposition of CuO semiconducting oxide for spintronic applications

Andre Avelino Pasó (UFSC), Iuri Stefani Brandt (UFSC), Vinícius Claudio Zoldan (UFSC), Douglas Langie da Silva (UFSC), Alexandre Da Cés Viagas (UFSC), Wagner Figueiredo (UFSC) and Andre Avelino Pasó (UFSC)

E603 - Fe-DOPED SnO2 NANOPOWERS OBTAINED BY MECHANOCHEMICAL ALLOYING AND THERMAL TREATMENT OF SnC2

Luís Carlos Sanchez (Universidade de Antioquia), Jailes Joaquim Beltran Jimenez (Universidade de Antioquia), Jaime Alberto Osorio (Universidade de Antioquia), Liliana del Socorro Tirado-Mejía (Universidade de Antioquia), Elisa Maria Baggio Saitovitch (CBPF) and Cesar Augusto Barrera (Universidade de Antioquia)
E615 - Domain wall narrowing in ferromagnetic bilayers
Gladis Mendaza (Universidad Nacional de Colombia), Octavio Guzmán (Universidad Nacional de Colombia), Johan Prado (Universidad del Valle), María Elena Gomez (Universidad del Valle) and Pedro Prieto (CENM, Cali, Colombia)

E616 - Manganese and zinc ferrites: Synthesis and Characterization
Maurilio Longo Martins (Unesp/Botucatu), Alberto Adriano Cavalheiro (UEM/Naval), Ariovaldo Oliveira Florentino (Unesp/Botucatu) and Margarida Juri Saeki (Unesp/Botucatu)

E617 - Spin wave spectrum of ferromagnetic nanotubes
Aníbal Lautaro González Goyarce (University of Chile), Álvaro Sebastian Núñez Vázquez (University of Chile) and Pedro Landeros (UTFSM)

E618 - Magnetic nanofilms of maghemite nanoparticles hosted in polyvinylidene fluoride
Leonardo Giordano Paterno (UnB), Maria Aparecida Godoy Soer (UnB), Fernando Josepetti Fonseca (USP), Joao Paulo Sinnecker (UFRJ), Emilia Lima (UFRJ) and Paulo Cesar Morais (UnB)

E620 - Origin of Vertical and Horizontal Shifts in Nanoferrites
BRENDO RODRIGUES SEGATTO (UFES), EDSON PASSAMANI CAETANO (UFES), ARMANDO TAKEOUCHI (UFES), VALBERROMO RODRIGUES SEGATTO (UFES) and JOSÉ RAFAEL CÁPUA PROVETI (UFES)

E621 - CRYSTALLOGRAPHIC AND MAGNETIC PROPERTIES OF Fe-DOPED SnO2 NANOПARTICLES OBTAINED BY A SOL-GEL METHOD
Jailes Joaquim Beltran Jimenez (Universidad de Antioquia), Luis Carlos Sanchez (Universidad de Antioquia), Jorge Alberto Osorio (Universidad de Antioquia), Lillian do Soccaro Tiraodo-Meijas (Universidad del Quindio), Elisa Maria Baggio Saltovitch (CRPP) and Cesar Augusto Barrero (Universidad de Antioquia)

E622 - Morphology, magnetic properties and magnetoresistance of as deposited and oxidized Fe thin films electrodeposited on Si
Vinicius Claudia Zaldain (UFSC), Jose Santos Cruz (UFSC), Maximiliano Luis Munford (UFV), Giovanni Zangari (University of Virginia), Nicolas Garcia (CSIC) and Andre Avelino Pasa (UFSC)

E623 - Static and dynamic study of superparamagnetic CoFe2O4 nanoparticles
Jorge Luis Lopez (UFMG), Jose Higino Dias Filho (UNIMONTES), Hans Dieter Pfirnis (UFMG), Roberto Magalhaes Paniago (UFMG), Anselmo Ruiz Rodriguez (UFA), João Paulo Sinnecker (UFRJ) and Miguel Novak (UFRJ)

E625 - Exchange Bias Properties and Surface Disorder in Magnetic Nanoparticles
Franciscoscarlos Gomes da Silva (Universidade de Brasí-lia), Renata Aquino (Faculdade da UnB Planetário), Vicent Dupuis (Université Pierre et Mari), Jerome Depeyrot (Universidade de Brasí-lia), Francisco Augusto Tourinho (Universidade de Brasí-lia), Regine Perzynski (Université Pierre et Mari) and Cleiton Rocha Alves (Universidade de Brasí-lia)

E626 - Magnetic properties of nanostructured SnO2–FeO milled samples
Vitaliy Bilovol (UNLP), Azucena Mudarra Navarro (UNLP), Claudia Rodriguez Torres (UNLP), Francisco Sanchez (UNLP) and Fabiana Cabrera (UNLP)

E627 - Influence of the Fe3+ ions concentration on the magnetic behaviour of (Ti,Fe)O3 samples
Azucena Mudarra Navarro (UNLP), Vitaliy Bilovol (UNLP), Claudia Rodriguez Torres (UNLP), Francisco Sanchez (UNLP) and Fabiana Cabrera (UNLP)

E628 - Rashba and Dresselhaus spin–orbit coupling effects on the conduction electronLandé g factor in a 2D cylindrical GaAs quantum dot under an axis–parallel applied magnetic field
Julio Cesar Gonzalez (Universidad del Valle) and Juan Carlos Granada (Universidad del Valle)

E629 - Magnetic interaction in exchange-biased bilayers: a ﬁ rst-order reversal curves analysis
Leonardo Alonso (IFUSP) and Daniel Reinaldo Cornejo (IFUSP)

E630 - CaCO3 addition effects on the MgB2 superconducting properties
German Dario Serrano (CAB-IB, CONICET, Argentina), German Bridoux (CAB-IB, CONICET, Argentina) and Adriana Cristina Serquis (CAB-IB, CONICET, Argentina)

E633 - Thickness Dependence of the Magneto Electric Properties in BiFeO3 Thin Film
John Edward Ordoñez (Univalle), John Emanuel Prado (Univalle) and Maria Elena Gomez (Univalle)

E634 - Superconducting/Ferromagnetic Heterostructures Study
Miguel Alejandro Zorra (PGMTR–UFPE) and Clecio Souza Silva (DF–UFPE)

E635 - Synthesis and Characterization of Nanocrystalline Zn1−xMxO (M=Co or Mn) by Proteic Sol–Gel Process
Nilson dos Santos Ferreira (UFS), Daniel Augusto de Andrade Santos (UFS) and Marcelo Andrade Macedo (UFS)

E636 - Surface spin slips in thin dysprosium films
Artur Silva Carriço (UFRN), Fábio Henrique Sales (IFMA), Ana Lúcia Dantas (UERJ) and Vandomberto Dias Mello (UERN)

E637 - Study of Magnetic Properties on a Micromagnetic Object by Scanning Near Field Optical Microscopy
Mariana Poyar (IFUSP), Marcelo Larançarotte (IFUSP), Antônio Carlos Seabra (IFUSP) and Antonio Domingues dos Santos (IFUSP)

E638 - Amorphization process by mechanical milling of the FeZr alloy
Jose Medina Medina (UNMSM), Chachi Rojas Ayala (UNMSM), Justino Quispe Marcatoma (UNMSM) and Victor Antonio Peña Rodriguez (PCF-UNMSM)

E639 - Structural and Magnetic Properties of Electrodeposited Co–Ni alloys
Elizandra Martins Silva (UFRN)/COPEP/PEMM, Luiz Carlos de Lima (CETEM/UFRRJ), Mateus VB Pinto (UFRJ/IF), Dominique Givord (Institut NEEL), Renata Antoun Simão (UFRJ/COPEP/PEMM) and Vitória MTS Barthem (UFRJ/IF)

E640 - Barrier potential and magnetic field conﬁ nement effects on the Landé g factor in a GaAs–(Ga,Al)As cylindrical quantum well wires
Diego Fernando Mulato Gómez (Universidad del Valle), Jorge Ricardo Mejía Salazar (Universidad del Valle) and Nelson Porras (Universidad del Valle)

E641 - Critical Behavior of La1−xCaxMnO3 Magnetic Thin Films: Monte Carlo Simulation
Elizabete Restrepo (Universidad Nacional), Claudia Milena Bedoya (Universidad Nacional), Jesus Fabian Jurado (Universidad Nacional), Juan Carlos Riaño (Universidad Nacional) and Johans Restrepo (Universidad de Antioquia)

E642 - Aluminium concentration and magnetic field effects on the Landé g factor in a GaAs–(Ga,Al)As cylindrical pillbox
Jorge Ricardo Mejía Salazar (Universidad del Valle) and Nelson Porras (Universidad del Valle)

E643 - Relaxation in interacting NiFe2O4 nanoparticles
Jorge Luis Lopez (UFMG), Roberto Magalhaes Paniago (UFMG), Anselmo Ruiz Rodriguez (UFA), João Paulo Sinnecker (UFRJ), Miguel A Novak (UFRJ), Adriana S Albuquerque (CDTN) and Waldemar A Macedo (CDTN)

E644 - Interface bias vortex nucleation in magnetic nanoelements
Ana Lúcia Dantas (UERN), Artur Silva Carriço (UFRN) and Gustavo Oliveira Rebouças (UFRN)

E645 - DEVELOPMENT OF INSULATING MAGNETIC OIL FOR TRANSFORMERS
Antonalvilemaalbuquerque(Eletrobrasil),Pauco Cesar Morais (UnB) and José Aliésio Severo (Eletronorte)

E646 - Interface Roughness influence on exchange bias behavior in La2/3Ca1/3MnO3/La1−3Ca2/3MnO3 bilayers
Elizabete Restrepo (Universidad Nacional), Giovany Orózco (Universidad Nacional), Johans Restrepo (Universidad de Antioquia), Juan Carlos Riaño (Universidad Nacional de C) and Jesus Fabian Jurado (Universidad Nacional)

E647 - Optical properties of GaAsMn Layers Prepared by Magnetron Sputtering
Alvaro Pulzara Mora (Universidad Nacional de Colombia), Monica Bernál Salamanca (Universidad Nacional de Colombia), Miguel Melendez Lira (Cinvestav, Mexico D-F), Andres Rosales Rivera (Universidad Nacional de Colombia) and Maximo Lopez Lopez (Cinvestav, Mexico D-F)

E648 - The metric influence on magnetic and electrical transport properties of nanoparticles
Juan Carlos Riaño (Universidad Nacional), Elisabet Restrepo (Universidad Nacional), Claudia Milena Bedoya (Universidad Nacional), Jesus Fabian Jurado (Universidad Nacional), Juan Carlos Riaño (Universidad Nacional) and Johans Restrepo (Universidad de Antioquia)
E650 – SAXS studies of phase separation induced by magnetic field in magnetic nanocolloids  
Anaíde Ferreira da Silva (Universidade de Brasília), Fábio Luiz de Oliveira Paula (Universidade de Brasília), Juliano de Andrade Gomes (Universidade de Brasília), Renata Aquino (Faculdade da UnB Planalti), Jerome Depeyrot (Universidade de Brasília), Francisco Augusto Tourinho (Universidade de Brasília) and Epitácio Pinto Marinho (Universidade de Brasília)

E651 – Synthesis and characterization of nanoparticles of iron oxide supported on aluminium and silicon oxide by polymeric precursor method.  
Tiago Pinheiro Braga and Wiliam Trujillo Herrera

E652 – Synthesis of spheres containing iron oxide superparamagnetic and aluminum oxide.  
Tiago Pinheiro Braga (UFC), Antoninho Valentini (UFC) and Wiliam Trujillo Herrera

E653 – In situ Kerr magnetometry study of thin films of FeCo/Pd(100)  
Gustavo Fóscolo de Moura Gomes (UFMG), Roberto Magalhaes Paniago (UFMG) and Hans Dieter Pfannes (UFMG)

E654 – Imaging magnetic relaxation with elemental resolution in hard-soft-hard trilayered films  
Jesús María González (ICMM-CSIC/IMA-UCM), Javier Palomares (ICMM-CSIC), Eirví Paz (ICMM-CSIC), Tolek Tyliszczak (ALS) and Federico Cebollada (EUPT-UPM)

E655 – Study of the exchange bias behavior on the applied field cooling in ferromagnetic/antiferromagnetic bilayers based La, Ca,MnO3 system  
Lorena Marin (Universidad del Valle), David Reyes (Universidad del Valle) and Maria Elena Gomez (Universidad del Valle)

SYMPOSIUM F
Solving Nanostructures through Electron Microscopy

Auditorium: Oriente

Simposium Organizers:

Gustaaf Van Tendeloo (EMAT – University of Antwerp, Belgium)
Guillermo Solórzano (PUC-Rio, Brazil)
Uli Dahmen (NCEM, USA)
Carla Bittencourt (University of Mons, Belgium)
Monday, September 21
Session chair: Gustaaf Van Tendeloo
09:30 - 10:00
PF4 (invited) - Elongation and rupture of nanoscale metal wires
Daniel Mario Ugarte (IFGW-UNICAMP)
10:00 - 10:15
F514 - The Smallest Silver Atomic-Size Nanotube
Maureen Joel Luque (LNLS), Daniel Ugarte (Unicamp), Fernando Sato (Unicamp), Varlei Rodrigues (Unicamp), Jefferson Bettini (LNLS) and Douglas Galvão (Unicamp)
10:15 - 10:45
PF5 (invited) - EELS mapping, a key component for the exploration of the nanoworld
Christian Collet (LPS UPS/CRNS)
10:45 - 11:00
F527 - Ceria mixed oxides as Gold Species Support and their performance on the CO oxidation
Ricardo Rangel (Universidad Michoacana) and Brenda Acosta (Universidad Michoacana)
11:00 - 11:30
Coffee Break
Session chair: Gustaaf Van Tendeloo
11:30 - 12:00
PF1 (invited) - Energy-Loss Spectroscopy and Near-Edge Structures with Aberration-corrected Transmission Electron Microscopes
Giannluigi Andre Betton (McMaster University), Sorin Lazar (FEI Company and McMaster), Martin Couillard (McMaster University), Lisa Gunawan (McMaster University) and Yang Shao (McMaster University)
12:00 - 12:15
F505 - Analysis of Sb dopant influence on SnO, nanoparticles morphology and growth mechanism
Daniel Grando Stroppa (LNLS), Luciano Andrey Montoro (LNLS), Armando Beltran (UJI), Rafael Oliveira da Silva (UFSCar), Juan Andrés (UJI), Edson Leite (UFSCar) and Antonio Ramirez (LNLS)
12:15 - 12:45
PF6 (invited) - Aberration Correction and Exit Wave Reconstruction of Metal and metal Oxide Nanoparticles.
Angus Kirkland (Oxford University), Neil Young (Oxford University) and Sarah Haigh (Oxford University)
12:45 - 13:00
F515 - III-V Semiconductor Nanowires VLS Growth: Does Arsenic Diffuse Through the Catalytic Nanoparticle?
Luiz Henrique Galvão Tizei (IFGW-UNICAMP), Thalita Chiaromonte (IFGW-UNICAMP), Daniel Mario Ugarte (IFGW-UNICAMP) and Mônica Alonso Cotta (IFGW-UNICAMP)
13:00 - 14:30
Lunch
Session chair: Carla Bittencourt
14:30 - 14:45
Luiz Henrique Galvão Tizei (IFGW-UNICAMP), Thalita Chiaromonte (IFGW-UNICAMP), Mônica Alonso Cotta (IFGW-UNICAMP) and Daniel Mario Ugarte (IFGW-UNICAMP)
14:45 - 15:00
F503 - HRTEM analysis of the crystallization process of calcium phosphate nanostructures
Carlos Alberto Ospina Ramirez (CBPF), Andrea Machado Costa (CBPF), Jefferson Bettini (LNLS), Antonio Jose Ramirez (LNLS), Elena Mavropoulos Oliveira Tude (CBPF) and Alexandre Malta Rossi (CBPF)
15:00 - 15:15
F530 - MICROSCOPY OF BIOFILMS FORMED ON A METALLIC SURFACE IN DYNAMIC AND STATIC SYSTEMS IN THE PRESENCE OF OILY FLUIDS
Karla de Avelar Mota (PUC-Rio), Walter Barreiro Cravo Jr (PUC-Rio), Maria Isabel Pais da Silva (PUC-Rio), Monica de Oliveira Penha (Petrobras) and Ivani de Souza Bott (PUC-Rio)
15:15 - 15:30
F502 - In situ catalytic growth of Gallium Nitride Nanowires
Rosa Estela Diaz (Arizona State University), Renu Sharma (Arizona State University), Karalee Jarvis (Arizona State University) and Subash Mahajan (Arizona State University)
15:30 - 15:45
F526 - Micro Et Nanostructural characterization of 2.29Cr-1.6W(V) ASTM A213 T23 ferritic steels
Mauricio Barreto Lisboa (CEPEL), Luiz Henrique de Almeida (UFU/UCOP/PEMM), Heloisa Cunha Furtado (CEPEL) and Glaucio Riquera (CEPEL)
16:00 - 16:15
F504 - Crystallographic and Local Electronic Structures of Magnetic Nano-Checkerboards in Mn-Doped Cobalt Ferrite
Chuan - Ming Tseng (National Taiwan Univ), Chenglin Zhang (Rutgers University), Sang-Wook Cheong (Rutgers University) and Cheng-Hsuan Chen
Tuesday, September 22
Session chair: Uli Dahmen
09:30 - 10:00
PF7 (invited) - Transmission Electron Microscopy of sp2-bonded Carbon and Boron Nitride
Alex Zettl (University of California)
10:00 - 10:15
F529 - Graphene Structures, Fabrication and Characterization with Aberration Corrected Microscopy
David C. Bell (Harvard University) and Wei Li Wang (Harvard University)
10:15 - 10:45
PF2 (invited) - Transmission Electron Microscopy: a tool for the direct determination of carbon nanotube structure
Annick Loiseau
10:45 - 11:00
F508 - Analysis of the structure of nanorods with pentagonal cross-sections by electron microscopy
Jose Reyes - Gasga (Instituto de Fisica, UNAM), Jose Luis Elechiguerra (University of Texas), Juan Martin Montejano-Carrizales (Instituto de Fisica, UASL) and Miguel Jose-Yacaman (University of Texas)
11:00 - 11:30
Coffee Break
Session chair: Alexandre Felten (University of Mons)
11:30 - 12:00
PF9 (invited) - Off-axis electron holography of magnetic nanoparticles, nanostructures and devices
Rafal Dunin - Borkowski (TUD)
12:00 - 12:15
F528 - ANCHORAGE OF INORGANIC NANOPARTICLES ON NITROGEN DOPED MULTIWALLED CARBON NANOTUBES
Alcida Rodriguez - Pulido (IPICYT), Aaron Morelo-Gomez (IPICYT), David Cullen (ASU), David Smith (ASU), Humberto Terrones (IPICYT) and Mauricio Terrones (IPICYT)
12:15 - 12:45
PF3 (invited) - Combined HRTEM and STXM-NEXAFS study of a patterned CNT
Adam Hitchcock (McMaster University), Ebrahim Najafi (McMaster University), Xiaoxing Ke (University of Antwerp), Alexandre Felten (University of Namur), Carla Bittencourt (University of Mons)
Poster Session F
Solving Nanostructures through Electron Microscopy
Room: Louvre
Monday, September 21
18:30 to 20:30
F501 - NANOOBJECT SIZES OF DEFECTS IN POROUS SYSTEMS AND DEFECTIVE MATERIALS ACCORDING ADAP METHOD
Eugene Petrovich Prokopiev
F507 - Method of convergence used for calculating electron transport described by 3D invariant imbedding differential equations.
Carlos M Figueroa (LAFISO-UNT) and Silvia P Heluani (LAFISO-UNT)
Igor Ivanovich Khodos (IMT RAS), Yusif Alekberovich Kasumov (IMT RAS), Vladimir Timofeevich Volkov (IMT RAS) and Viktor Nikolaevich Matveev (IMT RAS)

F510 – Surfactant Self-Assembly on Substrates and the Dewetting Process
Juliana da Silva Bernardes (Unicamp) and Fernando Galemebeck (Unicamp)

F511 – Phase Transition Induced on Ag/TiO2 Thin Films by Transmitted Electron Beam
Marcelo Machado Viana (UFMG), Nelcy Della Mohallem (UFMG), Karla Balzuweit (DF/UFMG) and Douglas Rodrigues Miquita (UFMG)

F512 – Environmental effects on chemical stability of Fe80Ni15 alloy studied at high pressures and high temperatures
Suzana Bottega Peripolli (INMETRO), Alexei Yu Kuznetsov (INMETRO), Lincoln Silva Gomes (INMETRO), Anastasia Kantor (Universität Bayreuth), Leonid Dubronvinsky (Universität Bayreuth), Carlos Alberto Achete (Inmetro/ Coppe) and Vitali Prakapenka (University of Chicago)

F517 – Synthesis processing and Characterization of Cu–CNT Nanocomposites
MARTIN EMILIO MENDOZA (PUC-Rio), Guillermo Solorzano (PUC-Rio), Eduardo Albuquerque Brocchi (PUC-RJ) and Célio Albano Costa (COPPE/UFRJ)

F519 – Design and Construction of a STM oriented to the study of passivated metallic nanoparticles
Bruno Vieira da Cunha Martins (IFGW - UNICAMP), Varlei Rodrigues (IFGW - UNICAMP) and Daniel Ugarte (Unicamp)

F520 – Production of nanocrystalline Fe74.3Si14.2Cu1Nb3B7.5 alloy for magnetic sensors
Geronimo Perez (PUC-Rio), Guillermo Solorzano (PUC-Rio) and Luiz Corvalho Benyosef (ON-MCT)

F521 – Distribution of clay platelets in blend nanocomposites by molecular mapping in energy-filtered transmission electron microscopy (EFTEM)
Elisangela Moura Linares (Unicamp), Marcia Maria Rippel (Unicamp) and Fernando Galemebeck (Unicamp)

F522 – SEM analyses after FIB preparation of the subsurface layer zone of steel balls modified by wear
Suzana Bottega Peripolli (INMETRO), Lincoln Silva Gomes (INMETRO), Marcia M Maru (INMETRO), Alexei Yu Kuznetsov (INMETRO), Adilci Menezes De Oliveira (PETROBRAS) and Carlos Alberto Achete (Inmetro/ Coppe)

F523 – HRTEM and Molecular Simulation Analysis of e- Fe23N AND g’- Fe3N Nitrides
Ariosto Medina Flores (UMSNH), Luis Bejar Gomez (UMSNH), Hector Carrer Garceutias (UMSNH), Salomon Borjas Garcia (UMSNH) and Ismeli Alfonso Lopez (UNAM)

F524 – Determination of Ti(C,N) Nanoprecipitates in a Low-Carbon Microalloyed Steel by HRTEM analysis
Ariosto Medina Flores (UMSNH), Luis Bejar Gomez (UMSNH), Hector Carreron Garceutias (UMSNH), Jose Luis Bernal Ponce (Universidad Politecnica d) and Ismeli Alfonso Lopez (UNAM)

F525 – One-step CVD synthesis of nanometric carbon rings and junctions
Nestor Perea - Lopez (IPICYT), Emilio Munoz-Sandoval (IPICYT), Ana Laura Elias-Arriaga (IPICYT), Humberto Terrones (IPICYT), Benji Maruyama (WP-AFRL) and Mauricio Terrones (IPICYT)

F531 – Synthesis and characterization of SnO2 sphere nanostructures
Thiago Sequinrel (UNESP), Sergio Mazurek Tebcherani (UEPG), Sergio Cava Itajara Minerais, Jose Arana Varela (Unesp-Ararauara), Sergio Ricardo de Lazaro (UEPG) and Juliana de Oliveira Pimenta (UEPG)

F533 – Advanced Electron Microscopy Characterization of GaN–based High Electron Mobility Transistors
David Cullen (Arizona State University), Lin Zhou (Arizona State University), Jacob Leach (Virginia Commonwealth), Hadis Morkoc (Virginia Commonwealth), Peter Fejes (Freescale Semiconductor), David Smith (Arizona State University) and Martha McCarty (Arizona State University)
G509 - SILOXANE-POLYPOLYPYRLENOXIDE HYBRIDIZED AS MATRIX FOR INCORPORATION AND RELEASE OF PROPANOLOL CHLORIDE
Juliana Henriques Pereira (Uetz), Karim Dahmouche (Uetz) and Carlos Eduardo Carvalho (Uetz)

G510 - Novel pan-antiviral strategy and delivery using gold nanoparticles for inhibiting growth of all influenza viruses including the drug-resistant seasonal human, avian H5N1 viruses, and 1918 pandemic influenza virus
Krishnan Chokovaryathy (SUNY Buffalo), Adela Bonoiu (SUNY Buffalo), William Davis (CDC), Hong Ding (SUNY Buffalo), Paul Knight (SUNY Buffalo), Suryaprakash Sambhara (CDC) and Paras Prasad (SUNY Buffalo)

G511 - Carboxymethylxtrated-coated Fe3O4, biocompatible nanoparticles for biomedical applications by a new microemulsion route
Watson Beck Jr (IASC-USP), Miguel Jafelicci Jr (IAR-USP) and Laudemir Carlos Varanda (IASC-USP)

G512 - Determining the thermodynamic parameters of dispersed systems by variable temperature multiple light scattering
Juan almeida fiel (UFGRS), marcia duarte odor (UFGRS), marilia rizzi (UFGRS), silvia stanisçuaski guterres (UFGRS) and adriana raffin pohllmann (UFGRS)

G513 - Nanocapsules prepared with sorbitan monostearate and polysorbate 80 are more effective in scatter the light than those prepared with phosphatidylcholine
Samuel Luiz de Marco (UFGRS/Brazil), Fernanda Poletto (UFGRS/Brazil), Valeria Weiss-Angeli (UCS/Brazil), Nádia Pesca da Silveira (UFGRS/Brazil), Silvia Stanisçuaski Gutierrez (UFGRS/Brazil) and Adriana Raffin Pohlmann (UFGRS/Brazil)

G514 - A release study of capsaicinoids from nanocapsules before and after the incorporation in hydrogels
Renata Vitor Contr (UFGRS), Rafaela Peixoto Silva (UFGRS), Moacir Kaiser (UFGRS), Luana Almeida Fiel (UFGRS), Adriana Raffin Pohlmann (UFGRS) and Silvia Stanisçuaski Gutierrez (UFGRS)

G515 - SILOXANE-PMMA NANO-POLYMER COMPOSITES AS DRUG DELIVERY SYSTEM
Bianca Ferreira (Uetz), Karim Dahmouche (Uetz), Caio Paranhas (UFSCar) and Ailton de Souza Gomes (UFRJ)

G520 - Optimization of the nano-capsule formulation to provide a suspension containing exclusively one type of colloid with high physical stability
Cristina de Garcia Venturini (UFGRS), Elizée Jäger (UFGRS), Andrea Bernardi (UFGRS), Ana Maria Oliveira Battastini (UFGRS), Silvia Stanisçuaski Gutierrez (UFGRS) and Adriana Raffin Pohlmann (UFGRS)

G521 - HER-2 Targeted PEG-PE Immuno-Micelle for Bioluminescent Imaging
Ali Mohammad Tamaddon (SUMS), Nasim Golkar (SUMS) and Soleyman Mohammadi Samani (SUMS)

G522 - Cellular Pharmacokinetic of PEG-Stabilized Antisense Nanoliposomes
Ali Mohammad Tamaddon (SUMS), SMBU), Samira Sadaat Abolmaali (SUMS, SMBU), Farshad Hoseini Shirazi (SUMS, SMBU) and Hamid Reza Moghimi (SUMS)

G524 - Preparation techniques of poli-ε-caprolactone nanoparticles: influence on particles size and distribution
Cristiane da Silva Melo (UFMG), Thiago Silva Oliveira (UFMG), Roberta Marques Sanches (FUNED), Armando Silva-Cunha (UFMG) and Silvia Ligório Faiio (FUNED)

G525 - Nanocomposites formed by boron nitride sheets and Fe nanoparticles for biomedical applications: Synthesis and characterization
Tiago Hilário Ferreira (CDTN), Gracielle Ferreira Andrade (CDTN) and Edesia Martins Barros Sousa (CDTN)

G526 - Protein-loaded chitosan nanoparticles modulate uptake and antigen presentation of hen egg-white lysozyme by murine peritoneal macrophages
Jose Roberto Vega-Baudrit (Lanotec)

G528 - Preparation and characterization of chitosan biomembranes loaded with natural polyphenols from fruit peels and waste steams
Ximena Matamoros (Universidad Nacional)

G529 - Preparation of PEGylated Green Fluorescent Protein for Bioluminescent Imaging
Mehdi Cinna Hoorang (SUMS), Ali Mohammad Tamaddon (SUMS) and Ghomal Hossien Yousefi (SUMS)

G530 - Obtainment and Characterization of Nanocomposites for Pharmaceutical Applications
Ana Paula de Oliveira Rodrigues (UFRJ), Maria Inês Bruno Tavares (UFRJ) and Lúcio Mendes Cabral (UFRJ)

G531 - Control of amine density onto SPI0N by the use of different alkoxyxilanes
Rafael Admar Bini (UNESP), Rodrigo Fernando Costa Marques (UNESP), Taciane Pereira da Costa (UNESP), Francisco José dos Santos (UNESP), Juliano Alexandre Chaker (UNB) and Miguel Jafelicci Jr (UNESP)

G534 - Core-shell magnetic nanoparticles of La1-xSrMnO3 / SiO2
Ana Gabriela Levy (CNEA-UNSAM), Cecilia Andrea Alvaronzo (CNEA), Horacio E Troiani (CONICET-CNEA) and Mara Granada (CONICET-CNEA)

G535 - Insulin-loaded polymeric nanoparticles: Cell viability and cytotoxicity studies
Thiago Matos Araujo (UNICAMP), Luis Fernando Godoy Falco (UNICAMP), Zaine Teixeira (UNICAMP), Helena Cristina de Lima Barbosa (UNICAMP), Nelson Duran (UNICAMP), Antonio Carlos Boschero (UNICAMP) and Neiça Renata Hêder (UNICAMP)

G536 - Efficiency studies of DNA-conjugation/hybridization to magnetic silica nanosphere system designed as probes for genetic mutation
Giselda Maria Kalil de Cabello (FIOCRUZ), Kely Lopes Caiafa (UFRG), Debra da Oliveira Cintra e Silva (UnB), Paulo Cesar Moraes (UnB), Patricia Pomme Confessori Sartorutto (UFRG) and Zulmira Guerrero Marques Lacava (UnB)

G537 - Dye functionalized nanosized SiO2 for photodynamic therapy
Sheila Southgate (UFRJ), Rodrigo José corrêa (UFRJ), Célia Ronconi (UFRJ) and Gleiciâni Silveira (UFF)

G538 - Nanoemulsions stabilized by caseinates as potential controlled delivery vehicles of interest in dermatological and cosmetic products
Paula Gimeres (IUSP), Claudia Pranuve Sanches (IUSP), André Rolim Baby (ICF-USP), Ray Edwards Bruns (IUSP-UNICAMP) and Elizabeth P. Aréas (IUSP)

G544 - Assessment of cytotoxic and apoptogenic properties of safranal and its nanoliposomes in various cancer cell lines.
Seved Hatii Mousavi

G545 - Analysis of growth of calcium phosphate coating on Ti-7.5Mo alloy using AFM
Ana Lúcia do Amaral Escada (UNESP), Maria Isabel Etoli Kmaid (UNESP), João Paulo Barros Machado (INPE), Maria Cristina Rosifini Alves Rezende (UNESP) and Ana Paula Rosifini Alves Claro (UNESP)

G548 - Preparation of magnetic β-glucan microspheres for MRI-detectable embolic materials
Yangkyu Ahn (Konyang University)

G549 - Biomimetic Surfaces Containing Phospholipid and Metallophthalocyanines: Application as Chemical Modified Electrodes
Edson Juliàn Ramos Fernandes (USP), Carlos José Leopoldo Constantino (UNESP), Maria Luz Rodriguez Méndez (UVA), Jose Antonio de Saja Saez (UVA) and Valteric Zucolotto (USP)

G550 - Elucidating the Action Mechanism of Herbicides using Chemical Force Microscopy and Molecular Modeling
Fábio Lima Leite (UFSCar), Eduardo de Faria Franca (USP/UFSCar), Eduardo Martins Lopes (UFSCar), Luiz Carlos Gomide Freitas (UFSCar), Volterrinc Zucolotto (USP) and Osvaldo Novais Oliveira Jr (USP)

G551 - About Field- and Affinity Interactions of Piezoelectric GaPO4, BiAW and ZnO Thin Film Transducers
Jaroslav Nosek (TU Liberec), Jakub Stepanek (TU Liberec) and Lidmila Jaroslav Nosek (TU Liberec), Jaroslav Nosek (TU Liberec), Jakub Stepánek (TU Liberec) and Lidmila Stepanek (TU Liberec)

G552 - Biomimetic Surfaces Built by Layer-by-Layer Films Containing Phospholipid and Metallophthalocyanine Applied as Chemical Modified Electrodes
Edson Juliàn Ramos Fernandes (USP), Carlos José Leopoldo Constantino (USP)
G556 - Biomedical Application of Ferrofluids Containing Magnetite Nanoparticles - Based Buriti (Mauritia flexuosa L.) Oil Using Mössbauer and Nuclear Magnetic Resonance (NMR) Spectroscopies
Anselmo Furtado Ruiz Rodriguez (Universidade Federal do A), Inês Sabioni Resck (Universidade de Brasília), Claudia Jorge Nascimento (Universidade de Brasilia), Adherbal Carlos Oliveira (Universidade de Brasilia), Jorge Luis Lopez (Universidade Federal de M), Ricardo Bentes de Azevedo (Universidade de Brasilia) and Paulo Cesar Morais (Universidade de Brasilia)

G559 - Porous Silicon for Biomedical Application
Ennio Tasciotti (Institute for Molecular M)

G560 - Biodistribution of radioactive gold nanoparticles in mice
Maurício Brant Pinheiro (UFMG)

G561 - Gold Nanorods as Potential Contrast Agents for Ocular Optical Coherence Tomography
Michelle L Gabriele (University of Pittsburgh), Kyle C McKenna (University of Pittsburgh), Hiroshi Ishikawa (University of Pittsburgh), Larry Kagemann (University of Pittsburgh), Joel S Schuman (University of Pittsburgh) and Gadi Wollstein (University of Pittsburgh)

G562 - Langmuir monolayers containing ibuprofen and phospholipids
Vananélia Pereira Nunes Geraldo (USP), Adriana Pavinatto (USP), Felipe José Pavinatto (USP), Thayane Morimoto Nobre (USP) and Osvaldo Novais Oliveira Jr (USP)

G539 - Protein Delivery through Enteric Nanoparticles: The Effect of the Matrix and the Surfactant
Danay Rosa Dupeyrón Martell (IMRE), David Cruz Rodriguez (UH), Janette Cruz Rodriguez (CIM), Mayra González Hurtado (CI1Q), Jacques Rieumont Briones (UH) and Guillermo Solorzano (PUC)

International Conference of Advanced Materials
Rio de Janeiro, 20-25 September 2009

SYMPOSIUM H
New Developments in Biomaterials
Auditorium: El Pardo II

Simposium Organizers:
Gema Gonzalez (IVIC, Venezuela)
Rudolf Reichelt (U. of Münster, Germany)
Carlos Graeff (UNESP, Brazil)
Yannis Missirlis (U. of Patras, Greece)

Health and biological materials
Thursday, September 24

Session chair: Gema Gonzales

09:30 - 10:00
PH5 (invited) - Microengineered hydrogels for stem cell bioengineering and tissue regeneration
Ali Khademhosseini

10:00 - 10:15
PH1 (invited) - Characterization of Hydrogels at the Micro- and Nanoscale by FESEM and SFM
Rudolf Reichelt

10:15 - 10:30
H594 - THE MECHANICS OF STAPHYLOCOCCUS EPIDERMI- DIS ADHESION TO VARIOUS CHEMICALLY FUNCTIONALIZED SURFACES
Yannis F Missirlis (Univ Patras) and Maria Katsikogianni (Univ Patras)

10:30 - 11:00
PH4 (invited) - Fabrication of Nanobiomaterials though Molecular Self-assembling Peptides and Their Applications in Nanomedicine
Xiaoqin Zhao (Institute for Nanobiomedicine)

11:00 - 11:30
Coffee Break

11:30 - 12:00
PH7 (invited) - Nanostructured calcium phosphateapatites for biomedical applications: structure and properties.
Alexandre Rossi (CBPF), CA Ramirez (LNLS), J Bettini (LNLS) and C A Ramirez (CBPF)

12:00 - 12:15
H568 - Zinc-containing hydroxyapatite: synthesis, physico-chemical characterization and in vivo behaviour
Mônica Diuana Calasans - Maia (UFF), Alexandre Malta Rossi (CBPF), Inay Correa Barbosa Lima (URJF), Ricardo Lopes (URJF), Jose Albuquerque Calasans-Maia (UFF) and Jose Mauro Granjeiro (UFF)

12:15 - 12:30
H570 - Hydroxyapatite of Bovine Origin Strengthened with Bioglass
Cléone Lopes Alves Silva (IME), Luiz Eduardo Serra Carneiro Pinto (IME) and Marcelo Henrique Prado da Silva (IME)

12:30 - 12:45
H525 - Functionalized Calcium Phosphate Nanoparticles: Applications for Gene Transfer
Matthias Engel (Univ Duisburg-Essen), Anna Koutun (Univ Duisburg-Essen), Sebastian Neumann (Univ Bochum) and Rolf Heumann (Univ Bochum)

12:45 - 13:00
H528 - Structural and thermal behavior of human tooth and synthetic hydroxyapatite
Jose Reyes - Gasga (Instituto de Fisica, UNAM), Ramiro Garcia-Garcia (Instituto de Fisica, UNAM), Gaby Esthela Tiznado-Orozco (F de Odontologia, UNAM), Eslon Sanchez-Pastenes (Instituto de Fisica, UNAM) and Gabriela Gomez-Gasga (ESFM-IPN)

13:00 - 13:45
Lunch
Session chair: Rudolf Reichelt

14:30 - 15:00
PH3 (invited) - Aragonite containing otolith: a hierarchical nanostructured bio composite
Marta Pascale Martins Sant’Anna Barroso (UFRJ), Maír (UFRJ), André Linhares Rossi (UFRJ), Eleonora Kurtenbach (UFRJ) and Marcos Farina de Souza (UFRJ - Brasil)

15:00 - 15:15
H587 - Selection of a Ni-Ti Alloy and Designed of a Heat Treatment to Optimize a PDA Corrective Devices
Andrés Julian Corzo (Universidad de Los Andes) and Wilson Alexander Hor-maza (Universidad de Los Andes)

15:15 - 15:30
H613 - Hydroxyapatite Coating for Fixation of Biomedical Implants
Kanhaiya Lal Yadav (IIT Roorkee) and Aarti Mehta (NPL New Delhi)

15:30 - 15:45
H607 - Macrophage Response to UHMWPE Submitted to Accelerated Ageing in Hydrogen Peroxide
Rodolpho Francisco Rocha (UFMG/UPC-MG), Alexandra A P Mansur (UFMG) and Herman Sander Mansur (UFMG)

15:45 - 16:00
H612 - Cell-injected bacterial cellulose scaffolds for guided tissue regeneration
Fernando Vieira Berti (UFS/CBTC/CAEA), Derce de Oliveira Souza Recouvreux (UFS/CBTC/CAEA), Carlos Renato Rambo (UFS/CBTC/CAEA), Rosana Maria Ribeiro do Valle (UFS/CBTC/CAEA), Paulo Fernando Dias (UFS/CBTC/CAEA) and Luismar Marques Porto (UFS/CBTC/CAEA)

16:00 - 16:15
David Knallus (University of Califorinia), Qianqian Wang (University of California), James Weaver (University of California), Luke Chen (University of California) and Anthony Tantuccio (The Cooper Union)

16:15 - 16:30
H616 - Biomechanical analysis of new material applied to dental implants
Clara Isabel Lopez (IME Industrial de Santander) and Carlos Renato Rambo Derce de Oliveira Souza Recouvreux (UFSC/CCB/FMC), Paulo Fernando Dias (UFS/CBTC/CAEA) and Luismar Marques Porto (UFS/CBTC/CAEA)

16:45 - 17:00
H624 - Nanometer Crystalline Hydroxyapatite of Bovine Origin Strengthened with Bioglass
Rafael Pujada (CBPF), Elvis Elvis Lopez (CBPF) and Alexandre Malta Rossi (CBPF)

17:00 - 17:15
Coffee Break

17:15 - 18:00
Session chair: Mosleh Uddin

18:00 - 18:15
H619 - Evaluation of Stem Cells and 3D Scaffolds for Endothelialized Tissue Engineering
Rajiv Kumar Satsangi (RANN Res Corp), Arpan Satsangi (U of Texas Hlth Sci Ctr) and Neera Satsangi (U of Texas Hlth Sci Ctr)

Friday, September 25

Session chair: Carlos Graeff

09:30 - 10:00
PH2 (invited) - Tuning Hierarchical Architectures of 3D Polymeric Scaffolds for Cardiac Tissue Engineering
Enrico Traversa (MANA-NIMS)

10:00 - 10:15
H514 - Surfactant and acidity effects on nanofibers based on chitosan with different molecular weight
KHALID ZIANI (ULg), Abdelhafid Aqil (UFRJ), Christine Jérôme (UFRJ), Catherine Henrist (UFRJ) and Rudi Clouts (UFRJ)

10:15 - 10:30
H624 - Nanometer Crystalline Coatings of Hydroxyapatite: Surface Characterization by Grazing Incidence X-ray Diffraction from Synchrotron Radiation
Alexandre Mello (CBPF), Bernudez Rafael Pujada (CBPF), Elvis Elvis Lopez (CBPF) and Alexandre Malta Rossi (CBPF)

10:30 - 10:45
H516 - THE EFFECT OF INJECTION OF ANTICOAGULANT DRUGS TO RATS WITH FRACTURED BONES ON THE TRANSITION OF PHASES IN ORNOMIC PARTS OF BONE
AHMET HIKMET UCISIK (BOGAZICI UNIVERSITY), BURCU TUNC (BOGAZICI UNIVERSITY), EMIN MEHMET AKSOY (MINISTRY OF HEALTH), ISIL KUTBAY (GEBZE INST OF TECH) and METIN USTA (GEBZE INST OF TECH)

10:45 - 11:00
H517 - Optimization of Phospho-lipid-modified Metallic Surface Relative to Initial Osteogenic Responses
Rajiv Kumar Satsangi (RANN Res Corp San Antonio), Arpan Satsangi (U of Texas Hlth Sci Ctr) and Neera Satsangi (U of Texas Hlth Sci Ctr)

11:00 - 11:30
Coffee Break

Session chair:<article>Yannis Missirlis</article>

11:30 - 12:00
PH8 (invited) - Towards the Development of Advanced Nanomedicine by new Biomaterials
Jossein Hossein khani (School of Biomedical Eng) and Mohsen Hossein khani (Department of Cardiarc)
Tuesday, September 22

18:30 to 20:30
H501 - A Surface Tension Measurement Method for Biomaterials Applications using Digital Imaging Analysis
Norberto Mangiavacchi (UERJ), Marilia Garcia Diniz (UERJ), Francisco José Cunha Pires Soeiro (UERJ) and André Rocha Pimenta (UERJ)

H502 - A novel chitosan/hydroxyapatite biocomposite for tissue engineering applications
Geovanna Pires (UNICAMP), William Fernando Zambuzzi (UNICAMP), Carmem Verissima Ferreira (UNICAMP), Celso Bertran (UNICAMP) and Valeria Perna de Souza (UEA)

H508 - Production of Titanium Alloys for Surgical Implants by Powder Metallurgy
Vinícius Rodrigues Henrique (CTA), Sérgio Luis Petroni (CTA) and Matheus Modesto Paula (ITA-CTA)

H509 - NONSTRUCTURED SYNTHETIC HYDROXYAPATITE AND DENTAL ENAMEL HEATED E IRRADIATED BY ER, CR: YSGG CHARACTERIZED BY FTIR AND XRD
Jose da Silva Rabelo Neto (IPEN-CNEN/USP), Thiago Martinis Pereira (IPEN-CNEN/USP), Vera Lucia Muzzocchi (IPEN-CNEN/USP), Maria Ernesto Gimílida Valerina (DFI/UFS) and Denise Maria Zezelli (IPEN-CNEN/USP)

H510 - Preparation and characterization of a lamotrigine imprinted polymer and its application for drug assay in human serum
Saedeh Ahmad Mohajeri (School of pharmacy) and Soiltan Ahmed Ebrahimi (School of medicine)

H511 - Polymer films made with bacteriorhodopsin and its derivatives as an example of photosensitive material for recording, processing and storage of optical information.
Anna B Druzhko (Institute of Theoretical Physics, ICEx-UFMG), Rodrigo Ribeiro Resende, Andrea Machado Costa (CBPF), Eduard Boeriu (Wageningen UR), Margarita Enid Ramírez (UPB), David Habeych (Wageningen ur), Maria Isabel Giraldo (UPB), Pedro Cañán (UPB) and Gerrit Eggink (Wageningen UR)

H518 - Determination of material characteristics of polyethylene
Tomas Navrat (FMF BUT), Eduard Malenovsky (FMF BUT) and Petr Vosynek (FMF BUT)

H519 - Determination of mechanical properties of the bone cement
Petr Vosynek (FMF BUT), Tomas Navrat (FMF BUT) and Lubomir Houfek (FMF BUT)

H520 - In Vitro Silver Sulfadiazine Controlled Release from Chitosan Cross-linked Films
MARIA GABRIELA NOGUEIRA CAMPOS (UNIFAL), NEERA SATSANGI (LITHSCSA), HENRY RALPH RAWLS (LITHSCSA) and LUCIA HELENA INNOCENTINI MEI (UNICAMP)

H522 - BIOCOMPATIBILITY OF COLLAGEN matrices for equines abdominal wall repair
valcinir aloisio scalla vulcani (UFPR), Delphim da Graça Macoris (FCAV), Ana Maria de Guzzi Plesis (IQSC – USP) and Vanessa Sober Franco (UFU)

H523 - obtainment and CHARACTERIZATION OF COLLAGEN matrices for soft tissue uses
valcinir aloisio scalla vulcani (UFPR), Delphim da Graça Macoris (FCAV), Ana Maria de Guzzi Plesis (IQSC – USP) and Vanessa Sober Franco (UFU)

H529 - The influence of the composition of Ni and Cr in the resistance to the corrosion of Ni-Cr-Mo alloys for dental prostheses in NaF 0,05% solution.
Nilo Antonio de Souza Sampaio (UNESP), Hamilton de Félie (UNESP) and Eduardo Roberto Cadaro (UNESP)

H530 – Biomaterial Based on phEHA-co-MMA for Articular Cartilage Repairing: Kinetic Reaction Study.
Ana Lívia Senedese (Unicamp), André Luiz Jaradini (Unicamp), Vanessa Petrelli Bauresco (Unicamp) and Rubens Maciel Filho (Unicamp)

H531 – Nanostructured 3D collagen-nanotube biocomposite for future bone regeneration scaffolds
Rodrigo Ribeiro Resende (Dep of Physics, ICFX-UFMG), Edelma Eleto Silva (Dep of Physics, ICEX-UFMG), Andre Santorosa Ferlauto (Dep of Physics, ICEX-UFMG), Sergio de Oliveira (Dep of Physics, ICEX-UFMG), Rodrigo Griebel Lacerda (Dep of Physics, ICEX-UFMG) and Luiz Orlando Ladeira (Dep of Physics, ICEX-UFMG)

H532 – Molecular weight studies in biotechnologically PHB to develop a new PHB-PLA material
Diana Marcela Vanegas (UPB), Carmen Boeniu (Wageningen UR), Margarita Enid Ramirez (UPB), David Habeych (Wageningen ur), Maria Isabel Giraldo (UPB), Pedro Cañán (UPB) and Gerrit Eggink (Wageningen UR)

H535 – Myoglobin Attachment on Apatite Surface
Elena Mavroupolous Oliveira Tude (CBPF), Níce Carbonel Rocha (UFU), Andrea Machado Costa (CBPF), Eulêr Araujo dos Santos (CNRS), Amanda Tosi (CBPF) and Alexandre Malta Rossi (CBPF)

H536 – Production and Characterization of Composites PMMA/ZrO2 and PMMA/TiO2 for use as bone cement
Gabriel Augusto de Oliveira Lopes (CEFET-MG) and Sidney Nicedemos Silva (CEFET-MG)

H537 – An ibuprofen/hydroxypropyl-β-cyclodextrin hybrid material obtained by spray-drying organic solutions
Rodrigo Luis Silva Ribeiro Santos (IQ-USP) and Denise de Oliveira Silva (IQ-USP)

H538 – Characterization of collagen-chitosan scaffolds for skin tissue engineering
Lígia Lopes Fernandes (UFU/PEMM), Cristiano Xavier Resende (UFRJ/PEMM) and Glória Almeida Soares (UFRJ)

H539 – Preparation and Characterization of Crosslinked Chitosan Microspheres Impregnated with the Drug Ketoprofen
H541 – Development of a new composite for endodontic cones
Barbara Moreira da Conceição (IMA/UFRJ/Dentsply), Lelia Leila Yuan Visconde (IMA/UFRJ), Cristina Russi Guimarães Furtado (IQUERJ), Rodrigo Santanna Aguiar dos Reis (Dentsply) and Alexandre Sandri Câmara (Dentsply)

H542 – Microstructure-Mechanical Properties Correlation in a Ti-12Mo-13Nb Biocompatible Alloy
Sinara Borborema Gabriel (UFRJ), Emanuel Santos Junior (UFRJ), Carlos Angela Nunes (USP), Jean Dille (ULB) and Glória Almeida Soares (UFRJ)

H543 – Laser Surface Modification of Biomedical Ti-Mo Alloys: an in vivo study
Nilson Tadeu Camarimão de Oliveira (IQ-USP- Araraquara), Vitoria Perroti (Univ di Chieti-Italy), Hewerson Santos Tavares (IQ-USP- Araraquara), Fernando Pozzi Semeghini Guastaldi (IQ-USP- Araraquara), Giovanna Iezzi (Univ di Chieti-Italy), Adriano Piattelli (Univ di Chieti-Italy) and Antonio Carlos Guastaldi (IQ-USP- Araraquara)

H544 – Study of apatite deposition on several silicon nitride substrates
Juliana Marchi (UFABC), Cecilia Chaves Guedes e Silva (CTMSP), Eliana Cristina da Silva Rigo (FZEA-USP), Ana Helena de Almeida Bressiani (IPEN) and José Carlos Bressiani (IPEN)

H545 – Cells adhesion and proliferation on chitosan membranes with hydroxyapatite coating
Eliana Cristina da Silva Rigo (FZEA-USP), Hewerson Santos Tavares (IQ-USP- Araraquara) and Alexandre Félix Fraga (DEMa/UFS Carr)

H546 – Sustained delivery system for Bovine Serum Albumin (BSA) using Natural Rubber Latex (NRL) as matrix
Ronaldelli Donizetti Herculano (IFSC-USP), Cibele Ereno (USC-Bauru), Sérgio Augusto Catanzar Guimarães (USC-Bauru), Angela Kinoshita (USC-Bauru), Carlos Frederico de Oliveira Graeff (FC-UNESP) and Osvaldo Novais Oliveira Jr (IFSC-USP)

H547 – Metronidazole release using Natural Rubber Latex as matrix
Ronaldelli Donizetti Herculano (IFSC-USP), Sérgio Augusto Catanzar Guimarães (USC-Bauru), Gustavo Campos Belmonte (USC-Bauru), Marco Antonio Hungaro Duarte (USC-Bauru), Angela Kinoshita (USC-Bauru), Carlos Frederico de Oliveira Graeff (FC-UNESP) and Osvaldo Novais Oliveira Jr (IFSC-USP)

H548 – TGA/DSC characterization and drug release studies for a biocompatible material containing the drug ibuprofen encapsulated into polymeric cellulose acetate
Andrea Cristina Pio Santos (IQ-USP) and Denise de Oliveira Silva (IQ-USP)

H549 – Preparation, characterization, and biocompatibility of Ti-15Mo alloy used as biomaterial
José Roberto Severino Martins Junior (Unesp), Raúl Oliveira Araújo (Unesp), Carlos Roberto Grandini (Unesp), Tatiani Ayako Goto Donato (USP) and Ana Paula Rosífini Alves Claro (Unesp)

H550 – New possible candidate for use as a basis for dental cement and biomaterial
Alexandre Costari (Unifran), Katia Jorge Cufi (Unifran), Paulo Sérgio Calefi (Unifran) and Eduardo José Nassar (Unifran)

H551 – Evaluation of setting time, ions release, sealing ability and adhesion of a novel experimental endodontic cement
JOÃO CARLOS SILOS MORAIS (UNESP - ILHA SOLTEIRA) and ALAILSON DOMINGOS SANTOS (UNESP - ILHA SOLTEIRA)

H552 – Investigation of the action of acetyl groups of chitosan on phospholipid membrane models
Adriana pavinatto (USP), Jorge Augusto Deleczuk (USP), Felipe José Pavinatto (USP), Sérgio Paulo Campana-Filho (USP) and Osvaldo Novais Oliveira Jr (USP)

H554 – Dynamic elasticity modulus measured by mechanical spectroscopy of the Ti-Mo system
Renato Abdallah Naqueira (Unesp), Carlos Roberto Grandini (Unesp) and Ana Paula Rosífini Alves Claro (Unesp)

H555 – Preparation, characterization, and biocompatibility of Ti-Zr alloys for biomedical applications
Fábio Bossoi Vicente (Unesp), Diego Rafael Nesquecor Correa (Unesp), Tatiani Ayako Goto Donato (Unesp), Carlos Roberto Grandini (Unesp) and Ana Paula Rosífini Alves Claro (Unesp)

H556 – Scaffolds of Poli (ε-caprolactone) with whiskers of hydroxyapatite.
Guilherme Brasil Camargo Cardoso (UNICAMP), Sergio Lopes Ramos (UFSC), Cecília Améia de Carvalho Zavaglia (UNICAMP) and Antônio Celso Fonseca Arruda (UNICAMP)

H557 – Study of Surface Free Energy in Titanium Heart Treating
Haroldo Reis Alves Macedo (UFRRN), Marina de Oliveira Cardoso Macedo (UFRRN) and Clodomiro Alves Jr (UFRRN)

H558 – Surface modification of chitosan membranes by CH4 plasma
Marina de Oliveira Cardoso Macedo (UFRRN), Haroldo Reis Alves Macedo (UFRRN), Marcia Rodrigues Pereira (UFRRN) and Clodomiro Alves Jr (UFRRN)

H562 – Preparation, structural, and elastic characterization and biocompatibility of Ti-Nb alloys used as biomaterial
Luciano Monteiro da Silva (UNESP), Angélica Castilho Paes (UNESP), Tatiani Ayako Goto Donato (USP), Carlos Roberto Grandini (UNESP) and Ana Paula Rosífini Alves Claro (UNESP)

H564 – Preparation, structural characterization, and biocompatibility of Ti-Ta alloys used as biomaterial
Samira Lea Medina Ruiz (UNESP), Tatiani Ayako Goto Donato (USP), Carlos Roberto Grandini (UNESP) and Ana Paula Rosífini Alves Claro (UNESP)

H565 – Calculation of the Ceramic Endoprostheses Heads
Carlos Roberto Grandini (UNESP) and Ana Tatiani Ayako Goto Donato (USP), Carlos Roberto Grandini (UNESP) and Ana Paula Rosífini Alves Claro (UNESP)

H571 – Long-term implantation of zinc containing hydroxyapatite microspheres in rabbit tibia
Rodrigo Figueiredo de Brito Resende (UFF), Mônica Dianna Calasans-Maia (UFF), Alexandre Malta Rossi (CBPF) and Jose Mauro Granjeiro (UFF)

H573 – The comparison of the corrosion resistance of advanced ferritic stainless steels by Mott-Schottky approach
Rodrigo Albuquerque Marques (IPFN), Mayra Terada (EPUSP), Adonis Marcelo Salita-Silva (IPEN), Angela Fernando Padilha (EPUSP) and Isolda Costa (IPEN)

H574 – Synthesis of biodegradable amphiphilic copolymers and their application as drug carriers
Walker Soares Drumond (Universidade de São Paulo), Lilian Lacerda Almeida, (Universidade de São Paulo) and Wang Shu Hui (Universidade de São Paulo)

H575 – Study of the interface of biomaterials in osteoblastic culture
Rodney Nascimento

H577 – Biological behavior of the castor oil polyurethane containing zirconia and silica nanoparticles as graft for bone defect in the femoral diaphysis of rats
Angela Sanches Tardivo Delben (UFMS), Renato Silva Nacer (UFMS), Rodrigo Ré Poppo (UFMS), Alexandre Nakao Odashiro (UNIDERP), Janadora Schettet Silva (UNIDERP), Baldomero Kato da Silva (UNIDERP) and Paulo de Tarso Camillo de Carvalho (UFU)

H579 – Pore structure study of powder metallurgy titanium for surgical implants
Marize Varella de Oliveira (INT), Alexandre Antunes Ribeiro (INT), Andrea Barbosa Ramos de Castro (INT) and Luiz Carlos Pereira (UFRJ)

H580 – Characterization and evaluation of the compression and diametrical traction resistance of restorative dental cement modified with fibers
Maria Helena Santos (UFVJM), Lucas...
H581 - Composition and compression influence in physical-mechanical and microstructural properties of niobium - hydroxyapatite based composites. 
Gabriel Goetten Lima (UFPR), Eduardo Międziński Szczawny (UFPR), Gelson Bicaia de Souza (UFPR), Vítor Swinka Filho (UFPR), Paulo César Soares Junior (PUCPR) and Neide Kazue Kuramoto (UFPR)

H582 - Composition and compression influence in physical-mechanical and microstructural properties of niobium - hydroxyapatite based composites. 
José Leopoldo Constantino (UNESP/FCT-UNESP), Ricardo Rodrigues França (UNESP), Rogério Sanquênia Prado (IF/UFMT), Romildo Jerônimo Ramos (IF/UFMT), Luiz Everson da Silva (IQ/UFMT) and Helena Maria Petrelli (NAMO/UFSP)

H583 - A copper-isophthalate-bipyrine polymer: thermal analysis (TGA/DSC/MS) and studies about the capacity for incorporation of drugs. 
João Henrique Aduan (IO-USP) and Denise de Oliveira Silva (IQ-USP)

H584 - Preparation and Surface Characterization of TiO2 Layers on Ti-6Al-4V by Anodic Oxidation Technique.
Marina Laura Vera (CONICET-Unam), Alicia Esther Ares (CONICET-Unam), Diego Germain Lamas (CONICET-CITEPA) and Carlos Enrique Schvezov (CONICET-Unam)

H585 - Mechanical properties and electrochemical impedance of astenitic stainless steel ASTM F138 and Ti7Nb6Al alloy
André Itman Filho (IFES), Rosana Vilmar Silva (IFES) and Vivian Monteiro Azambuja (IFES)

H586 - Hardness and elastic modulus of castor oil polyurethanes after gamma irradiation.
Elaine Cristina Azevedo (UFPR), Danyel Scheidegger Soboll (UFPR/CPGEI), Salvador Claro Neto (USP) and Carlos Maurício Lenenski (UFPR)

H587 - New trend of epoxy polymers. An in vitro biological properties of epoxy polymers for medical applications
Filiberto González García (UNIFEI), Maria Elena Leyva González (UNIFEI), Alvaro Antonio Alencar de Queiroz (UNIFEI) and Olga Zazuco Higa (IPEN-USP)

H588 - Influence of sterilization methods on the properties of porous silk fibroin membranes 
Rafael Farias Wieska (UNICAMP), Andrea Cecília Dorión Rodas (IPEN), Grinia Michele Nogueira (UNICAMP) and Marisa Masumi Beppu (UNICAMP)

H589 - Thermomechanical and Biocompatibility Properties of PVDF and P(VDF-TrFE) Forming Blends Containing Natural Polymers as Additives.
Rebeca Delatorre Simões (FCT-UNESP), Miguel Angel Rodríguez-Perez (University of Valladolid), Jose Antonio de Saia Saez (University of Valladolid), Leonardo Marques (USC-Bauru), Angela Kinoshita (USC-Bauru) and Carlos José Leopoldo Constantino (UNESP/FCT - Pres Prudente)

H600 - Tailoring PHBV using variable propionate-glucose media to produce high valerate content copolymers in Chromobacterium violaceum cultures.
Claudimir Antonio Carminatti (UFSC), Derce de Oliveira Souza Recouveux (UFSC), Regina Vasconcellos Antonio (UFSC) and Luísmar Marques Porto (UFSC)

H601 - Biodegradation studies on blends of PLLA and PVP
Valdir Mano (UFSC) and Everton Luiz de Paula (UFSC)

H602 - Hydrogel: the influence of oxygen on the properties of PVP membranes
Mara Tânia Silva Alcântara (UFSC)

H603 - Evaluation of Resveratrol Incorporation in Hydrogel Matrices
Roberta Grazzielli Ramos Alves Pascoliari Momeo (IPEN), Patrick Jack Spencer (IPEN), José Maria de Sousa (IPEN), José Roberto Rogerio (IPEN), Suzé Otá Rogero (IPEN) and Ademar Benévelo Lugdo (IPEN)

H604 - FTIR and Swelling of Hydrogel: the influence of oxygen on the properties of PVP membranes
H605 - Osteointegration of poly-(3-hydroxybutyrate-co-3-hydroxyvalerate) pharmacologically scaffolds incorporated with violacine: an in vivo study
Clayton Miguel Costa (UFSC), Claudimir Antonio Carminatti (UFSC), Carlos Renato Rambo (UFSC), Derce de Oliveira Souza Recouveux (UFSC), Armando Jose da Campana (UNISUL) and Luismar Marques Porto (UFSC)

H606 - Nanofibrous electrical conductive polymer composites of bacterial cellulose and polypyrrole
Doliana Müller (UFSC / CTC / EMRC), Derce de Oliveira Souza Recouveux (UFSC / CTC / EQA), Luismar Marques Porto (UFSC / CTC / EQA), Guillerme Mariz de Oliveira Barra (UFSC / CTC / EMRC) and Carlos Renato Rambo (UFSC / CTC / EQA)

H608 - Differences in the cellular dynamic of two types of mineralizing cells given by the genetic expression.
IVET GIL CHAVARRIA (IFUNAM F ODONTOLOGIA), Jose Reyes-Gasga (IFUNAM), HIGINIO ARZATE (F ODONTOLOGIA UNAM) and LUIS FELIPE JUMENEZA GARCIA (F CIENCIAS UNAM)

H609 - Wear of TiO2 thin films deposited on a Ti-6Al-4V alloy via sol-gel technique
Miguel Angel Alterach (CONICET-Unam), Pablo Cesar Favilla (CEDIT-UNAM), Mario Roberto Rosenberger (Conicet-Unam), Alicia Esther Ares (Conicet-Unam) and Carlos Enrique Schvezov (Conicet-Unam)

H610 - Osteointegration of poly-(3-hydroxybutyrate-co-3-hydroxyvalerate) pharmacologically scaffolds incorporated with violacine: an in vivo study
Clayton Miguel Costa (UFSC), Claudimir Antonio Carminatti (UFSC), Carlos Renato Rambo (UFSC), Derce de Oliveira Souza Recouveux (UFSC), Armando Jose da Campana (UNISUL) and Luismar Marques Porto (UFSC)

H611 - Porous implants obtained using gelatin through powder metallurgy
Tamires Simpoe Goia (IPEN), José Hélio Duvaizem (IPEN), Hidetoshi Tokiishi (IPEN), José Carlos Bressiani (IPEN) and Ana Helena de Almeida Bressiani (IPEN)

H612 - Synthesis of polymer systems containing anionic polyelectrolytes and HIV-1 gag matrix protein fragments
Ekaterina Nikolaevna Karaseva (IPS RAS), Alexander Vladimirovich Serbin (IPS RAS) and Igor Leonidovich Rodionov (BIBC RAS)

H617 - Structural analysis of failures in lames-femoral implants of ASTM F-138 austenitic stainless steel
Suzanne Cristina Soares Martins (CEFET-MG), Aline Silva Magalhães (CEFET-MG), Alvaro Antonio Alencar de Queiroz (BIBC RAS) and Regina Vasconcellos Antonio (UFSC / CTC / EQA)
H618 - Physical-chemical analysis of failures in lobe-femoral prostheses of ASTM F-138 austenitic stainless steel
Aline Silva Magalhães (CEFET-MG), Suzanny Cristina Soares Martins (CEFET-MG) and Sidney Nicodemos Silva (CEFET-MG)

H619 - Rat mesenchymal stem cells and human adipose tissue-derived stem cells biocompatibility of bioactive glass/PVA
Viviane Silva Gomide (UFMG), Alessandra Arcoverde Cavalcanti Zanoni (UFMG), Silviene Novikoff (UFMG), Alfredo de Miranda Goes (UFMG) and Marivaldo de Magalhães Pereira (UFMG)

H620 - Evaluation of the stability of face coated molds for investment castings of titanium
Claudemir Bozarin (DEMa-UFSCar), Claudio Shynti Kimimani (DEMa-UFSCar), Walter Jose Botta (DEMa-UFSCar), Regis Daniel Cava (DEMA-UFSCar), Claudio Shynti Kimimani (DEMA-UFSCar) and Diego Pedroreira Oliveira (PPGCEM - UFSCar)

H621 - Failure Mechanisms in Adherence of fiberglass Posts to Dentine
Martina Cecilia Avalos (CONICET), Diana Medina (UNR) and Andrea Kaplan (UBA)

H623 - Tissue behavior in response to alginate-hydroxyapatite-capsul containing membrane
Sandra Arcoverde Cavalcanti Zonari (UFMG), Silviene Novikoff (UFMG), Aline Silva Magalhães (CEFET-MG) and Sidney Nicodemos Silva (CEFET-MG)

H624 - Characterization of chitosan modification by hydrogen plasma
Marina de Oliveira Cardoso Macedo (UFMG), Harolado Reis Alves Macedo (UFMG), Zilvam Melo dos Santos (UFERSA), Márcia Rodrigues Pereira (UFMG) and Clodomiro Alves Jr (UFMG)

H625 - Synthesis, characterization and biological activity of pure hydroxyapatite and associated with gentamicin
Christianne Philippi Horre Borges (PPQGA/UFPE), Fernando Ribeiro Ferreira (PPQGA/UFPE), Fabiane S Santos (UFPE), Fabio André Santos (UFPE), Sandra Regina Mascetti Antunes (PPQGA/UFPE), Augusto Celso Antunes (PPQGA/UFPE) and Andre Vitor Chaves Andrade (PPQGA/UFPE)

H626 - Cell proliferation of human fibroblasts on calcium phosphate based ceramics
Juliana Marchi (UFABC), Christiane Ribeiro (IPEN), Ana Helena de Almeida Bressiani (IPEN), José Carlos Bressiani (IPEN) and Marcia Marques (FIOUSP)

H627 - Surface Characterization of Ti Sand Blasted for Medical Applications
Eduardo Mołdawski Szcz (UFPR), Vinícius Hirdes Kräger (UFPR), Gelson Biscaia de Souza (UFPR) and Neide Kazue Kuroimoto (UFPR)

H628 - Investigations on Polyester Fabric Coated With Silver Using the Hollow Cathode Discharge Technique With Regard To Their Anti-Microbial Properties
Michelle Cequeira Feitor (IFJP), Thercio Henrique de Carvalho Costa (IFP), Clodomiro Alves Jr (Labplasma/UFPR), Silvia Regina Batistuzo Medeiros (LGBM/UFPR) and Maria Beatriz Matos (Cansanção Felipe) (LGBM/UFPR)

H629 - Scaffolds Based on S-Doped-A-Tcp Cement for Tissue Engineering Applications Fabricated by Indirect 3D Printing
André Luiz Jardini

H630 - Soy Protein Isolate and Poly(lactide acid) Biodegradable Blends for Controlled Release of NPK Fertilizer
Luciane Calatrava (UCS), Vanessa Schmidt (UCS) and Ingrid Nascimento Filho (UCS)

H631 - Physico-chemical analyses of distinct chitosan and their potential as quantum dots biocompatibility agents
Thataiana Montenegro Stamford (UFPE), Denise Avevedo Terorio (UFPE), Rebeca Moura Nascimento (UFPE), Thayza Montenegro Stamford (UFPE), Beate Saegerer Santos (UFPE), Adriana Fontes (UFPE) and Patricia Albuquerque Farias (UFPE)

H632 - FTIR studies of Fluorapatite coatings produced by opposing magnetron sputtering
Elvis Elvis lopez, Bermudez Rafael Pujado (CBPF) and Alexandre Mello (CBPF)

H634 - Photo – Polimerizable and Injectable Polyurethanes for Bio-medical Applications: In Vivo Tests
Elaine Ayres (UFMG), Ildes Lazarin Pereira (UFMG) and Rodrigo Lambert Oréliche (UFMG)

H635 - Characterization of a pulsed laser deposition Hydroxyapatite thin films grown, using a grazing incidence x-ray diffraction from synchrotron radiation.
Hugo Millward Riani Luna (UFU), Gustavo Paganini Canal (CBPF), Alexandre Mello (CBPF), Alexandre Malta Rossi (CBPF) and Ricardo Magnus Golvao (CBPF)

H636 - Mechanical Properties of Alginate Hydrogel for Biofabrication
Rodrigo Alvarenga Zezende (UNICAMP-BRAZIL), Paulo Jorge Bártilo (IPFL-PORUGAL), Ausenda Mendes (IPFL-PORUGAL) and Rubens Maciel Filho (UNICAMP-BRAZIL)

H638 - Hydroxyapatite precipitation on sand dollar skeleton coated by bacterial cellulose
Ona Monteiga Barreira (UFSC) and Carlos Renato Rambo (UFSC)

H639 - Nanoscale Structure of High Strength Poly(ethylene glycol)/Poly(acrylic acid) Interpenetrating Network Hydrogels from Small Angle Scattering
Dale Waters (Stanford University), Kristin Engberg (Stanford University), Rachel Parke-Houben (Stanford University), Michael Toney (SSRL) and Curtis Frank (Stanford University)

H640 - Synchrotron-based X-Ray Computed Tomography (SRµCT) imaging of Crack propagation in Human Cortical Bone
Holly Dana Barth (UC Berkeley, LBNL), Alastair A MacDowell (LBNL) and Robert O Ritchie (UC Berkeley, LBNL)

H641 - Bioactive Molecule (Pravastatin) incorporated in Layered Double Hydroxide Nano-materials
Vanessa Rodrigues Cunha (IQ-USP) and Vera Regina Leopoldo Constantino (IQ-USP)

H642 - Polyurethanes obtained from Momanos (Ricinus communis) oil
Arthur Francisco de Paiva Alcântara (UFPI), Germaine Santos Paiva (UFPI), Fernando Matos Borges (UFPI), Nougard Cardoso Batista (UFPI), Maria Rita de Mourais Chaves Santos (UFPI), Sidney Gonçalo de Lima (UFPI) and José Milton Elias de matos (UFPI)

H643 - Freeze-dried collagen membrane from porcine intestinal submucosa: a new promise of biological barrier for guided tissue regeneration
Christina Jardelino Lima (UFF), Igor Luco Castro-Silva (UFF), Driely Rodrigues Gomes (UFF), Esther Rieko Takamori (SIN), Ariel Lenthara (SIN) and Jose Mauro Granjeiro (UFF)

H644 - In vitro biocompatibility evaluation of Polyhydroxybutyrate (PHB) and poly(3-hydroxybutyrate-co-3-hydroxyvalerate) (PHBV) nanofiber meshes using human adipose derived stem cells
Alessandra Arcoverde Cavalcanti Zonari (UFMG), Silviene Novikoff (UFMG), Albino Martins (IBB), Rui Luís Reis (IBB) and Alfredo Miranda Góes (UFMG)
ICAM 2009
International Conference of Advanced Materials
Rio de Janeiro, 20-25 September 2009

SYMPOSIUM I
New Materials and Processes for Sensing and Biosensing

Auditorium: Segóvia II

Symposium Organizers:

Valtencir Zucolotto (USP, Brazil)
Santiago Sanchez-Cortes (CSIC, Spain)
Sanjeev Manohar (U. of Massachusetts, USA)
Lauro Tatsuo Kubota (Unicamp, Brazil)

Wednesday, September 23
Session chair: Valtencir Zucolotto

09:30 - 10:00
PI3 (invited) - Single molecule biodetection and multi-modality in single walled carbon nanotube optical sensors
Michael S. Strano (MIT)

10:00 - 10:15
I600 - Chemical Vapor Detection using Conducting Polymers
S.P. Surwade, V. Dua and Sanjeev Manohar (UMASS - Lowell)

10:15 - 10:30
I519 - Transport properties of nanoporous 1,2-PB membranes with tunable hydrophilicity for use in biosensors
Li Li (DTU) and Sokol Ndoni (DTU)

10:30 - 10:45
I571 - Spatial Organization of Peptide Nanotubes for Electrochemical Devices
Thiago Carvalho Cipriano, Wendel Andrade Alves, Pedro Mitshuo Takahashi and Vaní Oliveira Júnior (UFABC)

10:45 - 11:00
I575 - Towards structured-fibre based porphyrin gas sensors
George Huyang (University of Sydney), Mattias L Aslund (University of Sydney), John Canning (University of Sydney), Tony Khoury (University of Sydney), Maxwell J Crossley (University of Sydney) and Cicero Martelli (Unicamp)

11:00 - 11:30
Coffee Break

11:30 - 12:00
PI4 (invited) - Single nucleotide polymorphism detection using conjugated polymer/surfactant system and peptide nucleic acid and the myriad excitation quenching channels.
Hameed A Al Attar (OEM/University of Durham) and Andrew Monkman (OEM/University of Durham)

Thursday, September 24
Session chair: Pierre Labbé

09:30 - 10:00
PI2 (invited) - SERS of Biological Materials. From Amino Acids to Human Tissues
Marcelo M Campos - Vallette (University of Chile), Alvare E Aliaga Ceron (University of Chile) and Claudio R Clavijo (University of Chile)

10:00 - 10:15
I515 - Novel multi-walled carbon nanotubes paste electrode modified with Prussian blue: spectroelectrochemical study and its application as a hydrogen peroxide biosensor
Edson Nossa (UFPR) and Aldo José Gorgatti Zarin (UFPR)

12:00 - 12:15
I525 - Novel carbon-film-sputter-coated piezoelectric quartz crystals for electrochemical studies
Edison Moura Pinto, Carla Gouveia Caridade, David Mendez Soares (IFGW-UNICAMP) and Christopher M A Brett (Universidade de Coimbra)

12:15 - 13:00
I567 - Computational Investigation on the Carbohydrate Binding Site of Frutalin
Filipe Camargo Dal Matti Alves Lima (USP - São Paulo), Marcos Brown Gonçalves (USP - São Paulo), Valtencir Zucolotto (USP - São Carlos) and Helena Maria Petrilli (USP - São Paulo)

Health and biological materials
man Scattering: Detection of Trace Quantities of Drugs in Cells
Stefan Balint (Safarik Univ, Slovakia), Mark Kreuzer (ICFO, Barcelona, Spain), Satish Rao (ICFO, Barcelona, Spain), Goncal Badenes (ICFO, Barcelona, Spain), Pavel Miskovsky (P J Safarik University) and Dmitri Petrov (ICFO, Barcelona, Spain)

10:15 - 10:30
I521 - Enhanced Raman and Fluorescence by Metal Nanostructures
Vincenzo Giannini (IEM (CSIC), Madrid, Spain), Rogelio Rodriguez-Oliveros (IEM (CSIC), Madrid, Spain), Irene Izquierdo-Lorenzo (IEM (CSIC), Madrid, Spain), Jose Vicente Garcia-Ramos (IEM (CSIC), Madrid, Spain), Jose Antonio Sanchez-Gil (IEM (CSIC), Madrid, Spain), Otto Muskens (AMOLF, The Netherlands) and Jaime Gomez-Rivas (AMOLF, The Netherlands)

10:30 - 10:45
I526 - Characterization of the Magnitude Impedance of Ribbon-Shaped GMI Samples and their use in Transducers aimed at Biomedical Applications
Eduardo Costa da Silva (PUC-Rio), Luiz Antônio Pereira de Gusmão (PUC-Rio), Carlos Roberto Hall Barbosa (PUC-Rio) and Elisabeth Costa Monteiro (PUC-Rio)

10:45 - 11:00
I508 - (Bio-)Chemical Sensors based on Field-Effect Devices Functionalized with Carbon Nanotubes
José Roberto Siqueira Jr (USP), Arshak Poghosian (F H Aachen), Valentin Zucolotto (USP), Michael J Schoen (F H Aachen) and Osvaldo Novais Oliveira Jr (USP)

11:00 - 11:30
Coffee Break
Session chair: Lauro Kubota

11:30 - 12:00
P11 (invited) - Biosensing applications of multifunctional nanosized biomolecular devices
loubie pierre andre (af-grenoble), basit hajra hajra (af-grenoble), sandrin luidine luidvine (af-grenoble), murat pierre pierre (af-grenoble), guerente liliiane liliane (af-grenoble), van der heyden angeline angeline (af-grenoble) and renaudet olivier olivier (af-grenoble)

12:00 - 12:15
I529 - Magnetic nanoparticles as new labels for biosensing directly in living organisms
Maxim Petrovich Nikitin (MIPT), Petr Mikhailovich Vetashko (IRE RAS), Nikolay Antonovich Brusentsov (Oncocenter RAMS) and Petr Ivanovich Nikitin (GFI RAS)

12:15 - 12:30
I594 - Synthesis and Characterization of Antibody Conjugated Gold Nanoparticles for Medical Applications
Mayara Kimik Uchiyama (IQ-USP), Koiti Araki (IQ-USP), Walter Colli (IQ-USP) and Maria Julia M anso Alves (IQ-USP)

12:30 - 12:45
I511 - Promising dendrimers for biosensors construction
Alessandra Nogueira Santos (UFMG), Alvaro Antonio Alencar de Queiroz (Unicamp), jagminas irina gretien (vniief) and juan Pedro Bretas Roa (UFMG)

12:45 - 13:00
I597 - How does metallophthalocyanine molecule catalyze redox reaction at a supramolecular level?
Frank Nelson Crespilho (UFABC)

13:00 - 14:30
Lunch
Session chair: Frank Crespilho

14:45 - 15:00
I505 - Two-Photon Absorbing Nanocrystal Sensors for Ratiometric Detection of Oxygen
Emily Jane McMallin (MIT), Andrew B Greytak (MIT), Mounjir G Bawendi (MIT) and Daniel G Nocera (MIT)

15:00 - 15:15
I534 - Chalcogenide Glass Micro-lenses Fabrication for Sensing Devices
Eric Sanchez (The City College of NY and Craig B Arnold (Princeton University)

15:15 - 15:30
I536 - High refractive index silica-titania glasses for optical fiber sensing of liquid fuels
Eduardo Ona (Unicamp), Juliana Santiago dos Santos (Unicamp) and Carlos Kenichi Suzuki (Unicamp)

15:30 - 15:45
I570 - Reflection-based Au surface plasmon resonance fiber optic sensor
Paula M P Gouveia (PUC-Rio), Michael Fokine (KTH, Suede), Isabel C S Carvalho (PUC-Rio), Marco Cremona (PUC-Rio) and Arthur M B Braga (PUC-Rio)

15:45 - 16:00
I576 - Novel low-loss high-temperature stable strong fibre Bragg gratings
Matthew A. Aslund (University of Sydney), John Cunning (University of Sydney), Michael Stevenson (University of Sydney), Mattias Cook (University of Sydney) and Ciccio Martelli (Uni Cat Rio de Janerio)

16:00 - 16:15
I578 - Synchrotron radiation induced persistent luminescence of Sr2MgSi2O7:Eu2+,R3+ jorna P K Holsa (QD/UT), Hermi Felinto Brito (IQ/USP-SP), Lucas Carvalho Veloz Rodrigues (IQ/USP-SP), Mika Lastusaari (University of Turku) and Taneli Laamanen (University of Turku/ESMR)

16:15 - 16:30
I589 - Silicon Nano-tube fabrication by Using a Macroporous Silicon as Starting Material
Walter Jaimes Salcedo (Escola Politécnica - USP) and Danilo Roque Huancan (Escola Politécnica do USP)

Poster Session I
New Materials and Processes for Sensing and Biosensing
Room: Louvre
Tuesday, September 22
11:30 to 13:00
I501 - Ionic Polymer-Metal Composite Material as a Diaphragm for Micropump Devices
José Santos (IST), Bruno Lopes (IST) and Paula Costa Branco (IST)

I503 - Application of semiconductor sensors for noninvasive diagnostics
Oleg Mikhailovna Ivanova (Practic-NC), Maxim Vasilevich Chuprin (Practic-NC), Alexander Viktorovich Pislyakov (Practic-NC), Anatoly Vyacheslavovich Shevchenko (Practic-NC), Vladimir Valentinovich Kalinovsky (VNIEF) and Vladimir Vladimirovich Kanonov (VNIEF)

I504 - New polyphthalocyanines in medical diagnostics: development of H2O2 detection
Sergei Arkadievich Kruvotsev (Practic-NC), Oleg Mikhailovna Ivanova (Practic-NC), Maxim Vasilevich Chuprin (Practic-NC), Alia Ilirichna Rodrigues Lima (Unicamp) and Auro Atsushi Tanaka (UFMA)

10:30 - 10:45
I597 - Carbon paste electrode modified with pine kernel peroxidase immobilized on pegylated polyurethane nanoparticles for dopamine detection
Mauricio Bedin Fritzner-Garcia (UFSC), Inês Rosane Oliveira (UFSC), Betina Ghiel Zanetti-Ramos (UFSC), Orlando Fatibello-Filho (UFSCar), Valdir Solad (UFSC), Andre Avelino Pasa (UFSC) and Tânia Beatriz Creczynski - Pasa

10:45 - 11:00
I595 - 3-n-propyl-1-azonia-4-azabicyclo[2.2.2]octane silsesquioxane chloride: Simultaneous voltammetric determination of ascorbic acid, dopamine and uric acid
Jacqueline Anquela (UNICAMP), Hérica Aparecida Magossato (UNICAMP), Andre Ricardo Ramos (UNICAMP) and Yoshi-taka Gushikem (UNICAMP)
I506 - SiO2/SnO2 Mixed Oxide: Characterization and Application in electrochemical sensor
Lucas Samuel Soares dos Santos (UNICAMP) and Yoshitaka Gushikem (UNICAMP)

I507 - Characterization of Encapsulated Magnetic Nanoparticles for Immunoassays by a Modular Hall Magnetometer
Jefferson Ferroza Araújo (PUC-Rio), Antonio Carlos O Bruno (PUC-Rio) and Sonia Renaux Wanderley Louro (PUC-Rio)

I510 - Active waveguides made from porous anodic alumina filled with luminescent polymer: an optical sensor proposition
Francisco Trivinho Strixino (UFSCar-Sorocaba, Horacio Guerra (IFSC-USP), Caroline Sanz Gomes (IFSCar), Ernesto Chaves Pereira (USFcar) and Francisco Gontijo Guimarães (IFSC-USP)

I512 - Electrochemical characterization of electroactive nanocomposites containing cashew gum (Anacardium occidentale L) and modified polyaniline
Senio Bitencourt Araújo Barros (UFPI), Cleide Maria Leite de Souza (UFPI), José Ribeiro dos Santos Júnior (UFPI), Valteric Zucolotto (UFPA) and Carla Sergio Bitencourt Araújo Barros (UFPI), Sergio Bitencourt Araújo Barros (UFPI) and Valtencir Zucolotto (UFPA)

I513 - Evaluation of a Ni-Zn ferrite for use in temperature sensors
Vera Lúcia Othério de Brito (IEAv), Luis Fernando Álvares de Almeida (INAP), Anderson Kenji Hirato (IEAv) and Antonio Carlos da Cunha Migliano (IEAv)

I514 - Complex permittivity and permeability of a Ni-Zn ferrite at different temperatures in the 50-1500-MHz range
Antonio Carlos da Cunha Migliano (IEAv), André Luiz Córtez (IEAv), Vera Lúcia Othério de Brito (IEAv) and Ricardo Teixeira de Carvalho (IEAv)

I516 - Characterization of Nanostructured Films to be Applied in Biosensors for Glucose and Sucrose
Rafael Furlan Oliveira (UNESP), Marli Leite Moraes (UFSCar) and Marystela Ferreira (UFSCar)

I517 - Layer-by-layer films of latex, natural gum and carboxy-methyl-chitosan
Celina Massumi Miyazaki (UFABC), Adriana Pavinatto (USP), Felipe José Pavinatto (USP), Marisela Ferreira (UFABC), Carla Eiras (UFPI), Antonio Riui Jr (UFSCar) and Osvaldo Novais Oliveira Jr (USP)

I518 - Planar Hall Effect in amorphous ribbons of Co5Fe5Si15B10
Lucíte Pereira Gonçalves (DACI-UFPE) and Fernando Luiz de Araújo Machado (UF-UFPE)

I520 - Ascorbic acid electro-oxidation by modified electrodes: Ppy and Ppy/Ni(OH)2 films
Marcelo Rodrigues Da Silva (UNESP)

I522 - Detection of Polychlorinated Edifices by Surface-Enhanced Raman Scattering on Silver Nanoparticles Functionalized with a,c,c-Aliphatic Diamines
Santiago Sanchez – Cortes (IEM (CSIC)), Luca Guerini (IEM/CSIC), IRENE IZQUIERDO-LORENZO (IEM (CSIC)), Jose Vicente Garcia-Ramos (IEM (CSIC)) and Concepcion Domingo (IEM/CSIC)

I523 - Synthesis of SiO2/C-graphite mesoporous ceramic material and their electrochemical study
Abdur Rahim (UNICAMP), Leliz Ticona Arenas (UNICAMP), Sergio Bitencourt Araújo Barros (UNICAMP) and Yoshitaka Gushikem (UNICAMP)

I524 - Nanostructured hydroxyapatite coating on monocrysaline silicon for BioMEMS
Luci Cristina de Oliveira Vercik (FEM-UNICAMP), Eliana Cristina da Silva Rigo (FZEA-USP), André Vercik (FZEA-USP) and Cecília Amélia de Carvalho Zavaglia (FEM-UNICAMP)

I527 - Novel biosensor combining conductimetric technique with a MOSFET transducer
Andrés Vercik (ZAB-FZEA-USP)

I528 - Gelatin films crosslinking with glutaraldehyde for use in biosensors: influence of the concentration and the reticulation time
Eliana Cristina da Silva Rigo (FZEA-USP), Andrés Hércules Devittio (FZEA-USP), Lucas Mira Buzone (FZEA-USP), Alessandra Granato (UNICAMP), Cristina Pacheco Soares (UNICAMP), Luci Cristina de Oliveira Vercik (FEM-UNICAMP) and André Vercik (FZEA-USP)

I530 - Transducers based on gold nanowires arrays.
Cristian Vera Oyarce (USACH), Maríza Páez Collío (USACH), Jorge Pavez Irrazabal (USACH), Carlo Silva Molina (USACH) and Esteban Vargas Rojas (USACH)

I531 - Low-cost biosensors based on tyrosinase for analyzing phenols in aqueous media
Rodrigo Lins Papulii (IFSC-USP) and Débora Gonçalves (IFSC-USP)

I532 - Polypropylene composite films prepared by Square Wave Cyclic Voltammetry
Nam-Thang Pham (INRS-EMT), Ana Correia Tavares (INRS-EMT) and Le Dao (INRS-EMT)

I533 - SiO2/Nb2O5/graphite carbon ceramic conducting material: preparation, characterization, and its use as electrochemical sensor for 4-aminophenol
Leliz Ticona Arenas (UNICAMP), Thiago da Cruz Carevare (UNICAMP) and Yoshitaka Gushikem (UNICAMP)

I537 - Incorporation of Ag Nanoparticles into Membrane Mimetic Systems Composed by Phospholipid Layer-by-Layer (LbL) Films to Achieve Surface-enhanced Raman Scattering as a Tool in Drug Interaction Studies
Pedro Henrique Benites Aoki (FCT-USP), Priscila Alessio (FCT-USP), Jose Antonio de Saja Saez (University of Valladolid) and Carlos José Leopoldo Constantino (FCT-USP)

I538 - Taking the Advantage of Raman Scattering on Silver Nanoparticles Functionalized with ω-Aliphatic Diamines for 4-aminophenol preparation, characterization, and possible application of oxygen sensing based on photodegradation
Yoshitaka Gushikem (UNICAMP) and Fernando Luiz de Araújo Machado (UNICAMP)

I539 - Fluorescent photoproducts for 4-aminophenol
Christiana Andrade Pessoa (UEPG), Tatiane Skeika (UEPG) and Cristiane Zuconelli (UEPG)

I540 - Preparation of carbon materials
Marcelo Rodrigues Da Silva (UNESP), Priscila Alessio (FCT-UNESP), Maria Luz Rodríguez Méndez (UNESP), Priscila Alessio (FCT-UNESP) and Pedro Henrique Benites Aoki (FCT-UNESP)

I541 - Equivalence of Native and Recombinant AntinM–Carboxydrates Recognition Evaluated by Eletrogravimetric Technique
Naira Caneveralo Pesquero (IQ-Araquara, UNESP), Paulo Roberto Bueno (IQ-Araquara, UNESP), Fabio Lima Leite (UFSCar), Carlos Gomide Freitas (UFSCar) and Osvaldo Novais Oliveira Jr (USP)

I542 - UV-Vis and GCMS analyses of 5,10,15,20-tetraphenylnporphyrin and tetraphenylporphyrin cobalt LB films for chemosensing applications
Nelicio Faria de Sales (UFMG) and Herman Sander Mansur (UFMG)

I543 - Investigation on the Bacterial Effects of Silver-Chitosan Nanobiocomposites
Elías Bemi (IFSC-USP), Valtencir Zucolotto (IFSC-USP) and Coé Ribiero de Oliveira (Cpapdia-Embrapa)

I544 - Electric characterization by current-voltage curves in samples of human DNA with human immunodeficiency virus (HIV)
Carlos Augusto Andrade (Universidad del Cauca), Carlos Andres Mendez (Universidad del Cauca), Leonardo Salazar (Universidad del Cauca), Gilberto Bolaro (Universidad del Cauca), Jesus Cabrera (Universidad de Nariño) and Patricia Velez (Universidad del Cauca)

I545 - Design of a Nanobiosensor using Molecular Modeling Techniques
Eduardo de Faria Franco (USP), Osvaldo Novais Oliveira Jr (USP), Eduardo Martins Lopes (USC), Luiz Carlos Gomide Freitas (USFcar) and Fábio Lima Leite (USFcar)

I546 - Force spectroscopy for Citrus Tristeza Virus antigen/antibody immobilized at SiOx surface
Alberto Luis Dario Moreau (IPGW/UNICAMP), Luís Antonio Peroni (IB/UNICAMP), José Raimundo Ribeiro dos Reis (IB/UNICAMP), Dagmar Ruth Stach-Machado (IB/UNICAMP) and elmer augusto cueba quevara (PUC-Rio), Cassia Ribeiro Panciano (PUC-Rio) and Sonia Renaux Wanderley Louro (PUC-Rio)
I550 - Influence of Polyelectrolyte on the Electrochemical Response of Single-Walled Carbon Nanotubes-Modified Electrodes for Biosensing

Leonardo Eid Okamoto Iwaki (USP), Juliano Elvis Oliveira (UFSCar), Pedro Henrique Benites Aoki (FCT-UNESP), Luiz Henrique Capparelli Mattos (Embrapa), Carlos José Leopoldo Constantino (UNESP/FCT - Pres. Prudente), Valtercinz Zaculotto (USP) and Luiz Henrique Capparelli Mattos (Embrapa)

I551 - Immobilization of Single Walled carbon nanotubes on conducting polymers modified electrodes

Juliano Elvis Oliveira (UFSCar), Leonardo Eid Okamoto Iwaki (USP), Pedro Henrique Benites Aoki (FCT-UNESP), Carlos José Leopoldo Constantino (UNESP/FCT - Pres. Prudente), Valtercinz Zaculotto (USP) and Luiz Henrique Capparelli Mattos (Embrapa)

I552 - The interaction of water with Langmuir films of amphilic amines as a function of pH probed by π-Å isotherms and SFG spectroscopy

Thiers Massami Uehara (IFSC-USP) and Paula Barbeitas Miranda (IFSC-USP)

I553 - Microwave assisted synthesis of nanostructured oxides and their applications

Ana Gabriela Levy (CNEA-UNSAM), Joaquin Gonzalo Sacoanell (CNEA-CONICET), Javier Curiale (CONICET-CNEA), Horacio E Troiani (CONICET-CNEA), Mara Granada (CONICET-CNEA), Rodolfo Daniel Sanchez (CONICET-CNEA) and Pablo Levy (CNEA and CONICET)

I554 - Structural Characterization of Cobalt Tetrasulfonated Phthalocyanine Immobilized in Nanostructured Thin Films

Lilian Maria Pessôa da Cruz Centurion (USP), Wanida da Conceição Moreira (UFSCar) and Valtercinz Zaculotto (USP)

I555 - Polyaniiline nanofibers obtained by pressurized fluid toward gas sensors construction

Cláudia Steffens (Cnpdia-Embrapa), Alexandre Manzoli (Cnpdia-Embrapa), Rafaela T Paschoalin (Cnpdia-Embrapa), Elton Franceschi (URI - Campus de Erechim), Fernanda Castilhos Corazza (URI - Campus de Erechim), José Vadamir Oliveira (URI - Campus de Erechim) and Paulo Sergio de Paula Herrmann (Cnpdia-Embrapa)

I556 - Immobilization of Tyrosinase in Langmuir-Blodgett (LB) films for biosensing

Felipe José Pavinatto (USP-IFSC), Edson Giuliani Ramos Fernandes (USP-IFSC), Maria Luiz Rodrigues Mendes (UFlv - ETSII), Jose Antonio da Saoa Saez (UFlv - FC), Valtercinz Zaculotto (USP-IFSC) and Osvaldo Novais Oliveira Jr (USP-IFSC)

I557 - The substrate effect in the developing disposable sensor using line patterning technique of graphite

Alexandre Manzoli (Cnpdia-Embrapa), Cláudia Steffens (Cnpdia-Embrapa), Rafaela T Paschoalin (Cnpdia-Embrapa), Pedro Cezar Zavitskis (Cnpdia-Embrapa) and Paulo Sergio de Paula Herrmann (Cnpdia-Embrapa)

I558 - Structural and Topographical Characterization of Carbon Nanotubes Immobilized on Lipid Monolayers: Applications as Biomembrane Models

Juliana Carlos Cancino (IFSC/IFSC-USP), Thayanne Morimoto Nobre (IFSC-USP), Sergio Spinola Machado (IFSC-USP) and Valtercinz Zaculotto (IFSC-USP)

I559 - Structural characteristics and properties of nanocrystalline WO3/TiO2-based powders and thin films for humidity sensors

Noemia M. Zoratti (Sencer Ltda), Mariane Santos do Carmo (IFSC-USP), Adenilton José Chiquito (IFSC-USP) and Elson Longo (Unesp-Araçarara)

I560 - Piezoresistive Response of ITO films deposited at room Temperature by Magnetron Sputtering

Luiz Antonio Rasia (Escola Politécnica), Ronaldo Domingues Mansaro (Escola Politécnica - USP), Larissa Rodrigues Damiani (Escola Politécnica - USP) and Carlos Eduardo Viana (Escola Politécnica)

I562 - Multipolymetric planar optical waveguides for wavelength converters and biosensing application

Francisco E Vonitio Guimarães (IFSC/USP), Mike Melo do Vale (IFSC-USP), Nirton Cristi Vieira (IFSC-USP), José Roberto Tocznio (IFSC-USP) and Leni Campos Aczkalud (UFPR)

I563 - Molecular Interactions and Assembly of the Antimicrobial Peptide Indolidin in Layer-By-Layer Films

Luiz Carlos Salay (USP) and Valtercinz Zaculotto (USP)

I564 - Study of polyaniline films morphological properties with AFM in optical pH sensors

Rafaela T Paschoalin (Cnpdia-Embrapa), Cláudia Steffens (Cnpdia-Embrapa), Alexandre Manzoli (Cnpdia-Embrapa) and Paulo Sergio de Paula Herrmann (Cnpdia-Embrapa)

I565 - Synthesis, characterization and functionalization of magnetic nanoflowers

Paulina Elena Lloret (INTI), Carlos Moina (INTI), Gloria Longinotti (INTI), Gabriel Omar Ybarra (INTI) and Leandro Socolovsky (UBA)

I566 - Stability study of conducting polymers as gas sensors

John Paul Hempel Lima (EPUSP) and Adnei Melges Andrade (EPUSP, IEE-USP)

I568 - The Relative Humidity and Electrical Field Effect in the Electrical Properties of Ceramic System SiO2-Fe2O3-MoO3 Added of Nb2O5

Mauro Miguel Costa (UFMT), Tatiana Sairna Maria Fernandes (UFSC), Marcelo Antonio Silva (UFSC), Antonio Sergio Bezerra Sombra (UFSC) and Cleber Cândido Silva (UFSC)

I572 - Columnar structures of polypyrrole for solid-phase microextraction

Éverton Fabian Jasinski (UFSC), Maria Luisa Sartorelli (UFSC), Eduardo Caraske (UFSC) and Kalya di Pietro Roux (UFSC)

I573 - Polyaniline/Gold Nanoparticles: Assembly and Biological Applications

Raimundo Rômulo Martins Júnior (UFPE), Cleylton Bezerra Lopes (UFPE), Marcelo Antonio Silva (UFPE), Marilia Oliveira Fonseca Goulart (UFAL), Phabyanno Ribeiro de Souza (UFPE) and Lauro Tatsumi Kubota (Unicamp)

I574 - Titanium oxide films as sensitive membrane in field effect devices

Angelica Denardi de Barros (UNICAMP), Ana Maria Faenza (UNICAMP), Atha Shokri (UNICAMP), José Alexandre Diniz (UNICAMP)

I577 - Studies of structural, microstructural, electrical and magnetic properties of REFeO3 (RE = Gd, Eu, Sm)

Mylena Pinto Nascimento (UFPE), Ingrid Tavares Weber (UFPE), Petrucio Barroso da Silva (UFPE), Ana Augusta Mendonça Oliveira (UFPE) and José Albinho Oliveira de Aquiar (UFPE)

I579 - Magnetic Iron Oxide Nanomaterials: Synthesis, Stabilization, Characterizations and Applications

Valério Spolon Marangoni (IFSC-USP), Valtercinz Zaculotto (IFSC-USP) and Marcelo Mulato (IFCLRP-USP)

I580 - Development of planar microfluidexs using FeNi and FeNiCo electrodeposited cores

Tobias Heimfarth (IFCLRP-USP) and Marcelo Mulato (IFCLRP-USP)

I581 - Kinetics and Stability Studies of PPID/NiTsPC LbL Films as pH Sensitive Membrane

Nirton Cristi Vieira (IFSC-USP), Edson Giuliani Ramos Fernandes (IFSC-USP), Valtercinz Zaculotto (USP), Alvaro Antonio Alencar de Queiroz (UNIFEI) and Francisco E Gontijo Guimardes (IFSC-USP)

I582 - EGFT nanostructured manganese oxide and carbon nanotubes as pH sensors

Giulio Ribeiro Silva, Luciano Andrey Montoro (UNILS), José Maurício Rosolen and Marcelo Mulato

I583 - A new chemical sensor for NADH based on multi-walled carbon nanotubes and xanthurenic acid

Francisco de Assis dos Santos Silva (UFAL), Clevilton Bezerra Lopes (UFAL), Ervaldo Oliveira Costa (UFAL), Paula Rogério Miranda (UFAL), Marilia Oliveira Fonseca Goulart (UFAL), Phabyanno Rodrigues Lima (Unicamp) and Lauro Tatsumi Kubota (Unicamp)

I584 - New nanostructured platforms based on nicosamide immobilized on multi-wall carbon-nanotubes for electrocatalytic NADH oxidation

Francisco de Assis dos Santos Silva (UFAL), Clevilton Bezerra Lopes (UFAL), Fabiane Caixic Abreu (UFAL), Marilia Oliveira Fonseca Goulart (UFAL), Phabyanno Rodrigues Lima (Unicamp) and Lauro Tatsumi Kubota (Unicamp)

I585 - Eletrodetection of oligonucleotide hybridization on poly(4-aminophenol) microarrays

Cristina Honorato Castro (UFU), Alex Ander Oliveira (UFU), Erick Guimarães Franco (UFU), João Marcos Madurro (UFU) and Ana Grazi Brito-Madurro
ROBERTO ALVES DE SOUSA LUZ (UFPI), WELTER CANTANHÉDE DA SILVA (UFPI), MARCCUS VICTOR ALMEIDA MARTINS (UFPI), FRANK NELSON CRESPILHO (UFABC), JOSÉ ROBERTO SIQUEIRA JR (USP), Valtencir Zucolotto (USP) and Osvaldo Novais Oliveira Jr (USP)

103 - The Use of a PANI/Caraia-Gum Composite in Electrochemical Sensor for Herbicide Quantifications
Karen Wohnrath (UEPG), Dyovani Coelho (UEPG), Jarem Raul Garcia (UEPG), Christiana Andrade Pessoa (UEPG) and Carla Eiras (UFPI)

104 - Array of Ion-Sensitive Field Effect Transistors based pH sensors using SiNx/SiOxNy Stacked Layer Gate Dielectric
Jair Fernandes de Souza (CT-PIM/UNICAMP), Peter Jürgen Tatsch (UNICAMP) and José Alexandre Diniz (UNICAMP)

105 - Immobilization of Au Nanoparticles within Layered Nanoarchitectures for Application as Arsenic Sensor
GUILHERME BUENO CHRISTOFOLLETTI (USP), FRANK NELSON CRESPILHO (UFABC) and Valtencir Zucolotto (USP)

106 - Zirconia-titania porous ceramic as soil moisture sensor element in controlled environments
Rodrigo de Matos Oliveira (LAS/INPE) and Maria do Carmo Andrade (LAS/INPE)

107 - Photonic Nanodevice for Monitoring of Potable Water
Ana Clara Raposo Salazar (UFPE) and Petrus Santa-Cruz (UFPE)

108 - Microstructure and crystalline phase characterization of multilayered ZrO₂-TiO₂ ceramic for applications as air humidity sensor
Marina Córtes Pires (INPE), Maria do Carmo Andrade (INPE), Rodrigo de Matos Oliveira (INPE) and Sergio Luiz Mineiro (INPE)

109 - Anchoring vesicles to form Tethered Bilayers; A facile approach to model cell membrane
H Basit, A Van Der Heyden and Pierre Labbé
Wednesday, September 23

**Session chair:** To be informed

**PJ4 (invited) – High Energy Density Cathodes for Next Generation Lithium Ion Batteries**

Arunagam Manthiram ([Univ of Texas - Austin])

09:30 - 10:00

**PJ1 (invited) – A challenging route towards 3D-integrated all-solid-state batteries**

Peter Hl Notten ([Eindhoven University])

10:00 - 10:30

**PJ3 (invited) – Optimization of Electrodes for Portable Fuel Cells in relation to the nature of the fuel**

Jean – Michel Leger ([University of Poitiers]), Christophe Coutounceau ([University of Poitiers]), Steve Bonarot ([University of Poitiers]) and Teiko Nappom ([University of Poitiers])

10:30 - 10:45

**J502 – Photocatalytic Hydrogen Production and Solar Energy Conversion by an Oxide Semiconductor**

Zou Zhigang

10:45 - 11:00

**J504 – A Versatile Electrode Technology for Energy Storage and Conversion**

Grant Norton ([Washington State University]), David McIlroy ([University of Idaho]), Giancarlo Corti ([GoNano Technologies]), Timothy Cantrell ([GoNano Technologies]), Miles Beaux ([GoNano Technologies]) and Tejasvi Prakash ([GoNano Technologies])

11:00 - 11:30

**Coffee Break**

Session chair: Gláucia Goulart Silva

11:30 - 12:00

**PJ5 (invited) – In search of new cobalt conductive additives for the positive electrode of high power Ni-MH cells**

Liliane Guerlou – Dermougues (CNRS)

12:00 - 12:15

**J505 – Wettability and Electrochemical studies of macroporous MnO2 films in hydrophobic and hydrophilic ionic liquids**

Tania Machado Benedetti ([IQ-USP]), Vinícius Romero Gonçalves ([IQ-USP]), Denise Freitas Siqueira Petri ([IQ-USP]), Susana Inês Cordoba de Torresi ([IQ-USP]) and Roberto Manuel Torresi ([IQ-USP])

**Poster Session J**

**Materials for Portable Energy Sources**

**Room:** Louvre

Tuesday, September 22

11:30 to 13:00

**J506 – Thick mesoporous TiO2 nanostructured films obtained by screen-printing for application in dye-sensitized solar cells**

Elaine Cristina Muniz ([IQ-Araquara, UNESP]), Rodrigo Parra ([INTEMCA]), Márcio de Sousa Góes ([IQ-Araquara, UNESP]), Josiel José da Silva ([IQ-Araquara, UNESP]), Ednann Joanni ([IQ-Araquara, UNESP]), José Arana Varel ([IQ-Araquara, UNESP]) and Paulo Roberto Bueno ([IQ-Araquara, UNESP])

**J508 – Voltage-Composition profile and structural analysis of low and high temperature Li<sub>x</sub>CoO<sub>2</sub> cathodes**

Naira Canevarolo Pesquera ([IQ-Araquara, UNESP]), Paulo Roberto Bueno ([IQ-Araquara, UNESP]), Fábio Ferreira Furlan ([LNS]) and Elisabete Inacio Santiago ([IPEN])

**J509 – Carbon Nanotube/felt composite as matrix for electrodes of lithium ion batteries**

José Mauricio Rosolen ([University of São Paulo]) and Elaine Yoshiko Matsubara ([University of São Paulo])

**J510 – Synthesis of SnO2 nanoparticles for Dye-Sensitizer Solar Cells**

Josiel José da Silva ([IQ-Araquara, UNESP]), Rodrigo Parra ([INTEMCA]), Elaine Cristina Muniz ([IQ-Araquara, UNESP]), Márcio de Sousa Góes ([IQ-Araquara, UNESP]), Ednann Joanni ([IQ-Araquara, UNESP]) and Paulo Roberto Bueno ([IQ-Araquara, UNESP])

12:15 - 12:30

**PJ2 (invited) – Carbon nanotube/polymeric electrolyte interface**

Gláucia Goulart Silva ([UFMG]) and Raquel Silveira Borges ([UFMG])

12:30 - 13:00

**J521 – Synthesis and Characterization of Electrospun WO<sub>3</sub>/PVDF nanofibers on FTO and their use as hydrogen gas sensors**

BERTRAND TUMBAIN SONE ([Thembisa LABS-South Africa])

12:30 - 13:30

**J512 – Development of Mg-alloy for hydrogen storage and processing by severe plastic deformation**

Gisele Ferreira de Lima ([UFSCar]), Gisele Ferreira de Lima ([PPGCEM-UFSCAR]), Alberto Moreira Jorge Jr ([UFSCar]), Claudio Shyinti Kiminami ([DEMA-UFSCar]), Walter Jose Botta ([DEMA-UFSCar]) and Claudemiro Bolfarini ([DEMA-UFSCar])

12:30 - 13:00

**J513 – Complex hydrides Mg<sub>2</sub>(Fe,Co)H<sub>y</sub> for hydrogen storage materials**

Marcos Meyer ([IFLP-FCE UNLP]), Luis Mendoza Zenis ([IFLP-FCE UNLP]) and Lorena Baum ([IFLP-FCE UNLP])

12:30 - 13:00

**J514 – Changes in the optical response of GaSb grown over GaInAsSb films and GaSb substrates**

Jhon Joao Prias Barampan ([Universidad del Quindío]), Liliana del Socorro Tirado-Mejia ([Universidad del Quindío]), José Fernando Gómez Cortés ([Universidad del Quindío]), Ana Patricia Cardona Echeverri ([Universidad del Quindío]), Marivel E. de los Rios Londoño ([Universidad del Quindío]), Leonardo Torres Londoño ([Universidad del Quindío]) and Hernando Calderón Ariza ([Universidad del Quindío])

12:30 - 13:00

**J515 – Synthesis and characterization of the composite La0.50Li0.50TiO3/PANI for application in lithium batteries**

Silvia Leticia Fernandes ([UNESP/Bauru]), Alejandra Hortencia Miranda González ([UNESP/Bauru]) and Carlos Frederico de Oliveira Graeff ([FC-UNESP])

12:30 - 13:00

**J516 – Characterization of Ni-electrodeposited on carbon flexible mesh and stainless steel mesh for electrodes in Alkaline Membrane Fuel Cell (AMFC)**

Luciana Schmidlin sanches ([UFPR]), Rafael Bertier Valencia ([UFPR]), Elise Meister Sommer ([UFPR]), Sandro Campos Amico ([UFGRS]), Haroldo Araujo Ponte ([UFPR]) and José Viríatio Coelho Vargas ([UFPR])

12:30 - 13:00

**J517 – Direct Synthesis of Nanocrystalline Oxides by Polyol-Mediated Method**

Doyue Iara dos Santos ([UNESP/Bauru]), See-How Na ([PS/Switzerland]), Sau-Yen Chew ([UOW/Australia]), Camilla dos Santos Zanatto ([UNESP/Bauru]), Alejandra Hortencia Miranda González ([UNESP/Bauru]), Shi-Xue Dou ([UOW/Australia]) and Hua-Kun Liu ([UOW/Australia])

12:30 - 13:00

**J519 – Structural and Physical Properties of the Double Layer Perovskite System ReBaFe2O5+w (Re=Rare Earth): Possible Application as Anode for Solid Oxide Fuel Cells – SOFC**

Rogério Lúcio Almeida ([IFGW-UNICAMP]), Mirella Lorynne Alcântara ([UnB]) and Oscar Ferreira de Lima ([IFGW- UNICAMP])

12:30 - 13:00

**J520 – Characterization and study of the electrolyte’s solid base of Alkaline Membrane Fuel Cell (AMFC) with C/Pt electrode**

Elise Meister Sommer ([UFPR]), Luciana Schmidlin sanches ([UFPR]), Rafael Bertier Valencia ([UFPR]) and José Viríatio Coelho Vargas ([UFPR])

12:30 - 13:00

**J522 – Bias-Assisted Sputtering of Gadolinia–Doped Ceria Interlayers for Solid Oxide Fuel Cells**

Fabio Coral Fonseca ([IPEN]), Sven Uhlenbruch ([Forschungszentrum Juelich]), Ronan Nedélec ([Forschungszentrum Juelich]) and Hans Peter Buchkremer ([Forschungszentrum Juelich])

12:30 - 13:00

**J523 – 2Mg–Fe alloys processed by hot-extrusion: Processing temperature influence in the hydrogenation properties**

Gisele Ferreira de Lima ([UFSCar]), Sebastião Garroni ([IAB]), Maria Dolors Gisele Ferreira de Lima ([UFSCar]), Sebatiano Garroni ([UAB]), Santiago Sunhach ([IAB]), Claudio Shyinti Kiminami ([DEMA-UFSCar]), Walter Jose Botta ([DEMA-UFSCar]) and José Viríatio Coelho Vargas ([UFPR])

12:30 - 13:00

**J524 – Effect on heat transfer of surface modifications caused by pool boiling using –Al2O3-water**

Hans Petar Buchkremer ([Forschungszentrum Juelich])
nanofluid
Tamara Lehmkuhl Coelho (UFSC), Julio
Cesar Passos (UFSC), Enio Fedone Ban-
darra Filho (UFU), Gherhardt Ribatski
(USP-São Carlos), Helcio Rangel Bar-
reto Orlande (UFRJ) and José Alberto
dos Reis Parise (PUC-Rio)

SYMPOSIUM K
Innovation in Fuel Cells: from Materials
to Novel Devices

Auditorium: Itamaraty

Symposium Organizers:

Enrico Traversa (MANA – National Institute for
Materials Science (NIMS), Japan)
Marcelo Linardi (IPEN, Brazil)
Reginaldo Muccillo (IPEN, Brazil)
Eric D. Wachsman (U. of Florida, USA)
Ernesto R. Gonzalez (USP, Brazil)

Energy and environment
Tuesday, September 22

Session chair: To be informed

09:30 - 10:00
PK3 (invited) – Processing and Properties of Mixed Conductor Membranes for Oxygen Transport in Energy Systems

Diego Pereira Tarragó (UFRGS) and Gabriela Leyva (CNEA), Juan Peña-Fuentes (CINSO, CONICET-CITEFA), Ana Fabbri (MANA-NIMS), Alessandra D Epifanio (TOR Vergata), Elisabetta Di Bartolo (TOR Vergata), Silvia Licoccia (TOR Vergata) and Enrico Traversa (MANA-NIMS)

10:00 - 10:15
K505 – Exploring Solvent-Free Citrate–Nitrate Auto-Combustion for the Synthesis of SOFC Electrocatalsists

Francesca Satya Deganello (ISMN-CNR), Leonardi Francesca Liotta (ISMN-CNR), Giuseppe Pantaleo (ISMN-CNR), Giuseppe Marci (DICP-MUNIPA), Enrico Traversa (MANA-NIMS) and Edoardo Magnone (MANA-NIMS)

10:15 - 10:30
K561 - Performance of nanostructured perovskite-type cathodes for IT-SOFCs

Leandro Marcelo Acuña (CINSO, CONICET-CITEFA), Joaquin Gonzalo Sacanell (CNEA-CONICET), Rodolfo Oscar Fuentes (CINSO, CONICET-CITEFA), Ana Gabriela Leyva (CNEA), Juan Peña-Martínez (ULL), Pedro Nuñez (ULL) and Diego Germán Lamas (CINSO, CONICET-CITEFA)

10:30 - 11:00
PK2 (invited) – Innovative microstructures of MIEC cathode for IT-SOFCs

E Di Bari (LEPMI)

11:00 - 11:30
Coffee Break

Session chair: To be informed

11:30 - 12:00
PK5 (invited) – Nanostructured Cobaltite Cathodes for Intermediate Temperature Solid Oxide Fuel Cells

A Serquis (CONICET)

12:00 - 12:15
K527 – Characterization of La1-xSrxMnO3 (x=0,1) powders for cathode application in SOFCs obtained by combustion synthesis

Diego Pereira Tarragó (UFRGS) and Vania Caldas Sousa (UFRGS)

12:15 - 12:30
K502 – Synthesis and Characterization of potential anodic materials for SOFCs based on La0.80Sr0.20Cr0.80Fe0.20O3 system

Jairo Alberto Gómez (UNIVERSIDAD NACIONAL DE C), Jesús Sigifredo Valencia (UNIVERSIDAD NACIONAL DE C) and Juan Bautista Carda (UNIVERSIDAD JAUME I)

12:30 - 13:00
PK8 (invited) – Electrochemical performances of nanostructured La-perovskites layers deposited by pulsed laser technique for IT-SOFC cathode applications

V Eposito (Università di Roma)

13:00 - 14:30
Lunch

Session chair: To be informed

14:30 - 15:00
PK7 (invited) – Electrical conductivity in CeO2 based materials with extended interfaces

F Ruiz - Trejo (UNAM)

15:00 - 15:15
K513 - Application of doped CeO2 nanopowders as anode catalysts in Intermediate Temperature Solid Oxide Fuel Cells using hydrocarbon fuels

Shidong Song (St Andrews), Rodolfo Oscar Fuentes (St Andrews/CONICET) and Richard T Baker (St Andrews)

15:15 - 15:30
K501 – Synthesis and electrical characterization of Smx2+ doped ceria electrolytes

Mangalaraja Ramalinga Mangukarai, Aranthakumar Viswanathan, Annamalai Ramasamy, Rammy E Haiz Daniel A, Marta López, Carlos Camurri Porro and Ricardo E Avila

15:30 - 15:45
K512 – Playing with High Temperature Proton Conducting Materials for Application in Intermediate Temperature Solid Oxide Fuel Cells (IT-SOFCs)

Emiliana Fabbi (MANA-NIMS), Daniele Pergolesi (MANA-NIMS), Alessandra D Epifanio (TOR Vergata), Elisabetta Di Bartolo (TOR Vergata), Silvia Licoccia (TOR Vergata) and Enrico Traversa (MANA-NIMS)

15:45 - 16:00
K514 – Fabrication of highly textured Y-doped barium zirconate thin films by pulsed laser deposition for bulk conductivity direct measurement

Daniele Pergolesi (MANA-NIMS), Emiliiana Fabbi (MANA-NIMS), Alessandra D Epifanio (University of Roma), Simone Sanna (University of Roma), Silvia Licoccia (University of Roma), Giuseppe Balestrino (University of Roma) and Enrico Traversa (MANA-NIMS)

16:00 - 16:30
PK9 (invited) – ADVANCED MANUFACTURING METHODS OF CELLS AND STACK-COMPONENTS FOR SOLID OXIDE FUEL CELLS

Hans Peter Buckkreamer (Forschungszentrum Jülich)

Wednesday, September 23

Session chair: To be informed

10:00 - 10:30
PK10 (invited) – Nafion membrane water dynamics by in-situ time-resolved X-ray diffraction on running PEMFCs

V Rossi Albertini (ISMN-CNR)

10:30 - 11:00
PK1 (invited) – Nanostructured catalysts for fuel cell reactions: Effects of properties on activity

H Mercedes Villullas (UNESP)

11:00 - 11:30
Coffee Break

Session chair: To be informed

11:30 - 12:00
PK6 (invited) – Novel composite membranes for Direct Methanol Fuel Cells

A C Tavares (INRS)

12:00 - 12:30
PK4 (invited) – Development of Nafion-based composite electrolytes for applications in PEMFC at high temperature

F C Fonseca (IPEN)

12:30 - 12:45
K510 – The performance and degradation of Pt electrocatalysts on novel carbon carriers for PEMFC applications

Md Shuhazly Mamat (University of Nottingham), Sergei Grigoriev (Kurchatov Institute), Kirill Dzus (Kurchatov Institute) and Govin Stuart Walker (University of Nottingham)

12:45 - 13:00
K552 – Anodic oxidation of hydrogen in PEFCs with varying platinum loading

Ganesan Selvarani (CECRI), Parthasarathi Sridhar (CECRI), Sethuraman Pitchumani (CECRI) and Ashok K Shukla (IISc)

Poster Session K

Innovation in Fuel Cells: from Materials to Novel Devices

Room: Louvre

Thursday, September 24

11:30 to 13:00
K506 – Synthesis of La1-xSr2MnO3 powders via polymerizable complex process: effect of molar ratio of citric acid to metal oxides

Marina M V M Souza (UFBJ), Leandro Conceição (UFBJ), Camila R B Silva (UFBJ) and Nielson F P Ribeiro (UFBJ)

13:00 - 13:50
K508 – Morphological properties of Nafion–TiO2 composites prepared by solgel and casting

Bruno Ribeiro de Matos (IPEN), Roberta Alvarenga Isidoro (IPEN), Elisabete Inacio Santiago (IPEN), Marcelo Linardi (IPEN), Enrico Traversa (Tor Vergata), José Fernando Queiruga Rey (UFABC) and Fabio Coral Fonseca (IPEN)

14:00 - 14:50
K511 – Lanthanum Strontium Chromites: Synthesis and Characterization

Adney Luis Anjos da Silva (UFBJ), Mariana M V M Souza (UFBJ) and Ana Maria Rocco (UFBJ)

15:00 - 15:50
K515 – Ordered intermetallic compounds: a multi-purpose electroactive anode material for fuel cell

Marcelo Rodrigues Da Silva (UNESP) and Antonio Carlos Dias Angelo (UNESP)

15:50 - 16:40
K516 – Influence of the powder concentrations on the performance of Nafion–TiO2 composite anode material for fuel cell

Md Shuhazly Mamat (University of Nottingham), Kirill Dzus (Kurchatov Institute), Sergei Grigoriev (Kurchatov Institute) and Govin Stuart Walker (University of Nottingham)
K517 - Co-firing of Solid Oxide Fuel Cell (SOFC) Components Prepared by Direct Foaming and Tape Casting
Elisângela Guzi de Moraes (UFSC), Sérgio Stein (UFSC), Hansu Birol (UFSC), Suelen Burg (Uni-Bremen), Dachamir Hotza (UFSC) and Márcio Celso Fredel (UFSC)

K518 - Correlation between microstructure and thermodynamic stability of Y1.3-doped BaCeO3 in water vapor and CO2-containing atmosphere
Camila Martins Hosken (PPGCEM/UFS-Car) and Dulcina Maria Pinatti Ferreira de Souza (PPGCEM/DEMa/UFS-Car)

K519 - Mesoporous ZrO2-0.8CeO2 with SiO2 for Catalytic Applications
Rebeca Bacani (USP), Marcia Carvalho de Abreu Fantini (USP), Tereza da Silva Martins (UNESP), Júlio Romário Matos (UNESP), Diego Germán Lamas (CONICET) and Rodolfo Oscar Fuentes (CONICET)

Júlio César Martins dos Silva (UFABC), Adriane Elise Assunção Flausino (UFABC), João Paulo Bianchi Leal (UFABC), Luanna Silveira Parreira (UFABC), Ernico Teixeira Neto (UFABC), Marcelo Luiz Calegaro (USP São Carlos) and Mauro Coelho dos Santos (UFABC)

K521 - Synthesis and Microstructural Study on Lanthanum Fuel Cells
Luanna Silveira Parreira (UFABC), Rodrigo Brambilla de Souza (UFABC), Daniel Campana Raschio (UFABC), Júlio César Martins dos Silva (UFABC), Estevam Vitorino Spinaci (IPEN CEN/SP), Almir Oliveira Neto (IPEN CEN/SP) and Mauro Coelho dos Santos (UFABC)

K522 – Development of Alternative Seal Materials for Solid Oxide Fuel Cells (SOFCs): Li2O ZrO2 SiO2 (LZSA) Glass-ceramic Seal Prepared by Tape Casting
Priscila Lemes Rachadoli (UFSC), Guilherme Gregorio (UFSC), Hansu Birol (UFSC), Pedro Novaes (UFSC), Márcio Celso Fredel (UFSC) and Dachamir Hotza (UFSC)

K523 - Effect of the Composition of Pt and Pb on the Oxidation of Formic Acid in Carbon Supported Electro Catalysts
Hugo B Saffredini (UFABC), Guilherme Soares Buzio (UFABC) and Maria J B Orleans (UFABC)

K524 – Hybrid Proton Conducting Membrane Based on SPEEK and Modified Silica
Florêncio Gomes Ramos Filho (UFRJ) and UEZO, Karim Dahrhouche (UEZO), Patrick Judeinstein (UFRJ) and Ana Maria Rocc (UFRJ)

Júlio César Martins dos Silva (UFABC), Adriane Elise Assunção Flausino (UFABC), João Paulo Bianchi Leal (UFABC), Luanna Silveira Parreira (UFABC), Ernico Teixeira Neto (UFABC), Marcelo Luiz Calegaro (USP São Carlos) and Mauro Coelho dos Santos (UFABC)

K526 – Rare earth doped SiO2- containing ceria for solid oxid fuel cells applications
Robson Paccheco Pereira (GMCE / UEZO), Carolina Mariano da Silva (UFRJ), Adney Luís Anjus da Silva (UFRJ) and Ana Maria Rocc (UFRJ)

K527 – New hybrid proton conducting zirconium oxide-SPEEK membranes for direct ethanol fuel cell
Carla Akimi Kawaguchi (UERJ), Karim Dahrhouche (UEZO) and Ailton de Souza Gomes (UFRJ)

K528 – Study of stainless steel type 444 at high temperatures for SOFC applications
Cláudio Rogério Cruz de Sousa (UFRN), Wilson Acchar (UFRRN), Hervald Ramos Paes Junior (UFENF), Edmar de Deus Vaz da Silva (IUFN), Eldiane Silva Barreto (UFS) and Eduardo Etzberger Feistauer (UFS)

K529 – Morphological Investigation of Nafion and Nafion-SiO2-X hybrid membranes by SAXS analysis in dry and wet environments.
Mauro André Dresch (IPEN), Bruno Ribeiro de Matos (IPEN), Fabio Coral Fonseca (IPEN), Marcelo Linardi (IPEN), José Fernando Queiruga Rey (UFABC) and Elisabete Inacio Santiago (IPEN)

K530 – Investigation on the influence of carbon nanotubes on the thermal behavior of graphite–PPS composites
Renato Alibelli Antunes (UFABC), Mara Lopes Oliveira (Electrocell) and Gerhard Ett (Electrocell)

K531 – Polarization behavior of zirconate-supported planar solid oxide fuel cell
Sergio Akinobu Yoshikawa (IQSC - USP), Flavio Colmatar (UFABC), Ernesto Rafael González (IQSC-USP), Cintia Tommaso (IQSC-USP) and Adriano Gomes (IQSC-USP)

K532 – Supporting Electro Catalysts for oxidation of methanol in DMFC
Vera Lucia da Silva Marinho (UFAM), Elson Almeida Souza (UFAM), Cleuton da Souza Silva (UFAM), Jamail da Silva Chaar (UFAM) and Raimundo Ribeiro Passos (UFAM)

K533 – Effect of the Composition of Pt and Pb on the Oxidation of Formic Acid in Carbon Supported Electro Catalysts
Hugo B Saffredini (UFABC), Guilherme Soares Buzio (UFABC) and Maria J B Orleans (UFABC)

K534 – Combustion synthesis of doped ceria based electrolyte
Marcelo Antonio Coelho Berton (Lactec), Jéssica Rosa Silva (Lactec), Carlos Mario Garcia (Lactec), Eliana Navarro dos Santos Muccillo (IPEN) and Reginaldo Muccillo (IPEN)

K535 – Supported PtRu electro catalysts for fuel cells of the DMFC type
Elson Almeida Souza (UFAM), Raimundo Ribeiro Passos (UFAM), Vera Lucia da Silva Marinho (UFAM), Cleuton de souza silva (UFAM) and Jamail da Silva Chaar (UFAM)

K536 – Polyacrylonitrile–based sulfonated membranes: synthesis and thermal analysis
Robson Paccheco Pereira (GMCE / UEZO), Carolina Mariano da Silva (UFRJ), Adney Luís Anjus da Silva (UFRJ) and Ana Maria Rocc (UFRJ)

K537 – Synthesis and Characterization of the TiO2–CeO2–(Gd1−xYx)O2 Matrix Nanomaterials
Rafael Innocenti Vieira da Silva (UNESP/Botucatu), Sidney Domingues (UNESP/Botucatu), Alberto Adriano Cavalheiro (UEMS/Naviraí), Dayse Iara Dias Santos (Unesp/Bauru) and Marcelo de Gaita Juri Saeki (Unesp/Botucatu)

K538 – Operation of barium zirconate–supported planar solid oxide fuel cells at 600°C with methane
Olavo Rodrigo Oliveira (IPEN), Tiago Felipe Andrade (IPEN), Eliana Navarro dos Santos Muccillo (IPEN), Marcos Antônio Coelho Berton (Lactec), Carlos Maria Garcia (Lactec) and Reginaldo Muccillo (IPEN)

K539 – ZrO2-doped SOFC membranes
Ruben Antonio Vargas (UNIVALLE), José Humberto Castillo (UNIQUINDIO), Jesus Roberto Castillo (UNIVALLE), Manuel Noemíno Chacón (UNIVALLE) and Elsa María Materón (UNIVALLE)

K540 – Electrochemical applications of Diamond-Like Carbon (DLC) films deposited by reactive magnetron sputtering
Marina Sparvoli (Escola Politécnica – USP), Ronald Domingues Manzano (Escola Politécnica – USP), Ana Paula Mousinho (Escola Politécnica – USP), Luís Silva Zambom (Facet – SP), Maria Cecilia Pisatti De Oliveira (Escola Politécnica – USP) and Nelson Ordizone (Escola Politécnica – USP)

K541 – Electrochemical applications of Diamond-Like Carbon (DLC) films deposited by reactive magnetron sputtering
Marina Sparvoli (Escola Politécnica – USP), Ronald Domingues Manzano (Escola Politécnica – USP), Ana Paula Mousinho (Escola Politécnica – USP), Luís Silva Zambom (Facet – SP), Maria Cecilia Pisatti De Oliveira (Escola Politécnica – USP) and Nelson Ordizone (Escola Politécnica – USP)

K542 – Development of Alternative Seal Materials for Solid Oxide Fuel Cells (SOFCs): Li2O ZrO2 SiO2 (LZSA) Glass-ceramic Seal Prepared by Tape Casting
Priscila Lemes Rachadoli (UFSC), Guilherme Gregorio (UFSC), Hansu Birol (UFSC), Pedro Novaes (UFSC), Márcio Celso Fredel (UFSC) and Dachamir Hotza (UFSC)

K543 – Combustion synthesis of doped ceria based electrolyte
Marcelo Antonio Coelho Berton (Lactec), Jéssica Rosa Silva (Lactec), Carlos Mario Garcia (Lactec), Eliana Navarro dos Santos Muccillo (IPEN) and Reginaldo Muccillo (IPEN)

K544 – An experimental setup to synthesize ceramic nanoparticles by the spray pyrolysis technique for electrolytes in solid oxide fuel cells
Renata Ayres Rocha (IPEN), Eliana Navarro dos Santos Muccillo (IPEN), Eliza Bujadra (LEPIM), CNRS - Grenoble) and Reginaldo Muccillo (IPEN)

K545 – Development of biocathodes with immobilized enzymes on mediator carbonylated carbon cloth for biocell fuel
Sergio Akinobu Yoshikawa (IQSC - USP), Flavio Colmatar (UFABC), Ernesto Rafael Gonzalez (IQSC-USP), Cintia Tommaso (IQSC-USP) and Adriano Gomes (IQSC-USP)
K554 - Microemulsion synthesis of PtCo/C catalyst: electrochemical and morphological characterization.
Felipe Augusto Moro Loureiro (UFRJ), Ana Maria Rocco (UFRJ) and Guillermo Solorzano (PUC-Rio)

K555 - PtCo/C electrocatalysts preparation and characterization: reduction with NaBH₄
Felipe Augusto Moro Loureiro, Ana Maria Rocco (UFRJ) and Guillermo Solorzano (PUC-Rio)

K556 - Pt/ZSM-5/C electrocatalysts for PEMFC
Isis Nunes de Souza (EQ/UFRJ) and Ana Maria Rocco (EQ/UFRJ)

K557 - XRD and TPR Characterization of Fe-Ni/YSZ-GDC for Application as SOFC Anode
RAIGENIS PAZ FIUZA (UFBA), MARCOS AURELIO SILVA (UFBA) and JAIME SOARES BOAVENTURA (UFBA)

K558 - Ba₂In₂O₅ Solid Electrolytes: pH controlled chemical Synthesis and Characterization
Jose Fernando Queiruga Rey (UFABC), Eliana Arico (IPEN), Alexandre Castro Lanhredi (UFABC), Marcio Tsuyama Escote (UFABC), Marcelo Linaudi (IPEN) and Daniel Zanetti de Florio (UFABC)

K559 - Nanostructured ceria-based anodes for IT-SOFCs
Maria Genoveva Zimicz (CINSO, CONICET-CITEFA), Paula Macarena Abdala (CINSO, CONICET-CITEFA), Marcelo Daniel Cabezus (CINSO, CONICET-CITEFA), Ismael Oscar Fabregas (CINSO, CONICET-CITEFA), Susana Adelina Larrondo (R-UBA), Pedro Nuriez (ULL) and Diego German Lamos (CINSO, CONICET-CITEFA)

K560 - Characterization of PtSnNi/C nanocatalysts obtained using alcohol reduction process
Felipe Wu Tzong Yeh (UFRGS), Celia Fragalmafati (Universidade Federal do R), Claudia Radtke (UFRGS) and Ester Rieder (ULBRA)

K562 - AFM studies of S-PEEK films for PEMFC electrolyte
RAILO ALVES FIUZA (UFBA), Irani Santos (UFBA), NADIA MAMEDE JOSÉ (UFBA) and JAIME SOARES BOAVENTURA (UFBA)

K563 - Mesoporous silica with different surface area used as electrolyte’s fillers for ethanol fuel cells application
zakarya ahmed (Universidade Federal ABC), Daniel Zanetti de Florio (UFABC), Bruno Ribeiro de Matos (IPEN), Elisabette Inacio Santiago (IPEN) and Fabio Coral Fonseca (IPEN)

K564 - Structural and Physical Properties of the Double Layer Perovskite System ReBaFe₅O₁₀₋ₓ (Re=Rare Earth): Possible Application as Anode for Solid Oxide Fuel Cells – SOFC
Rogério Lúcio Almeida (Unicamp), Mirella Lorraine Alzoe (UnB) and Oscar Ferreira de Lima (IFGW-UNICAMP)

K567 - Preparation of LSM/SDC films by Spin Coating
Moisés Rômotos Cesário (UFRN), Dulce Maria Araujo Melo (UFRN), Patrícia Mendonça Pimentel (UFRN), Daniel de Araujo Macedo (UFRN), Marcus Antonio de Freitas Melo (UFRN), Valeria Moraes Longo (UNESP) and Ana Paula Marques (UFSCar)

K568 - Infrared spectroscopy, structural and morphological characterizations of LSM ceramics obtained by modified Pechini’s method
Moisés Rômotos Cesário (UFRN), Dulce Maria Araujo Melo (UFRN), Patrícia Mendonça Pimentel (UFRN), Daniel de Araujo Macedo (UFRN), Rosane Maria Pessoa Betânia Oliveira (UFRN) and Roberto Luiz Moreira (UFMG)
Tuesday, September 22
Session chair: Fernando Galembeck

09:30 - 10:00
PL1 (invited) - Application of cellulose to water purification
Benjamin Chu (Stony Brook University) and Benjamin Hsiao (Stony Brook University)

10:00 - 10:15
L508 - POLYOLEFIN COMPOSITES REINFORCED WITH CURAÚA FIBERS PREPARED BY EXTRUSION: EFFECT OF SCREW ROTATION
Barbara Mano (Unicamp), Joyce Rodrigues Araujo (Unicamp), Marcia Silva Spinacé (Unicamp) and Marco Aurelio De Pópoli (Unicamp)

10:15 - 10:30
L513 - Influence of wet and drying cycles on behaviour of cement composites reinforced cellulose pulps
Hugo Resende Baeta Zile (CEFET-MG), Conrado Souza Rodrigues (CEFET-MG), Kehaven Ghamvari (PUC-Rio) and Stefan Chaves Figueiredo (CEFET-MG)

10:30 - 10:45
L547 - Stiffer Polyethylene Composites Reinforced with Jute Fabrics
Sergio Neves Monteiro (UFN), Amanda Camerin Lima (UFN), Leonardo Sarnary Marques (UFN) and Kestur Gundappa Satyanarayana (UFPR)

11:00 - 11:30
Coffee Break
Session chair: Benjamin Chu

11:30 - 12:00
PL2 (invited) - Fabrication of Porous 3-D Structure from Poly(L-lactide)-based Nano-composite Foams
Masami Okamoto (Toyota Technological Inst)

12:00 - 12:15
L503 - Shape memory material based on potato starch
Denis Lounin (INRA), Laurent Chaunier (INRA) and Cyril Véchambre (INRA)

12:15 - 12:30
L570 - A classification system of bamboo based on the digital image processing of its mesostructure
Conrado Souza Rodrigues (CEFET-MG), Otávio Martins Gomes (CETEM), Khosrow Ghamvi (PUC-Rio) and Sidnei Pacornik (PUC-Rio)

12:30 - 12:45
L519 - Development of nanostuctured photocatalysts and thin films for environmental application
Gustavo Henrique Albuquerque (UFPE), Ingrid Tavares Weber (UFPE) and Valdinete Lins da Silva (UFPE)

13:00 - 14:30
Lunch
Session chair: Massami Okamoto

14:30 - 15:00
PL4 (invited) - Processing of polymer nanocomposites using natural nanoparticles
Alain Dufresne (Grenoble INP)

15:00 - 15:15
L536 - Surface Chemical Modification of Ramie Cellulose Nanocrystals
Aparecido Junior de Menezes (UFSCar/ Sorocaba)

15:15 - 15:30
L523 - Characterization of retorted shale for use in heavy metal removal
Patrícia Mendonca Pimentel (UFRRJ), Rosane Maria Pessan Betânia Oliveira (UFRRJ), Dulce Maria Arauo Melo (UFRRJ), Christine Le Roux (Université du Sud Toulon), Marcelino José Anjos (UFRRJ), Gaspar González Maldonado (UFRRJ) and Marcus Antonio de Freitas Melo (UFRRJ)

15:15 - 15:30
L549 - New Melt Process Technique to Prepare Blends with Chitosan
Rafael Grande (DEMa/UFSCar), Luiz Antonio Pessan (DEMa/UFSCar) and Antonio Jose Felix Carvalho (UFSCar/ Sorocaba)

Wednesday, September 23
Session chair: Alain Dufresne

09:30 - 10:00
PL5 (invited) - Environmentally Benign Materials Based on Biodegradable Polymers and Clay
Suparakas Sinha Ray (CSIR)

09:30 - 09:45
L569 - Behavior of concrete by steel slags aggregates
Nilton Silva Maia (CEFET-MG), Júnia Nunes Paula Stief (CEFET-MG) and Ricardo André Fiorotti Peixoto (CEFET-MG)

10:00 - 10:15
L525 - Preparation and Characterization of Green Polymer from Industrial Waste
Waleed Khaled El - Sawawy (National Research Center) and Maha Mohamed Ibrahim (National Research Center)

10:15 - 10:30
L521 - Cassava starch/clay/natural rubber biocomposites
Marcia Maria Rippel (Unicamp) and Fernando Galembeck (Unicamp)

10:30 - 10:45
L548 - Polyester Composites Reinforced with the Highest Strength Curaúa Fibers
Sergio Neves Monteiro (UFENF), Ailton Silva Ferreira (UFENF), Felipe Perisse Duarte Lopes (UFENF) and Kestur Gundappa Satyanarayana (UFPR)

11:00 - 11:30
Coffee Break
Session chair: Suparakas Sinha Ray

11:30 - 12:00
PL3 (invited) - Investigating methods for the compatibilization of thermoplastic starch blends with TPT Silane for Cadmium Adsorption from Aqueous Solution
Alane Azevedo Pinto (UNICAMP), Denis Lima Guerra (UNICAMP) and Claudio Airoldi (UNICAMP)

12:00 - 12:15
L577 - Flax reinforced thermostet composites from polyfurfuryl alcohol
Rakesh Kumar Singh (CSIR) and Rajesh D Anandjiwala (CSIR/NMMU)

12:15 - 12:30
L538 - Effect of EDC/NHS and Alcohol
Sergio Neves Monteiro (UFENF), Ailton Silva Ferreira (UFENF) and Kestur Gundappa Satyanarayana (UFPR)

12:30 - 12:45
L569 - Behavior of concrete by steel slags aggregates
Nilton Silva Maia (CEFET-MG), Júnia Nunes Paula Stief (CEFET-MG) and Ricardo André Fiorotti Peixoto (CEFET-MG)

10:00 - 10:15
L525 - Preparation and Characterization of Green Polymer from Industrial Waste
Waleed Khaled El - Sawawy (National Research Center) and Maha Mohamed Ibrahim (National Research Center)

10:15 - 10:30
L521 - Cassava starch/clay/natural rubber biocomposites
Marcia Maria Rippel (Unicamp) and Fernando Galembeck (Unicamp)

10:30 - 10:45
L548 - Polyester Composites Reinforced with the Highest Strength Curaúa Fibers
Sergio Neves Monteiro (UFENF), Ailton Silva Ferreira (UFENF), Felipe Perisse Duarte Lopes (UFENF) and Kestur Gundappa Satyanarayana (UFPR)

11:00 - 11:30
Coffee Break
Session chair: Suparakas Sinha Ray
L528 - Utilization of electric arc furnace dust (EAFD) as raw material for cement production
Margarete Regina Feitas Gonçalves (UFPEL), Alice Gonçalves Osório (UFGRS), Juliane Vicenzi (UFGRS) and Carlos Pérez Bergmann (UFGRS)

L529 - Preparation and Properties of Biodegradable Poly(lactic acid)/Poly(butylene adipate-co-terephthalate) Blend with Epoxy-functional styrene acrylic copolymer as Coupling Agent
Naiven Zhang and Jie Ren

L530 - Mechanical and Morphological Properties of Polyacrylamide and Methylcellulose Hydrogels
Fauze Ahmad Aouada (UFSCar), Bor-Sen Chiou (USDA-ARS-WRRC), William John Orts (USDA-ARS-WRRC) and Luiz Henrique Capparelli Mattoso (Embrapa)

L531 - Hydrogels as carriers for the controlled release of paraguay Fauze Ahmad Aouada (UFSCar), Marcia Regina de Moura (UFSCar), William John Orts (USDA-ARS-WRRC) and Luiz Henrique Capparelli Mattoso (Embrapa)

L532 - Ethanol from lignocellulosic residues of palm oil industry
Leonard Guimaraes Carvalho (UFRJ), Andréa de Moura Gomes (UFRJ), Michelle Henes Gomes (UFRJ), Donato Alexandre Gomes Aranda (UFRJ) and Nei Pereira Jr (UFRJ)

L533 - Oxides derived from hydroxide for the production of biodiesel from raw material of high acidity
Carla Cristina Costa Macedo Silva (UFRJ), Donato Alexandre Gomes Aranda (UFRJ), Mariana M V M Souza (UFRJ), Ana Paula Silva (UFRJ), Nelson C Furtado (UFRJ), Nelson C Furtado (CBPF), Carlton Anthony Taft (CBPF) and Donato Alexandre Gomes Aranda (UFRJ)

L534 - Analysis of biodiesel produced from residual oil of fishing industry.
Michelle mendes Gomes (UFRJ), Leonard Guimarães Carvalho (UFRJ), Nelson C Furtado (CBPF), Carlton Anthony Taft (CBPF) and Donato Alexandre Gomes Aranda (UFRJ)

L537 - Soda-Lime Glasses from Residues of Ornamental Rocks
Michele Pereira Bobisk (IME), Luis Henrique Leme Louro (IME), José Carlos da Rocha (INT) and Marcelo Henrique Prado da Silva (IME)

L540 - Structural Analysis, Order Molecular and Composition of the Bambou Angustifolia Kunshi-co colour variety
José Israel Cardenas (UNAL de colombia), Carlos Vargas Hernandez (UNAL de colombia) and Jesus Fabian Jurado (UNAL de colombia)

L542 - Soil degradation kinetics from PHB/PLLA and PHBV/PLLA blends
Vitor Henrique Grigull (UNIVILLE), Luciana Prazeres Mazur (UNIVILLE), Michele Formolo Garcia (UNIVILLE), Andréa Lima dos Santos Schneider (UNIVILLE) and Ana Paula Testa Pezzin (UNIVILLE)

L543 - Evaluation of degradability of HDPE films containing pre-degradant additive in various environments
Luciana Prazeres Mazur (UNIVILLE), Fernando de Amorai (UNIVILLE), Roseany de Vasconcelos Vieira Lopes (UnB), Andréa Lima dos Santos Schneider (UNIVILLE) and Ana Paula Testa Pezzin (UNIVILLE)

L544 - Organoclay brazilian smectic: synthesis and characterization
Caroline Bertagnolli (FEG/UNICAMP), Sirlei Jaiana Kleinübing (FEG/UNICAMP), Ana Lucia Pereira de Araujo (FEG/UNICAMP) and Meuris Gurgel Carlos da Silva (Unicamp)

L545 - Preparation of solid acid catalysts from brazilian flint kaolin.
Luís Adriano Santos do Nascimento (UFPA), Laura Madragn Zúñiga Tito (UFPA), Rómulo Simões Angélica (UFPA), Carlos Emmerson Ferreira da Costa (UFPA), José Roberto Zamian (UFPA) and Geraldo Narciso da Rocha Filho (UFPA)

L546 - Photocatalytic degradation of dyes with TiO2: efficiency studies
André Pimenta Faria (CETEC), Milena Luz Sabino (CETEC), William Ciriene Ferreira (UFSC), Ana Claudia Bernardes-Silva (UFSC) and Jose Tavares Branco (CETEC)

L550 - Cellulose microfibirs and nanocrystals thin films deposited by drying–dewetting
Antônio João Fernandes Silva - Filho (UFSCar/Sorocaba), Débora de Paiva Magalhães (UFSCar), Marcelo As-sumpção Pereira-da-Silva (UFSC/USP) and Antonio José Felix Carvalho (UFSCar/Sorocaba)

L551 - Evaluation of additives content (natural filler, plasticizer and nucleating and compatibilizing agent) on the production of biodegradable PHB-based composite
Jeremias De Souza Macedo (PMM/ COPE/UFJ), Marysílvia Ferreira da Costa (PMM/COPE/UFJ) and Rossana Mara da Silva Moreira Thiré (PMM/COPE/UFJ)

L552 - Obtaining nanofibers from sugarcane bagasse to reinforce nanocomposites biodegradable matrice
Franciët Borges de Oliveira (LNNA/ EMBRAPA), Eliangela de Morais Teixeira (Embrapa), Francis Klay Moreira (UFSCar/EMBRAPA), Thalita Jessica Bondancio (UFSCar/EMBRAPA), José Manoel Marconcini (LNNA/EMBRAPA) and Luiz Henrique Capparelli Mattoso (LNNA/EMBRAPA)

L554 - Modified H-Kenyaithe With TPT Silane for Cadmium Adsorption from Aqueous Solution
Alane Azevedo Pinto (UNICAMP), Claudio Airoldi (UNICAMP) and Denis Lima Guerra (UNICAMP)

L555 - Morphological evaluation of catalytic filters produced by wet and dry Ni-deposition on natural silica fibers
Karina Donadè (UFSC), Vanessa Feliciano (UFSC) and Bianca Oliveira (UNIVILLE)

L556 - Addition of Starch Nanocrystals as Filler to PHB Biodegradable Films
Rossana Mara da Silva Moreira Thiré (COPE/UFJ), Diogo Yukio Fujimoto (COPE/UFJ) and Ana Paula da Silva Nascimento (COPE/UFJ)

L557 - Two step chitosan modification based on glycidylmethacrylate and triethylenetetramine - synthesis, characterization and cation removal
udnam khan (UNICAMP), Syed Badshah (UNICAMP) and Claudio Airoldi (UNICAMP)

L558 - Ophthalmic Lenses Produced by Photopolymerization: Evaluation of Defects and Hardness
Marina Elizabeth Dias Alcântara (UFUFG), Cinthia Rodrigues da Silva Morais (UFUFG), Bruna Silveira Lira (UFUFG) and Soraya Alves Morais (UEPB)

L559 - Characterization of Treated Polyester Fabrics By Low Pressure Plasma
Thercio Henrique de Carvalho Costa (IFPI), Michelle Cequeira Feitor (IFPI) and Clodomiro Alves Jr (Labplasma/ UFRN)

L561 - Influence of lignin on thermo-mechanical behavior of modified novolac resins
Pedro Gahan (UPB), Juan David Martinez (UPB) and Catalina Gomez (UPB)

L563 - Characterization and uses of Bofe bentonite clay for adsorption of zinc (II).
Ana Lucila Pereira de Araujo (UNICAMP), Caroline Bertagnolli (UNICAMP), Sirlei Jaiana Kleinübing (Unicamp) and Meuris Gurgel Carlos da Silva (Unicamp)

L564 - Synthesis and soil biodegradability of PET-co-PLLA obtained by chemical way.
Delene Domingues da Silva (UNIVILLE), Fernanda Colpo de Mello (PUC/RS), Sandra Einfalt (PUC/RS) and Ana Paula Testa Pezzin (UNIVILLE)

L565 - Chemical and Physical Properties of a Liquid Crystal Polymer with mineral reinforcement
S. B. Faldini, M. C. Terence, L. F. de Miranda, M. R. X. Bartholomei, A. H. Munhoz Jr. UPM, Universidade Presbiteriana Mackenzie, e-mail: soniaf@macmckenzie.com.br

L566 - Synthesis and characterization of an urea functionalized nickel phyllosilicate
José Ricardo da Costa (UNICAMP), Claudio Airoldi (UNICAMP) and José de Alencar Simoni (UNICAMP)

L567 - Inorganic-organic hybrids derived through grafting silane onto vermiculite leaching
Francisco de Assis Rodrigues Pereira (UFPEL), Ana Paula Melo Alves (UFPEL), Maria Gardenia Fonseca (UFPEL) and Maria Estrela Alves da Silva (UEPB)

L568 - Cellulose Nanowhiskers obtained from Sugarcane Bagasse: Influence of the Hydrolyze Process in the Nanowhiskers Size and
Suspension Stability.
Adley Forti Rubira (UEM), Shirani Kaori Haraguchi (UEM), Rafael Silva (UEM) and Edvani Curti Muniz (UEM)

L571 – Efficient Vapor Sensors Using Foils of Dispersed Nitrogen-Doped and Pure Carbon Multiwalled Nanotubes
Bernabé Rebollo Plata (IPICYT), Emilio Munoz-Sandoval (IPICYT), florentino López Urias (ipicyt), Edson Henández Cortina (ipicyt), Humberto Terrones (IPICYT) and Maurocito Terrones (IPICYT)

L572 – Portland cement compositions with modified zeolite
Gintautas Skripkiunas (Kaunas University of Tech), Vytaitas Sasnauskas (Kaunas University of Tech), Danuté Palubinskaiké (Kaunas University of Tech) and Mindaugas Dauksys (Kaunas University of Tech)

L574 – Gypsum hemihydrate-cement blends: are they possible?
Glodis Comarini (UNICAMP) and José Antonio De Milito (FACENS)

L575 – Study to reuse an industrial solid waste generated by foundry sands
Javier Mazariégas Pablos (USP) and Eduvaldo Paulo Sichieri (USP)

L576 – The analysis of Nb2O5-doped ZrO2-TiO2 ceramic as soil water content sensor element in controlled environments
Rodrigo de Matos Oliveira (INPE), Maria do Carmo Andrade (LAS/INPE) and Geraldino Fita Britto Filho (USP)

L578 – Preparation and characterization of cashew gum nanoparticles loaded with natural larvicide from Moringa Oleifera seeds
Haroldo Cesar Beserra Paula (UFC), Maria L. Rodrigues (UFC), Wesley LC Ribeiro (UECE), Andre S. Stadler (Col Christus), Flavia OMS Oliveira (UFC) and Regina CM de Paula (UFC)

L580 – New copolymer used in PLEDs devices with ITO treated by UV-Ozone reactor with modified mercury HID lamp
Emerson Roberto Santos (POLI-USP), Fábio Conte Correia (POLI-USP), Wang Shu Hui (POLI-USP), Elvio Calixto Burini Junior (IEE-USP), Fernando Joaquim Fonseca (POLI-USP) and Adnei Melges Andrade (IEE-USP)

L586 – Wettability changes and mass loss during heat treatment in Pinnus sp. and Hymenae sp.
Anoline Crespo Zigli, André Brisolari, Andrey Coatrini Soares, Rodrigo Marques Oliveira and Débora Gonçalves (IFSC-USP)

L588 – Effect of Bismuth and Sulfur addition in Mechanical properties, structure and Machinability of 1045 steel
Rafael Vieira Silva Junior (Belgo), Dante Ribeiro (Açõespecial), Paulo Ribeiro (Açõespecial) and Waldemar Alfredo Monteiro (Mackenzie)

L589 – Two new RBPV-DODM-PPV polymers used as active layer in PLEDs devices using ITO treated by UV-Ozone reactor with low cost
Emerson Roberto Santos (POLI-USP), Tunísia Eufrausino Schuler (POLI-USP), Fábio Conte Correia (POLI-USP), Wang Shu Hui (POLI-USP), Elvio Calixto Burini Junior (IEE-USP), Fernando Josepetti Fonseca (POLI-USP) and Adnei Melges Andrade (IEE-USP)

L590 – Properties of coconut fibers reinforced polypolypropylene matrix
Maria Virginia Gelfuso (UNIFOR), M B Cavalane (UNIFOR) and D Thomazini (UNIFOR)

Cesar Beserra Paula (UFC)

ICAM 2009
International Conference of Advanced Materials
Rio de Janeiro, 20-25 September 2009

SYMPOSIUM M
Frontiers in Photonic and Photovoltaic Materials and Processes

Auditorium: Imperial

Symposium Organizers:
Fernando A. Ponce (Arizona State, USA)
Hiroshi Amano (Meijo University, Japan)
Edson Roberto Leite (UFSCar, Brazil)
Martha C. Lux-Steiner (Helmholtz Center, Germany)
Ana Flávia Nogueira (Unicamp, Brazil)

Energy and environment
Crystalline Silicon matched material platform for PM15 (invited) - Nobuaki Kojima and Masafumi Yama-Yoshio Ohshita, Hidetoshi Suzuki, efficiency multi-junction solar cells PM2 (invited) - Nobel materials

Coffee Break

Thursday, September 24

Session chair: M. Iwaya

10:00 - 10:30
PM16 (invited) - Study of Defects in Silicon by Photoluminescence for Development of Si-based Optoelectronic Applications - Supakit Charnvanichborikarn (Research School of Physics), Byron John Villis (School of Physics), Jennifer Wong-Leung (Research School of Physics), Jeffrey Colin McCollum (School of Physics), Chenrupati Jagadish (Research School of Physics) and James Stanislaus Williams (Research School of Physics)

11:00 - 11:30
Coffee Break

Session chair: B. R. Mehta

11:30 - 12:00
PM2 (invited) - Noble materials and structures for super high efficiency multi-junction solar cells - Yoshiho Onishita, Hidekisuke Suzuki, Nobuaki Kojima and Masafumi Yama-guchi

12:00 - 12:30
PM15 (invited) - A lattice-matched material platform for multijunction solar cell applications - Yong - Hang Zhang (Arizona State University)

12:30 - 12:45
M524 - Spray deposition of CuInS2 on electrodeposited ZnO for low cost solar cells - Mariana Berruet (INTEMA), Matias Valdes (CONICET), Albert Goossens (TUDelft) and Marcela Vazquez (UN-MdP, CONICET)

12:45 - 13:00
M510 - Meyer-Neldel Rule in Cadmium Sulfide - Fikry El Akkad (Kuwait University)

13:00 - 13:40
Session chair: D. Carroll

PM14 (invited) - Green electronics and II-VI semiconductors for optoelectronic applications - B R Mehta (Indian Institute of Technology)

14:30 - 15:00
PM11 (invited) - Charge photogeneration and recombination in dye sensitized polymer / fullerene solar cells - James Robert Durrant (Imperial College)

15:00 - 15:30
PM9 (invited) - Order and Disorder in Multicomponent Passive and Active Oxides - Rodrigo Martins (New University of Lisbon)

15:30 - 16:00
PM17 (invited) - Nanowire array - Gehan Amaratunga (University of Cambridge)

16:00 - 17:00
Coffee Break

Session chair: G. A. J. Amaratunga

17:00 - 18:00
PM10 (invited) - Charge photogeneration and recombination in dye sensitized polymer / fullerene solar cells - James Robert Durrant (Imperial College)

18:00 - 21:00
Dinner

Friday, September 25

Session chair: A. Khan

09:00 - 10:00
PM5 (invited) - High-performance group-III-nitride-based light-emitting solar cells (LESCs) - Motoaki Iwaya (Faculty of Science and Te), Yasuie Kuwahara (Faculty of Science and Te), Tasuharu Fujiyama (Faculty of Science and Te), Daisuke Iida (Faculty of Science and Te), Satoshi Kamiyama (Faculty of Science and Te), Hiroshi Amano (Faculty of Science and Te) and Isamu Akasaki (Faculty of Science and Te)

12:00 - 12:30
PM6 (invited) - Room Temperature Epitaxial Growth of InGaN and its Application to Solar Cells - Hiroshi Fujioka (The University of Tokyo)

12:30 - 13:00
PM12 (invited) - Nanoscale electrical characterization of Oxide and II-VI semiconductors for opto-electronic applications - B R Mehta (Indian Institute of Techn)

13:00 - 13:40
Lunch

Session chair: M. Iwaya

14:30 - 15:00
PM14 (invited) - Green electronics and II-VI semiconductors for optoelectronic applications - B R Mehta (Indian Institute of Techn)

15:00 - 15:30
PM9 (invited) - Order and Disorder in Multicomponent Passive and Active Oxides - Rodrigo Martins (New University of Lisbon)

15:30 - 16:00
PM17 (invited) - Nanowire array - Gehan Amaratunga (University of Cambridge)

16:00 - 17:00
Coffee Break

Session chair: J. R. Durrant

17:00 - 18:00
PM10 (invited) - Charge photogeneration and recombination in dye sensitized polymer / fullerene solar cells - James Robert Durrant (Imperial College)

18:00 - 21:00
Dinner

PM3 (invited) - Hybrid and tandem dye sensitized solar cells aiming at high efficiency - Shuji Hayase
11:30 to 12:00
M503 – Photoluminescence in silicon based multilayers grown by PECVD technique.
Marcia Ribeiro (EPUSP) and Inês Pereyra (EPUSP)

M504 – Explanation of optical shift on GaAs/GaSb/GaSb grown by Liquid-Phase Epitaxy
Gerdaro Fontali (Universidad del Quindio), Robert Sanchez (Universidad Autónoma de O), Liliaan del Socorro Tirado-Meja (Universidad del Quindio), Hernando Calderon Ariza (Universidad del Quindio) and Nelson Porras (Universidad del Valle)

M507 – Characterization of Cs$_2$NaAlF$_6$ single crystals
Lilian Pantoja Sosman (UFRJ), Heloisa Nunes Bordallo (Helmholtz-Zentrum Berlin) and Fabiano Yokaiysha (Helmholtz-Zentrum Berlin)

M511 – Chemometric Study of Microwave-assisted Thermal Synthesis of Metal Organic Framework
Cristiane Kelly de Oliveira (UFPE), Ivani Malvestiti (UFPE), Severino Alves Junior (UFPE) and Ingrid Távora Weber (UFPE)

M513 – Influence of Cr concentration and photon energy excitation on the photoluminescence of Ruby microcrystals
Leiliane Cristina Cossolino (IFSC-USP) and Antonio Ricardo Zanatta (IFSC-USP)

M515 – Investigation of the Degenerate Two-Photon Absorption Cross-Section in all-trans Retinal: Nonlinear Spectrum and Molecular Structure
Marcelo Goncalves Vivas (IFSC-USP), Daniel Luiz Silva (IFSC-USP) and Cleber Renato Mendonca (IFSC-USP)

M519 – Ultra-low birefringence silica glass synthesized by VAD method for photonic components for UV photolithography
Juliana Santiago dos Santos (UNICAMP), Eduardo Vellozzi (UNICAMP), Claudio Rezende de Souza (UNICAMP) and Ana Flavia Nogueira (UNICAMP)

M520 – Enhancement of the Photocurrent in Dye-Sensitized Solar Cells by the Incorporation of MWCNT
Lucia Mesquita Loiola (UNICAMP), César Dopesa Avellaneda (UNICAMP) and Ana Flavia Nogueira (UNICAMP)

M521 – Hydrostatic pressure and electric field effects on excitons in coupled double quantum wells
Ricardo León Restrepo Arango (EIA), Walter Antonio Ospina Muñoz (EIA), Guillermo León Miranda Pedrazo (EIA), Eugenio Giraldo Tobón (EIA) and Carlos Alberto Duque Echeverri (UDeA)

M522 – Photoelectrochemical studies of oriented 3D crystalline nanorod arrays of hematite
Flavio Leandro Souza (UFABC), Bruno Henrique Ramos Lima (UFSCar), Elson Longo (Unesp-Araquara) and Edison Roberto Leite (UFSCar)

M523 – Important Parameters on Development of Nanostructured Films of Alpha-Hematite
Bruno Henrique Ramos Lima (UFSCar), Flavio Leandro Souza (UFABC), Edison Roberto Leite (UFSCar) and Elson Longo (Unesp-Araquara)

Youngwoo Kim (Pusan National University), Indang Shin (Pusan National University), Soochang Choi (Pusan national University) and Deugwoo Lee (Pusan National University)

M527 – Nonlinear optical absorption of doped and undoped polyaniline
Leonardo De Boni (IFSC-USP), Daniel Souza Correa (USP), Débora Terezinha Balogh (IFSC-USP) and Cleber Renato Mendonca (USP)

M529 – Dye-Sensitized Solar Cells Based on a Cross-Linked Gel Polymer Electrolyte Containing Multi-Wall Carbon Nanotubes
Joao Eduardo Benedetti (UNICAMP), Aline Alves Corrêa (UNICAMP), Mayara Carmello (UNICAMP) and Ana Flavia Nogueira (UNICAMP)

M531 – Synthesis and Characterization of Conducting Polyaniline doped with H$_3$PMo$_{12}$O$_{40}$ and its Application as Counter-Electrode in Dye-sensitized Solar Cells
Luiz Carlos Pimentel Almeida (UNICAMP), Agnaldo de Souza Gonçalves (UNICAMP), Paulo César Muniz de Lacerda Miranda (UNICAMP), Luis César Passoni (UFRJ) and Ana Flavia Nogueira (UNICAMP)

M532 – Preparation and Characterization of Layer-by-Layer Films based on Poly(p-phenylenevinylene) and Single-Walled Carbon Nanotubes
Luiz Carlos Pimentel Almeida (UNICAMP), Valentin Zucolotto (USP) and Ana Flavia Nogueira (UNICAMP)

M533 – Charge Transfer States in a polymerfullerene photovoltaic interface: A Density Functional Theory study
Cleber Fabiano Marchiani (UFPR) and Marcus Koehler (UFPR)

Rogerio Valaski (INMETRO) and N. A. D. Yamamoto (UFPR)

M536 – Photonic Rectangular Slot Resonator with Four Dielectric Layers
HUMBERTO CESAR CHAVES FERNANDES (UFPR) and HUMBERTO DIOSNIO ANDRADE (UFPR)

M537 – Photoconductivity analysis of photovoltaic structures based on TiO2 and poly(3-hexylthiophene)
Carlos Eduardo Zanetti (IFSC/USP), Adriana Pereira Ibáñez (IFSC/USP), Rogério Valaski (IFSC/USP) and Roberto Mendonça Faria (IFSC/USP)

M538 – Photosensitive Devices Structures Based on Low Porosity Porous Silicon
Faruk Fonthal Rico (U Autonoma de Occidente), Clara Eugenia Goyes Lopez (Pontificia UnivJaveriana), Mariela de los Rios Londoño (Universidad del Quindio), Liliana del Socorro Tirado - Mejía (Universidad del Quindio) and Gerardo Fonthal (Universidad del Quindio)

M540 – Optical studies of CdZnSe thin films
Dinesh Patidar (University of Rajasthan) and NS Saxena (University of Rajasthan)

M542 – Fabrication of luminescent optical quality Aluminosilicate Microtubes
Joseph Edward McCarthy (Trinity College Dublin) and Yuri Gunko (Trinity College Dublin)

M544 – A study of single phase formation, scintillation and optical properties of scheelite calcium

Poster Session M
Frontiers in Photonic and Photovoltaic Materials and Processes
Room: Louvre
Tuesday, September 22
tungstate powders and high optical quality single crystal mini rods
Luciana Benedita Barbosa (UFS), Ronaldo Santos da Silva (UFS), Marcelo Souza Silva (UFS), Fernanda Rocha Cavalcante (UFS), Diogenes Reyes Ardila (UFS) and José Pedro Andreeta (USP)

M545 - Doped ZnO powders for application in hybrid solar cells
Laura Cristina Damonte (Dto de Física, UNLP), Vicente Donderis (Dto de Ing Eléctrica, UPV), Javier Orozco-Messana (Dto Ing Mec y Mat UPV) and Marianoles Hernandez-Fenollosa (Dto Física Aplicada UPV)

M546 - Optical sensitization of TiO2 with modified Alq3 complexes
Luis Guilherme C Rego (UFSC), Robson da Silva (UFSC), Jose Arruda Freire (UFPR) and Victor S Batista (Yale)

M547 - Raman Spectroscopy Stress Measurements on Atmospheric Plasma Thermally Sprayed pc-Silicon Sheets for Use in Solar Cells Devices
André Pimenta Faria (CETEC), Igor Silva Corvalho (CETEC), Ricardo Luiz Ribeiro (CEFET/MG), Saudo Alonso Rodrigues-Silva (CETEC) and Jose Tavares Branco (CETEC)

M548 - Influence of CN Moieties Linked to the Backbone on Kinetics of PPV-like Polymers Formation
Karine Cristina Carlinho Weber dos Santos Klider (UEPG), Fabio Santana dos Santos (UEPG), Jacqueline Aparecida Marques (UEPG), Karen Wohrath (UEPG), Laura Oliveira Perez (UNIFESP), Mauro Roberto Fernandes (USP) and Jarom Raul Garcia (UEPG)

M550 - PbSe nanoprecipitates produced by ion implantation in Si (001) and SOI
Zacarias Eduardo Fabrim (UFRGS), Flavia Piegas Luce (UFRGS), Shay Reboh (UFRGS), Fernando Schaurich Silva (EE-UFRGS), Toiri Engel (EE-UFRGS) and Paulo Fernando Papaleo Fitchner (UFRGS)

M551 - Luminescence Properties of Er3+ and Tm3+ Doped BaY2F8
Ana Carolina Santana de Melo (UFS), Mario Ernesto Giroldo Valério (UFS-Aracaçu), Adriano Borges Andrade (UFS), Gerson Hiroshi de Geod Nakamura (CLA/IPEN) and Sonia Licia Baldock (CLA/IPEN)

M552 - Torsion barriers and atomic charges in OPVs
Jarlessson Gama Amazonas (IFUSP), José Maximiano Fernandes Pinheiro Júnior (IFUSP) and Marília Junqueira C дальas (IFUSP)

M553 - Photoluminescence from Ge nanocrystals produced by hot implantation into SiO2
Felipe Lipp Bregolin (UFRGS), Shay Reboh (UFRGS), Uilson Schwantz Sias (CEFET-RS), Moni Behar (CEFET-RS) and Eduardo Ceretta Moreira (UNIPAMPA)

M554 - Photophysical Systems for Proton Coupled Electron Transfer
Desmond Mac-Leod Carey (UNAB), Alvaro Rafael Muñoz - Castro (UNAB) and Ramiro Arattia Perez (UNAB)

M561 - Electronic states in double quantum wells-wires with potential W-profile: Combined effects of the hydrostatic pressure an electric field
Ricardo León Restrepo Arango (EIA), Guilherme León Miranda Pedroza (EIA), Walter Antonio Ospina Muñoz (EIA), Carlos Alberto Duque Echeverri (UdeA) and Carlo Mario Duque Jiménez (UdeA)

SYMPOSIUM N
Materials for Nuclear Power Generation

Auditorium: Aranjuez

Simposium Organizers:

M. G. (Grace) Burke (Betis Atomic Power, USA)
Raul Versaci (CNEA, Argentina)
Andre Costa e Silva (IBQN/UFF, Brazil)
Raul Versaci (CNEA, Argentina)
Andre Costa e Silva ( )
Monday, September 21
Session chair: Grace Burke and Luiz Henrique de Almeida
09:30 – 10:00
PN2 (invited) – Material Degradation and Aging Management of Primary Components in LWR Plants
Kawafati Abluwalia (EPRI)
10:00 – 10:30
PN1 (invited) – Materials Selection and Validation for Advanced Light Water Reactor Electricity Generating Power Plants
Michael Anthony Burke (Westinghouse Electric Com)
10:30 – 10:45
N517 – Materials concepts in steel containment for PWR Nuclear Power Plants
Andre Luiz Vasconcellos da Costa e Silva (IBQN- EPIMVR-UFF), Luiz Mamêde Gonzalez Magalhães (IBQN) and Raul Thonke Nicolescu (IBQN)
10:45 – 11:00
N509 – Fatigue Behavior of Ferritic/Martensitic Steels for Nuclear and Power Plant Applications
Martina Cecilia Avalos (CONICET), Alberto Armas (CONICET) and Iris Alvarez-Armas (CONICET)
11:00 – 11:30
Coffee Break
11:30 – 12:00
PN5 (invited) – Research in the UK into reactor structural materials degradation mechanisms
Colin A English
11:30 – 12:00
PN5 (invited) – Research in the UK into reactor structural materials degradation mechanisms
Colin A English
12:00 – 12:15
N505 – Nuclear material investigations by advanced analytical techniques

Claude Andre Degueldre (LNMM, NES, PSI), Goutam Kuri (LNMM, NES, PSI), Annick Froideval (LNMM, NES, PSI), Sebastiano Cammelli (LNMM, NES, PSI), Andrey Orlov (LNMM, NES, PSI) and Fohannes Bertsch (LNMM, NES, PSI)
12:15 – 12:30
N520 – Pb-Induced Transgranular SCC of Alloy 690 in a PbO + 10% NaOH Solution
Mary Grace Burke (Bechtel Marine Propulsion), Robert E Hermer (Bechtel Marine Propulsion) and Michael W Planeuf (Fibics, Inc)
12:30 – 12:45
N504 – Glassy Polymer Carbon and Silicon Carbide to be used in the TRISO fuel
Molek Amir Abuaenemeh (AAMU), Mohammad Seif (AAMU), Abdalla Elsaamadity (UAH), Ihabindo Ojo (AAMU), Kadus Ogbara (AAMU), Claudiu Muntele (AAMU) and Daryush ILA (AAMU)
12:45 – 13:00
N518 – RESEARCH AND DEVELOPMENT OF THE SINTESYS OF U-5%Zr-3,5%Nb ALLOYS BY PLASMA MELTING
Osvaldo Nunes Júnior (CTMSP), Claudio Padovani (CTMSP), Ieda Souza Silva (CTMSP), Selma Luiza Silva (CTMSP) and Ricardo Ricardo Gonçalves Gomide (CTMSP)
13:00 – 14:30
Lunch
Session chair: Raul Versaci and José Augusto Ferrota
14:30 – 15:00
PN3 (invited) – Zirconium Alloys in Nuclear Power Plants
Arthur T. Matta
15:00 – 15:15
N511 – Hydride formation and effects of hydrogen on the mechanical properties of Zirconium-rich alloys
Karla Roberto Freitas da Silva (UFRJ), Vincent Meyer (UFRJ), Dilson Silva dos Santos (UFRJ/COPEPEM) and Luiz Henrique de Almeida (UFRJ/COPEPEM)
15:15 – 15:30
N521 – Kinetics Analysis of Zircaloy-4 Hydriding between 20 and 670°C
I S Dupim (UFABC), Joao Marcelo Moreira (UFABC), S L Silva (CTMSP), C C G e Silva (CTMSP), O Nunes (CTMSP) and R G Gomide (CTMSP)
15:30 – 16:00
PN4 (invited) – Thermodynamic modelling of U-O-X systems with X=Pu,Zr,C – Application to nuclear fuel materials studies
Christine Gueneau (CEA), Stephane Gasse (CEA), Bo Sunzman (CRIMAT) and Christian Chatillon (SIMAP)
16:00 – 16:15
N503 – Experimental and thermodynamic description of the Er-Zr system
Jean – Marc Joubert (CNRS), Julien Jourdan (CEA) and Caroline Toffolon (CEA)

Poster Session N
Materials for Nuclear Power Generation
Room: Louvre
Monday, September 21 – 18:30 to 20:30
N501 – Synthesis and characterization of lithium silicates powders
Tao Tang (CAEP), De-Li Luo (CAEP) and Zhi Zhang (CAEP)
N502 – Mathematical Simulation of the Growth of the Interaction Layer Between UMo Fuels Dispersed in Aluminium and Other Metallic Matrices
Fábio Branco Vaz de Oliveira (IPEN/CNEN) and Humberto Gracher Riella (INB)
N508 – Sensibility of mechanical and electrochemical tests in detecting alpha prime phase in duplex stainless steels aged at 475 °C
Talita Filer Fontes (IPEN), Maysa Terada (EPUSP), Angela Fernanda Padilha (University of S Paulo), Rodrigo Magnabosco (FEI) and Isolda Costa (IPEN)
N510 – Volumetric Gas Hydrogeneration of a Nickel Alloy 718
Leonardo Sales Araujo (UFRJ), Tatiane Siqueiros dos Santos (UFRJ), Andre Freitas Ribeiro (UFRJ), Dilson Silva dos Santos (UFRJ/COPEPEM) and Luiz Henrique de Almeida (UFRJ/COPEPEM)
N512 – Nanoscopic study on the chemical species during uranium electrodeposition for alpha spectroscopy
Maria Elena Montero-Cabrera (CIMAV, Mexico), Carmen Grisel Mendez-Garcia (CIMAV, Mexico), Hilda Esperanza Esparza-Ponce (CIMAV, Mexico), Diana Cecilia Burciaga-Valencia (CIMAV, Mexico), Angela Medina Beesley (University of Manchester), Luis Eduardo Fuentes (CIMAV, Mexico) and Luís Fuentes-Montero (CIMAV, Mexico)
N515 – Microstructural characterization of UO2-Xwt%Gd203 fuel pellets obtained by AUC co-precipitation and mechanical mixing processes
Margarida Mário Fernandes Lima (CEFET-MG), Wilmar Barbosa Ferraz (CDTN/CNEN), Ana Maria Matildes dos Santos (CDTN/CNEN), Lúcio Carlos Martins Pinto (CDTN/CNEN) and Armindo Santos (CDTN/CNEN)
N516 – A comparative study of UO2 ceramic pellets for nuclear applications made from different Wet process industrial manufacturing routes
Franklin L Palheiros (INB), Reinaldo Gonzaga (INB) and Alexandre R Soares (INB)
N519 – Irradiation-Induced Solute Clustering in 1 Ni – 1.3 Mn Welds
Mary Grace Burke (Bechtel Marine Propulsion), Jonathan M Hyde (NNL, UK) and Robin M Boothby (NNL, UK)
Monday, September 21
Session chair: Ali Sayir and Carlos Levi

09:30 - 10:00
PO8 (invited) - Ceramic composites with designed reinforcement architectures for hot structure
Dave Marshall (Teledyne Scientific)

10:00 - 10:30
PO9 (invited) - Developments in fiber-reinforced oxide composites
Frank W Zok (UC Santa Barbara)

10:30 - 10:45
O524 - Scaled-Up Manufacturing of Nanostructured Refractory Ceramics for High-Temperature Applications
James Kelly (Alfred University), Raghu-nath Kanakala (Alfred University) and Olivia A Graeve (Alfred University)

11:00 - 11:30
Coffee Break

11:30 - 12:00
PO3 (invited) - Hafnium Carbide-based ceramics: processing and properties
Alida Bellosi (CNR-ISTEC, Faenza, Italy), Laura Silvestroni (CNR-ISTEC) and Diletta Sciti (CNR-ISTEC)

12:00 - 12:30
PO5 (invited) - Superalloys: Evolution and Revolution for the Future
K Kawagishi and Hiroshi Harada (National Institute for Mat)

12:30 - 12:45
O512 - Nickel-based superalloys for advanced turbine engines
Katharine M Flores (Ohio State University), Clarissa A Yabinsky (Ohio State University), Michael J Mills (Ohio State University) and James C Williams (Ohio State University)

12:45 - 13:00
O532 - A Coupled Thermodynamic-Kinetic Model for the Oxidation Kinetics of Ternary Nickel-Rich Alloys
R T Wu (ICYS), R C Reed (University of Birmingham), K KAWAGISHI (University of Birmingham) and Hiroshi Harada

13:00 - 14:30
Lunch
Session chair: A. Bellosi and D. Marshall

14:30 - 15:00
PO7 (invited) - LOW THERMAL CONDUCTIVITY OXIDES
David Clark (Harvard University, Combr)

15:00 - 15:30
PO6 (invited) - Advanced Concepts in Thermal Spray Processing of Materials: An Illustrative Discussion on YSZ Thermal Barrier Coatings
Sanjay Sampath (State University of New Y)

15:30 - 15:45
O529 - Thermal barrier coatings based on zirconia stabilized with charge compensating cations
Rafael M Leckie (UCSB - USA), Yang Shen (UCSB - USA), David R Clark (UCSB - USA) and Carlos G Levi (UCSB - USA)

15:45 - 16:00
O530 - Microstructural Effects in the Fracture Toughness of Thermal Barrier Coatings
EM Donoue (UCSB - USA), NR Phil-Lips (UCSB - USA), DM Lipkin (General Electric), CA Johnson (General Electric), W Nelson (General Electric_Energy), Carlos G Levi (UCSB - USA) and AG Evans (UCSB - USA)

16:00 - 16:15
O539 - Nanoindentation study of zirconia with non-transformable tetragonal phase: experiments and simulation of elastic and plastic behavior
David Torres - Torres (Centro de Investigacion Mexico), Juan Munoz-Saldana (Centro de Investigacion Mexico), Carlos Levi (UCSB), Robert McMeeking (University of California), Anthony Evans (University of California), Eduardo Jose Zuniga-Marquez (Centro de Investigacion Mexico) and Luis Gerardo Trapani Martinez (Centro de Investigacion Mexico)
Tuesday, September 22

Session chair: Ali Sayir and T. Caillat
09:30 - 10:00
P01 (invited) - Skutterudite-based Thermoelectrics: Nano-composites and Device Development
Lixiang Chen (SICCAS) and Xiangyang Huang (SICCAS)

10:00 - 10:15
O516 - Thermoelectric Properties of Cu-Filled Chevrel-Phase Sulfides
Michihiro Ohta (AIST), Atsushi Yamamoto (AIST) and Haruhiko Obara (AIST)

10:15 - 10:30
O502 - Thermoelectric figure of merit of Zn$_x$Sb$_{3-x}$, samples grown by mechanical alloying and subsequent sintering
Julio E. Rodríguez (Unal Col) and Doris Cadavid (Unal Col)

10:30 - 10:45
O515 - Microstructure and thermoelectric properties of p-type Mg$_2$Sn prepared by RF induction melting
Haiyan Chen (CSIRO, Australia), Nick Savvides (CSIRO, Australia), Christian Stieve (DLR, Germany), Titus Dasgupta (DLR, Germany) and Eckhard Mueller (DLR, Germany)

10:45 - 11:00
Thermoelectric energy conversion in metal–semiconductor nano-composites and multi layers
Ali Shakour (University of California)

11:00 - 11:30
Coffee Break

11:30 - 11:45
O521 - Thermopower of Bismuth (Bi) Nanowire Arrays with wire diameters between 20 and 200 nm. Interplay of quantum confinement and surface effects.
Tito E Huber (Howard University), Ajabala Adeeye (Howard University) and James W Mitchell (Howard University)

11:45 - 12:00
O537 - Semiconducting behavior in Cr$_2$Al thin films
Zoe Boekelheide (UC-Berkeley), Derek A Stewart (Cornell) and Frances Hellman (UC-Berkeley)

12:00 - 12:30
PO2 (invited) – Oxide thermoelectric power generation

12:30 - 12:45
O503 - Transport and thermoelectric properties of multi-phase LSCuO$_x$ samples grown by citrate sol-gel method
Julio E. Rodríguez (Unal Col), Luis Carlos Moreno-Aldana (Univ Nat de Colombia) and Doris Cadavid (Unal Col)

12:45 - 13:00
O513 - Unconventional Reduction of Thermal Conductivity in Thermoelectric Oxides
Michiaki Ohtaki (Kyushu University), Tomohiro Masuda (Kyushu University), Shinobu Teraoka (Kyushu University) and Kyoshi Yamamoto (Kyushu University)

13:00 - 14:30
Lunch
Session chair: R. Funahashi and L. Chen

14:30 - 15:00
PO4 (invited) – Thermoelectric Properties of Nanostructured TiO$_2$/SnO$_2$ Composites
Fred W DINYS (NASA), Marie Helene BERGER (Paris Tech), Ali SAYIR (NASA / CWRU) and Alp SEHIRIOLGU (CWRU)

15:00 - 15:15
O519 - Thermal Transport Measurements of LaCoO$_3$ and SrTiO$_3$
Alexander Cortes (Universidad del valle), Juan Claudia Nino (University of Florida), Wilson Iopero (Universidad del valle) and Pedro Prieto (CENM)

15:15 - 15:30
O508 - Modifications of the Bi$_x$Ca$_2$O$_7$-δ thermoelectric properties by controlling the microstructure
Hervé Mugniera (LCIS), Beatriz Rivas-Murias (LCIS), Maria Traianidis (bcrc), Bénédicte Vertruyen (LCIS), Philippe Vanderbemden (Inst Montefiore) and Rudi Cloots (LCIS)

15:30 - 15:45
O507 - Porous S-doped ZnO electrode for application in solar energy conversion
Eversson Thiago Santos Gerônico da Silva (UNICAMP), Gabriela Zanotto Bosshard (UNICAMP), Fernando Aparecido Sigoli (UNICAMP) and Cláudia Longa (UNICAMP)

15:45 - 16:00
O526 - Role of the polymer thermal stability on the efficiency of compact layer-by-layer TiO$_2$ films as blocking layers in dye-sensitized solar cells
Neyde Y Murakami Iha (IQUSP), Antonio Otavio T Patrocínio (IQUSP) and Leonardo Giordano Paterno (IQUSP)

16:00 - 16:15
O517 - The development of selective surfaces of n-i-n by magnetron sputtering for photothermal applications
Gislon Ronaldo Guimaraes (CTEC/ MG), Wagner Sode (REDEMAT) and Jose Tavares Branco (CTEC)

16:15 - 16:30
O518 - Electrodeposition of black chromium thin films from trivalent chromium-ionic liquid solution
Sônia Eugénio (Demat-IST-UTL), Rui Vilar (Demat-IST-UTL), Carmen Mireya Rangel (UEGM- INETI) and Iruson Baskaran (Demat-IST-UTL)

16:30 - 16:45
O525 - Microwave attenuation microstructure and Mg$_2$Sn prepared by RF induction melting
Haiyan Chen (CSIRO, Australia), Nick Savvides (CSIRO, Australia), Christian Stieve (DLR, Germany), Titus Dasgupta (DLR, Germany) and Eckhard Mueller (DLR, Germany)

16:45 - 17:00
O521 - Thermopower of Bismuth (Bi) Nanowire Arrays with wire diameters between 20 and 200 nm. Interplay of quantum confinement and surface effects.
Tito E Huber (Howard University), Ajabala Adeeye (Howard University) and James W Mitchell (Howard University)

17:00 - 17:15
O537 - Semiconducting behavior in Cr$_2$Al thin films
Zoe Boekelheide (UC-Berkeley), Derek A Stewart (Cornell) and Frances Hellman (UC-Berkeley)

17:15 - 17:30
PO2 (invited) – Oxide thermoelectric power generation

17:30 - 18:00
Coffee Break

18:30 to 20:30
Poster Session O
Materials for Direct Energy Conversion Systems
Room: Louvre

Monday, September 21
18:30 to 20:30
O509 - Potential for generation of thermal and electrical energy from biomass of sugarcane: an exergic analysis
Diosek Nascimento Dantas (EESC - USP), Frederico Fabio Mauad (EESC - USP) and Aldo Roberto Ometto (EESC - USP)
Tuesday, September 22

Session chair: Julius Vancso

09:30 - 10:00
PP4 (invited) – Self-Assembly of Soft Matter/Nanoparticle Hybrids
Stephen Z. D. Cheng (University of Akron), Wen-Bin Zhang (University of Akron), Yingfeng Tu (University of Akron), Chun Ye (University of Akron), Ryan M Van Horn (University of Akron), Xinfei Yu (University of Akron) and Chien-Lung Wang (University of Akron)

10:00 - 10:15
P507 – Redox Responsive Poly(ferrocenylsilane) (PFS) Interfaces Studied by Atomic Force Microscopy
Jing Song (University of Twente), Hong Jing Chung (University of Twente) and Julius G Vancso (University of Twente)

10:15 - 10:30
P510 – Stimulus Responsive Organometallic Nanostructures for Release of Molecular Payloads
Julius G Vancso (University of Twente), Jing Song (University of Twente), Yujie Ma (University of Twente), Nayeli Arias-Lopez (University of Twente) and Mark Hempenius (University of Twente)

10:30 - 11:00
PP7 (invited) – Improved barrier, mechanical and thermal properties of hydrophilic edible films by incorporation of nanoparticles and nanofibers
Luiz H C Mattosso (Embrapa/CNPDA/LNNA, BRA), Tara H McHugh (WRRC/ARS/USDA, USA), Maria R Mouna (Embrapa/CNPDA/LNNA, BRA), Henrique M C de Azeredo (Embrapa/CNPAT, Brazil), Nijan Dogan (Nestle, Switzerland) and Roberto J Avena-Bustillos

12:00 - 12:15
P512 – Modelling of space charge density in polymeric insulating materials
Medoura, Ourida, Ourida and Belkaid

12:15 - 12:30
P513 – Fluorinated Anionic Photoinitiator Generators (PAGs) & Super PAG Bound Polymer Resists for Nanolithography
Kenneth E. Gonsalves (UNCC), Minxing Wang (UNCC), Venkat Reddy Vummadi (UNCC) and Monica Miryam Rabinovich (UNCC)

12:30 - 13:00
PP1 (invited) – Functional Polymeric Nanostructures
Ming Yong Han

13:00 - 14:30
Lunch

Session chair: Rachel Segalman

14:30 - 15:00
PP3 (invited) – Rheology as a tool to characterize and control morphology of polymer blends and clay containing polymer nanocomposites
Nicole Raymonde Demarquette

15:00 - 15:15
P511 – Polymeric Scaffolding based on polyisocyanopeptide based multi-chromophoric arrays: Unraveling the relationship between nanoscale architecture and function in materials for organic electronics
Paolo Samori

15:15 - 15:30
P527 – Hygrothermal Ageing of Polypropylene/Maleated PP/Glass Fiber Composites: Influence ofCompatibilizer Content and Fiber Sizing
José Alexandrino Sousa (DEMa-Unicamp) and Marcelo Henrique Motta Dias (DEMa-Unicamp)

15:30 - 15:45
P528 – Nanostructure of New Functional and electronic materials
Maria Rippel (Unicamp) and Maria do Carmo Vasconcelos da Silva (Unicamp)
P514 - Two-photon polymerization of optically active microstructures for photonic applications
Cleber Renato Mendonça (USP), Daniel Souza Correa (USP), Tobias Voss (Harvard), Prakriti Tayalia (Harvard) and Eric mazur (Harvard)

11:00 – 11:30
Coffee Break
Session chair: Edwin Thomas

11:30 – 12:00
PP5 (invited) – Self-Assembly of Rod-Coil Block Copolymers for Optoelectronics
Rachel A Segalman (UC Berkeley), Bradley D Olsen (UC Berkeley), Victor Ho (UC Berkeley) and Bryan McCulloch (UC Berkeley)

12:00 – 12:30
PP6 (invited) – 3D Composite Structures for Storing, Generating, and Harvesting Photons and Electrons
Paul V Braun

Poster Session P

Designer Polymeric Nano and Micro-Structures
Room: Louvre

Thursday, September 24
11:30 to 13:00
P502 – Preparation of functional environmentally responsive supports
Alexandros Lampropoulou (ETH Zurich), Giuseppe Storti (ETH Zurich) and Massimo Morbidelli (ETH Zurich)

P503 – Controlled Styrene Polymerization using Trifunctional Initiator
Eduardo Galhardo (UNICAMP) and Liliane Ferreira Longa (UNICAMP)

P504 – Layer by Layer engineering of PLGA nanoparticles for control of surface properties, targeting and cellular uptake
Sergio Enrique Moya (CIC biomaGUNE), Jie Shou (CIC biomaGUNE) and Changyou Gao (Zhejiang University)

P505 – Selective erasing of nanoscale Polyelectrolyte films by means of Quaternary Ammonium Surfactants
Sergio Enrique Moya (CIC biomaGUNE), Jagoba Iturri (CIC biomaGUNE) and Irantzu Larena (CIC biomaGUNE)

P506 – Preparation and characterization of capillary monolithic columns for nano-chromatography
ZEID ABDULLAH ALOTHMAN (King Saud University), Yacine Badjah Hadi Ahmed (King Saud University), Metaab A Al Badrani (King Saud University) and Abdul Rahman Abdullah Al Wathian (King Saud University)

Luciano Caseli (UNIFESP), Laura Oliveira Pères (UNIFESP), Shu H Wang (USP), Thays CF Santos (UNIFESP) and Osvaldo Novais Oliveira Jr (USP)

P519 – Enhancement of the poly(p-phenylene vinylene) emission efficiency in the indium-tin oxide interface
Luiz Carlos Pocos (FACIP-UFU), Alexandre Marletta (UFU), Raigna Augusta Silva (UFU), Newton Martins Barbosa Neto (UFU), José Leonil Duarte (UEL), Ivan Frederico Lupiano Dias (UEL) and Edson Laurote (UEL)

P520 – Highly polarized light emission from layer-by-layer PPV+CR films
Luiz Carlos Pocos (FACIP-UFU), Alexandre Marletta (UFU), Raigna Augusta Silva (UFU), Newton Martins Barbosa Neto (UFU), José Leonil Duarte (UEL), Ivan Frederico Lupiano Dias (UEL) and Edson Laurote (UEL)

P523 – Effect of Alkali metal salt KCl Doping on Optical and Microstructural Properties of polymer PVA
Rajashekar Fakeerappa Bhajantri (Mangalore University), Ravindracharya Vasachar (Mangalore University), Ismayil (Mangalore University), Harisha Arkiady (Mangalore University) and Manjunatha Pattabi (Mangalore University)

P529 – Composite as a Selective Membrane for Electronic Applications
Lillian Marques Silva (EPUSP), Eduardo Yotis Matsuy (FATEC-SP), Roberto da Rocha Lima (IFUSP), Esteban Fachini (UPR-USA) and Maria Lucía Pereira da Silva (EPUSP)

P530 – Effect of chitosan addition in polyhydroxybutyrate scaffolds properties.
Roberta Helena Mendonça, Rosanna Mara da Silva Moreira Thiré (Thiré) and Marysilvia Ferreira da Costa

P531 – One-Step Synthesis of Polyamine and Silver Particle Composites in Ionic Liquids
Fernanda Ferraz Camilo (UNIFESP), Roselena Faez (UNIFESP), Marcos Augusto Bizeto (UNIFESP) and Cintia M Corea (UNIFESP)

P534 – Polyurethane/multiwalled carbon nanotube (MWNT) composite membrane characterized by AFM techniques
Cecilia Vilani (Imetrom), Monique Nonato Silva Petersem (UFU/Imetrom), Clara Muniz Almeida (Imetrom), Lidia Agata Sena (Imetrom), Indhira Oliveira Machiel (UFMGI) and Carlos Alberto Achete (IMETROM)

P536 – Analysis of Conductivity of the PUR/CB composites varying the amounts of polyol and carbon black.
Michael Jones da Silva (UNESP - Ilha Solteira), Paulo Vinicius dos Santos Rebeque (UNESP - Ilha Solteira), José Antonio Malmonge (UNESP - Ilha Solteira), Haroldo Naoyuki Nagashima (UNESP - Ilha Solteira) and Darcy Hiroe Fujii Kanda (UNESP - Ilha Solteira)

P537 – Degradation of Glass Fiber Reinforced Polymer Rebars
Fahad S Al - Mubadel (King Saud University)
Monday, September 21

11:00 - 11:30
Coffee Break
Session chair: Lucimara Stolz Roman

11:30 - 11:45
Q519 - Interface effect of heat treatment on amorphous In-Ga-Zn-O thin film transistor as a function of oxygen flow rate
Chulho Jung, Kwang Ho Choi, Min Suk Choi and Dae Ho Yoon

11:45 - 12:00
Q510 - Magnetostriction and substrate effect on microwave permeability of metal films
Sergey Nikolaevitch Starostenko (ITAE RAS) and Konstantin Nikolaevitch Rozanov (ITAE RAS)

12:00 - 12:15
Q541 - Ferromagnetic, ferroelectric and magnetoelectric properties of PZT-CoFe2O4 multiferroic composite
Maria Eugenia Botello-Zubieta (CIMAV-Chihuahua), Abel Hurtado - Macías (CIMAV-Chihuahua), Carlos Roberto Santillán-Rodríguez (CIMAV-Chihuahua), José Andres Matutes-Aquino (CIMAV-Chihuahua) and Jesús González-Hernández (CIMAV-Chihuahua)

12:15 - 12:30
Q522 - Electrical Characterization of Porous Silicon on p-Si Heterojunction
Maria Andres Chavarria (U Autonoma de Occidente) and Faruk Fonthal Rico (U Autonoma de Occidente)

13:00 - 14:30
Lunch
Session chair: Ana Claudia Arias

14:30 - 15:00
P03 (invited) - Materials and designs for flexible and stretchable electronic surfaces
Sigurd Wagner (Princeton University)

15:00 - 15:15
Q548 - Transparent ambipolar light-emitting field-effect transistors based on multilayer heterostructures
Michele Muccini (CNR), Raffaella Capelli (CNR), Stefano Toffanin (CNR), Gianluca generelli (CNR) and Antonio facchetti (Polyera Co)

15:15 - 15:30
Q521 - Investigation of the bonding process of anisotropic conductive films joints
Yong - Cheng Lin (Central South University)

15:30 - 16:00
P06 (invited) - Printing and Patternning for Plastic Electronics and Photonics
Donal Donat Conor Bradley (Imperial College London)

Tuesday, September 22

Session chair: Martin Heeney

09:30 - 10:00
P08 (invited) - Exploring the Optoelectronic Properties of Polymers Containing Fluorene Moieties
Jeni campos akcelrud (UFPR)

10:00 - 10:15
Q509 - Light-powered switching an entire monolayer: a switchable interface for organic electronics
Paolo Samori

10:15 - 10:30
Q537 - Charge-transfer excitons in lamellar organic semiconductors
Carlos Silva (Université de Montréal), Jean-François Glove (Université de Montréal), Simon Gélinas (Université de Montréal), Benoît Gosselin (Université de Montréal), Mathieu Perrin (Université de Montréal) and Richard Leonelli (Université de Montréal)

10:30 - 11:00
PQ5 (invited) - Solution processable phosphorescent materials
Paul Burn (Queensland), Jack Gunning (Oxford), Shih-Chun Lo (Queensland), Wen-Yong Lai (Queensland), Jack Levell (St Andrews) and Ifor Samuel (St Andrews)

11:00 - 11:30
Coffee Break
Session chair: Alberto Salleo

11:30 - 12:00

PQ1 (invited) – Compliant Organic Thin Film Transistors on Elasto-meric Substrates
  Stephanie P Lague (University of Cambridge) and Ingrid M GBest (University of Cambridge)

12:00 - 12:15

Q503 – Stabilized, Easily Processed Tetracarboxylic Diamides for Low-voltage n-Channel Circuits and Sensors
  Howard Alan Katz (JHU), Byung Jun Jung (JHU), Qiongdong Zheng (JHU) and Bal Mukund Dhar (JHU)

12:30 - 13:00

PQ4 (invited) – Thin Film Transitors of Liquid Crystalline Semiconducting Polymers
  Michael Chabinyc (University of California)

13:00 - 14:30

Lunch

Session chair: Lucimara Stolz Roman

14:30 - 15:00

PQ7 (invited) – The Design of High Performing Semiconducting Polymers
  Iain McCulloch and Martin Heeney

15:00 - 15:15

Q506 – Fluoropolymer Interlayer for Polymer LEDs
  Gianluca Latini (Imperial College London)

15:15 - 15:30

Q514 – Coadsorption of spectrally complimentary dyes in solid-state dye-sensitised solar cells: Observation of inter-dye energy transfer and enhanced photo-conversion efficiency
  Michael David Brown (University of Oxford) and Henry James Snaith (University of Oxford)

15:30 - 15:45

Q528 – Organic Solar Cells: Materials and Interfaces
  Scott Edward Watkins (CSIRO), Giovanni Fanchini (CSIRO), Katarin Hagedus (CSIRO), Peter Kempfinnen (CSIRO), Th Birendra Singh (CSIRO), Mark Bown (CSIRO) and Kevin Winzenberg (CSIRO)

15:45 - 16:00

Q533 – Solvent-Free Processing of High-Mobility Poly(3-hexylthio- phene) Structures
  Natalie Stingerlin (Imperial College London)

16:00 - 16:30

PO2 (invited) – Fabrication of submicrometric patterns from self-organized structures of block copolymers and transcription on solid surfaces
  Roberto Mendonça Faria (IFSC/USP), Rafael Henrique Longaresi (IFSC/USP), Marcelo Assumpção Pereira-da-Silva (IFSC/USP) and Antonio J Felix Carvalho (UFSCar)

Poster Session Q

Materials and Processes for Large-Area Electronics

Room: Louvre

Tuesday, September 22

18:30 to 20:30

Q501 – Processing of a paint based in hybrid material for use as Radar Absorbing Material
  Luiza de Castro Fukugawa (CTA/IAE) and Mirabel Cerqueira Rezende (CTA/IAE)

Q502 – Reliability of Ag Ink Jet Printed Traces on Polyimide Substrate
  Renato Bonaliman (INAT), Marta Machado Pinheiro Salazar (UEA) and Ociele Custodio Silva (INAT)

Q504 – Binder-Free Silver Paste Using the Reactive Monomolecular Layer
  Shojo Onishi (Kagawa University), Yuki Ohkubo (Kagawa University), Yuki Asabe (Kagawa University) and Kazu-tumi Ogawa (Kagawa University)

Q507 – Exciton dynamics in polyfluorene containing end-groups with intramolecular charge transfer (ICT) state
  Emanuelle Reis Simas (IQSC) and Marcelo Henrique Gehlen (IQSC)

Q508 – In place growth of vertical Si nanowires for surround gated MOSFETs with self aligned contact formation
  Alois Lupstein (TU Wien), Mathias Steinmayr (TU Wien), Christoph Henkel (TU Wien) and Emmerich Bertagnolli (TU Wien)

Q513 – Electrical and Optical properties of Diamond-Like Carbon (DLC) films deposited by reactive magnetron sputtering
  Vinicius Zacarian Rizzo (Escola Politécnica - USP) and Ronaldo Domingues Mansano (Escola Politécnica - USP)

Q515 – Tunneling conduction process introduction during the degradation phenomena process in SnO2 and ZnO varistors
  Miguel Adolfo Ponce (INTEMA), Miguel Ramirez (UNESP), Miriam Susana Castro (INTEMA), Paulo Roberto Bueno (UNESP), Elson Longo (UNESP) and José Arana Varela (UNESP)

Q516 – Scanning laser sintering: A two step sintering process?
  Eduardo Antonelli (USP - IFSC) and Antonio Carlos Hernandez (USP - IFSC)

Q517 – STUDY OF CRYSTAL STRUCTURE, MORPHOLOGY AND COMPOSITION OF THE α-MoO3 DOPED WITH NEODYMIUM, OBTAINED BY THERMAL PRECIPITATION.
  Rafael Eduardo Gorrüz (UnalColombia), José Edgar Alfonso (Unal Colombia), Nestor Jaime Torres (Unal Colombia) and Luis Carlos Moreno-Aldana (Univ Nal de Colombia)

Q523 – Coulomb oscillations observed in organic junctions
  Marcos Patricia dos Santos (UnB), Tiago da Silva Bonfim (UnB) and Artemis Marti Ceschin (UnB)

Q524 – Environmental and mechanics influence on functional behavior of electronics products with flexible printed circuit boards with embedded passive component
  Josineto Leal da Costa (INAT) and Ociele Custodio Silva (INAT)

Q525 – Study of KDP Concentration in a PEDOT: PSS matrix at Voltage x Pressure Response
  Felipe Azevedo Rios Silva, Artemis Marti Ceschin (UnB) and Maria José Araujo Sales (UnB)

Q530 – Electrical response analysis of doped tin oxide gas sensors under different gases atmospheres
  Liliana Fraig (INTI), Eliana Gabriela Mangano (INTI), Miguel Adolfo Ponce (INTEMÁ), Celso Manuel Aldao (INTEMA), Cesare Adolfo Malagù (UNIFE), Maria Cristina Carotta (UNIFE) and Giuliano Martinelli (UNIFE)

Q531 – Study of optical and electrical properties of copolymers based on phenylene–thiophene for electronic devices
  Natasha Ariane Diniz Yamamoto (UFPR), Bruno Fernando Nowacki (UFPR), Leni Campos Accrédur (UFPR) and Lucimara Stolz Roman (UFPR)

Q534 – a–Si:C:H thin films deposited by PECVD with very low silane flow
  Jones Wilian Soares de Queiroz (IF / UFMF), Evandro França (IF / UFMF), Marcus Pelegnini (LME / EPSUS), Inês Pereyra (LME / EPSUS) and Rogerio Junqueira Prado (IF / UFMF)

Q535 – Effects of the deposition pressure on the chemical and structural properties of a–Si:C:H thin films deposited by PECVD
  Evandro França (IF / UFMF), Jones Wilian Soares de Queiroz (IF / UFMF), Marcus Pelegnini (LME / EPSUS), Inês Pereyra (LME / EPSUS) and Rogerio Junqueira Prado (IF / UFMF)

Q536 – Ion-induced epitaxy in Fe+ implanted SiO,/Si: synthesis and optical characterization of FeSi2 nanoparticles
  Rossano Long Carvalho (UFROSG), Marcel Eduardo Staats (UFROS), Shay Reboh (UFROS), Eiermem Arroes Meneses (Unicamp) and Livio Amaral (UFROS)

Q542 – The use of a thermal-head inkjet printer to produce films of PEDOT and PANI
  Nerl Abic (Unesp), Tiago Carneiro Gomes (Unesp), José Alberto Gio- cometti (Unesp) and Alido Eloizo Job (Unesp)

Q545 – Sr2YSbO6 as a Buffer Layer for YBa2Cu3O7 Superconducting Films
  David Arsenio Landínez Téllez (Unesp), Elson Longo (UNESP), Miriam Susana Castro (INTEMA) and Ronaldo Aruna Varela (UNESP)

Q546 – Charge Transport Studies on Poly(o-alkoxyanilines) Nanostructured Films: Formation of Conducting Islands
  Fábio Lima Leite (UFSCar), Edgar Sanches (USP-IFSC), Marcelo Luiz Simões (Embrapa), Pedro Nascente
Q549 - Excimer Laser Wet Oxidation of Amorphous Hydrogenated Silicon

Saydulla Persheyev, Yongchang Fan and Mervyn John Rose

Q550 - Carrier spectrum in CNT functionalized by molecules with conformation transition

Victor Alexandrovich Lyakah (NTU Kharkov Polytechnic I) and Eugen Solomonovich Syrkin (Inst Low Temperature NASU)

Q551 - Electrical and dielectric properties of BaTiO$_3$ and Ba$_{0.77}$Ca$_{0.23}$TiO$_3$ ceramics synthesized by the proteic sol-gel method

Jerre Cristiano Alves dos Santos (DFi - UFS), Ronaldo Santos da Silva (DFi - UFS), David Vieira Sampaio (DFi - UFS), Zélia Soares Macedo (DFi - UFS), Eduardo Antonelli (IFSC - USP), Antonio Carlos Hernandes (IFSC - USP) and Jean-Claude M’Peko (IFSC - USP)

SYMPOSIUM R

Protective Coating: Advanced Surface Engineering

Auditorium: Oriente

Simposium Organizers:

Fernando L. Freire Jr. (PUC-Rio, Brazil)
Yip-Wah Chung (Northwestern, USA)
Israel J. R. Baumvol (UFRGS, Brazil)

Functional and electronic materials
Thursday, September 24

Session chair: Fernando L. Freire Jr.

09:30 - 10:00
PR1 (invited) – Quantitative Transmission Electron Microscopy of Multilayer Coatings for X-ray Optics
Wolfgang Jager

10:00 - 10:15
RS13 – Tailoring the mechanical and magnetic behavior of electrodedeposited nanocrystalline CuNi thin films
Eva Pellicer (UAB), Aida Varea (UAB), Salvador Pàez (ETHZ), Bradley J Nelson (ETHZ), María Dolores Baró (UAB), Josep Nogués (ICREA) and Jordi Sort (ICREA)

10:15 - 10:30
RS56 – Wear properties improved by laser surface melting in martensitic stainless steel
Félix Toloi Gistaldé (UNICAMP), Maria Aparecida Larosa (UNICAMP), Milton Sergio Fernandes Lima (IEAV), Rudimar Riva (IEAV), Ana Murcia Garcia (UNICAMP) and Maria Clara Filippini Jerardi (UNICAMP)

10:30 - 10:45
RS69 – Formation Study of Ag/TiO2 Thin Films Deposited in Stainless Steel by Sol-Gel Process
Nelcy Delia Mohalem (UFMG), Marcelo Machado Viana (UFMG), Sisnando Italibana Soberinho (REDEMAT), Sebastiana Luiza Bragança Lano (REDEMAT) and Elisângela Silva Pinto (UFMG)

10:45 - 11:00
RS10 – Conformational order of n-dodecanethiol and n-dodecanethiol-selenol monolayers on polycrystalline copper investigated by PM-IRRAS and SFG spectroscopy
Grégory Fonder, Francesca Cecchet, André Peremans, Paul Thiry, Joseph Delhalle and Zineb Mekhalif

11:00 - 11:30
Coffee Break
Session chair: Dante Franceschini

11:30 - 12:00
PR3 (invited) – New Nanoindentation and Scanning Probe Tools and Techniques.
Warren C. Oliver (Agilent)

12:00 – 12:15
RS07 – Enhancement of Corrosion, Mechanical, and Tribological Properties by Using a CrN/AlN, Multilayer System
Gerardo Bera (Univalle; Cali, Colombia), Felipe Torres (Univalle; Cali, Colombia), Cesar Amaya (Univalle; Cali, Colombia), William operador (Univalle; Cali, Colombia), Nelly Cecilia de Sánchez (UAD; Cali, Colombia), Gladys Mendoza (UNAL; Bogota, Colombia) and Pedro Prieto (CENM; Cali, Colombia)

12:15 – 12:30
RS31 – Physicochemical and tribological properties of Si₃N₄ thin films deposited on Si by D.C. reactive magnetron sputtering
Cristiane Marín (UNI), Gabriel Véierrez Soares (UNI), Cesar Azuguzi (UFRGS), Carlos Alejandro Figueroa (UFC) and Israel Jacob Rabin Baumvol (UFRGS)

12:30 – 12:45
RS37 – Study of morphology of Cr/CrN nanometric multilayers grown at different periods
Diana Maríiza Marulanda Cardona (Universidad Nacional de C), Yuri Lízbeth Chiquipecu Godoy (Universidad Nacional de C), Diego Fernando Arias Mateus (Universidad Nacional de C) and Jhon Jairo Olaya Florez (Universidad Nacional de C)

12:45 – 13:00
RS33 – The Nano Modification of Hard Coatings with Nitrogen Ion Implantation
Branko Skoric (Un Novi Sad), Damir Kakos, Gregory Favaro (CSM) and Aleksandar Miletic

13:00 – 14:30
Lunch
Session chair: Israel Baumvol

14:30 – 15:00
PR2 (invited) – Effect of the substrate coating nanostructure on the carbon nanotubes growth
Fernando Alvarez (UNICAMP)

Poster Session R
Protective Coating:

Advanced Surface Engineering
Room: Louvre
18:30 to 20:30
RS01 – La₀.₆Sr₀.₄Co₀.₂Fe₁.₈O₉ protective coatings for solid oxide fuel cell interconnect deposited by screen printing
Chu Chun Lin (Department of Mechanical), Lee Shyong (Department of Mechanical), Tsai Ming-Jui (Department of Mechanical) and Lee Jye (Department of Electrical)

RS02 – EB-PVD TiN coatings in titanium alloys produced by powder metallurgy
Vinicius Rodrigues Henrique (CTA), Eduardo Tavares Galvani (ITA) and Thales Geraldo Lemos (EEL-USP)

RS03 – Advanced Image Processing as a tool to identify sub-surface structural transformations of self-lubricant coatings
Tomás Polcar (Czech Tech Univ), Ondřej Drbohlav (Czech Tech Univ) and Albano Cavaleiro (University of Coimbra)

RS06 – Au-Pd bilayered films deposited on Si(111) and GaAs(100) substrates
Pedro Augusto de Paula Nascente (UFSCar), Aelison Conte Machado (UFSCar), Creber Moreti (UFSCar), Angelo Luiz Gobbi (LNS), Marcia Carvalho de Abreu Fantini (USP), Simoni Maria Gheno (UFSCar) and Pedro Iris Paulin-Filho (UFSCar)

RS08 – A qualitative study on wear behavior of Ti-doped carbon-based coatings by using ball-on-disk apparatus
Emanuel Santos Junior (COOPE/UFJF), Sérgio Álvaro de Souza Camargo Júnior (UFJF), Maria-Paule Delplancke-Ogletree (ULB) and Glória Almeida Soares (UFJF)

RS09 – Enhancement of electrochemical and tribological properties by using a [BCN/h-BN]c/n-BN multilayer system
Luis Henry Moreira (CDT ASCEN), Cesar Andres Amaya (Universidad del Valle), Julio Cesar Caicedo (Universidad del Valle), William Aperador (Universidad del Valle), Nelly Alba (Universidad Autonoma) and Pedro Prieto (CENM; Cali, Colombia)
R511 - Self-assembled Monolayers of Aliphatic Thiol, Dithiol and Dithiocarboxylic Acid on Electrochemically Reduced Polycrystalline Copper Substrates

Jessica Denguer, Anthony Maha, Joseph Delhalle and Zineb Mekhalif

R512 - Pre-Placed Laser Cladding of \(\text{Al}_{90}\text{Fe}_{20}\text{Cr}_{30}\text{Mn}_{10}\) quasicrystals former alloy on 7021 aluminum alloy

Piter Gargarella (PPGCEM-DEMA-UFS- Car), Rui Vilari (Demat-IST-UTL), Cláudio Shyinti Kiminami (DEMA-UFS-Car), Carlos Triveño Rios (DEMA-UFS-Car), Walter Jose Botta (DEMA-UFS-Car) and Claudemio Bolfarini (DEMA-UFS-Car)

R514 - Study of CaCO\(_3\) Scale Formation on DLC coated steel

Ricardo Assunção Santos (UFRJ) and Sérgio Álvaro de Souza Camargo Júnior (UFRJ)

R515 - Plasma Nitriding of sintered unalloyed iron superficially enriched with Mo

Tatiana Benda (UFSC), Ana Maria Moita (UFSC), Henrique Cesar Pavanari (IF-SC) and Aloísio Nélimo Klein (UFSC)

R516 - Preparation and Characterization of Super-Hydrophobic Surface

Yuji Ohkubo (Kagawa University), Shogo Onishi (Kagawa University), Yuki Asabe (Kagawa University), Hiroyuki Noriyasu (Kagawa University) and Kazufumi Ogawa (Kagawa University)

R518 - Influence of temperature on erosive wear of \(\text{Cr}_3\text{C}_2\)-plasma-coated spray coating

Juliane Vicenzí (UFFROS), Caio Marcelo Marques (UFFROS) and Carlos Pérez Bergmann (UFFROS)

R519 - AFM and XPS analyses of magnetron sputtered TiN functional films on AISI M2 and AISI D6 steel substrates

Rogerio de Almeida Vieira (UDESC), Maria do Carmo de Andrade Nono (INPE) and Ivo de Castro Oliveira (ITA)

R520 - Ultrawear Friction System: Liquid Crystals onto Boron Nitride/Diamond–Like Carbon–Multilayered Films Deposited by Plasma Enhanced Chemical Vapor Deposition

Vinicius Bossoni Amaral (UFSC)

R523 - Gamma and ultraviolet effect on contact angle of polyurethane adhesive derivate from castor oil

Elaine Cristina Azevedo (UFPR), Eduardo Mauro Nascimento (UFPR), Salvador Claro Neto (USP), João Sineiz Campos (Unicamp) and Carlos Mauricio Lepinski (UFPR)

R524 – Adhesion measurement of Cu thin films on polyamide and polypropylene substrates

Alexandre Luís Gasparrini (UFRGS), Israel Jacob Raun Baumvol (UFFROS), Alexandre Perez Umpierre (UFRGS), Angela Elisa Crespi (UFS), Felipe Cemin (UFS), Regina Célia Reis Nunes (UFS) and Cristiano Giacomelli (UFFROS)

R525 - Effect of Temperature on the Behaviour of Titanium Dioxide in Polyethylene Teraphthalate Protective Coatings on Electrolytic Chromium Coated Steels

Ernesto Zumelzu

R526 – Physicochemical and tribological investigations of TiC and VC thin films deposited on Si by DC reactive magnetron sputtering

Cesar Aguzzoli (UFFROS), Gabriel Vieira Soares (UFS), Carlos Alejandro Figueroa (UFS) and Israel Jacob Raun Baumvol (UFS/UFFROS)

R527 - Hysteresis effect and film characterization in DC reactive sputtering of titania and alumina

Tatiana Weber (UFFROS), Rodrigo Leonardo de Oliveira Basso (UFS), Gabriel Vieira Soares (UFS), Israel Jacob Raun Baumvol (UFS/UFFROS), Marcos Antonio Zen Vasconcellos (UFFROS) and Cristiano Krug (UFFROS)

R528 – Polystyrene surface modification by active screen plasma nitriding

Angela Elisa Crespi (UFS), Israel Jacob Raun Baumvol (UFS/UFFROS), Cristiano Giacomelli (UFS), Gabriel Vieira Soares (UFS), Alan Pereira Kauling (UFS), Carlos Alejandro Figueroa (UFS) and Alexandre Perez Umpierre (UFS)

R529 – Magnetron Sputtered Amorphous Carbon Nitride Coatings as Corrosion Protection

Priscila Tamassio Martinhon (CDTS-IOCROU), Mai Tran (LISE-UPR15-CNRS), Claude Gabrielli (LISE-UPR15-CNRS) and Claude Deslouis (LISE-UPR15-CNRS)

R530 – Fluoropolymer Addition to an Epoxy–Amine System: Fluorinated Acids

ALEJANDRO LUIS MICCO (INTEMA-UNMDP-Argentina) and PABLO EZEQUIEL MONTEMARTINI (INTEMA-UNMDP-Argentina) and Patrícia Angelica Oyan- guen (INTEMA-UNMDP-Argentina)

R532 – Surface properties of carbonic coatings developed on iron-based alloys by surface electrochemical engineering techniques

Víctor Aurol Andrei (INR), Cristian Lungu (INLPRP), Constantín Diaconu (INR), Gheorghe Oniciu (INR) and Oana Alice Rusu (INR)

R534 – Fracture and structural modifications induced by cathodic hydrogenation after nitriding on AISI 304

Fabiana Cristina Nascimento (UFEP), Elton Diniz Ferreira (UFFPR), Juliana Fatima Souza (UFFPR), Neide Kazue Kuromoto (UFFPR), Carlos Eugenio Foerster (UFFPR) and Carlos Mauricio Lepinski (UFFPR)

R536 – Development of the Novel Technique with the Aqueous Solution for Preparing Hydrophobic Monolayers

Hiroyuki Noriyasu (Kagawa University), Yuji Ohkubo, Yuki Asabe, Shogo Onishi and Kazufumi Ogawa

R539 – Hydrophobicity changes promoted by argon and CF\(_4\) plasma treatments on DLC films

Danny Pilar Araucano Holgado (PUC-Rio), FERNANDO LÁZARO FREIRE VIEIRA AOKI (USP), Hatsue Suegama (UNESP) and Idalina Monfellini (IPEN), Assis Vicente Benedetti (INP-MOE) and Celso Valen- tim Santilli (IPEN)

R540 – CORROSION RESISTANCE OF AERONAUTICAL ALLOYS TREATED BY PLASMA IMMERSION ION IMPLANTATION (PII)

Graziela da Silva (ITA/INPE), Mario Ueda (INPE), Cheoy Ota (ITA) and Heitfried Reuther (IBBMPR)

R541 – Effect of non-ionic surfactant \((EO)\_n\) chain size on poly(styrene-co-butyl- acrylate-co-acrylic acid) latex properties

Ziarat Shah Afridi (Unicamp), Maria do carmo V M da Silva (Unicamp) and Fernanda Galemebeck (Unicamp)

R542 – Evaluation of Corrosion Resistance of Diamond-Like Carbon Films Deposited on AISI 4340 Steel

Ricardo de Padua Oliveira Sá Nery (UFRJ/Brazil), Ricardo Santo Bonelli (INT/Brazil) and Sérgio Álvaro de Souza Camargo Júnior (UFRJ/Brazil)

R543 – THE EFFECT OF PROCESSING PARAMETERS ON NANO-STRUCTURED \(\text{Cr}_2\text{C}_2-\text{Ni}_{0.5}\text{C}\) and WC-4Co POWDER AND COATING CHARACTERISTICS

Lalaji Venkataraman Ramaghan (IPEN), Armando Guilherme Padial (IPEN), Cecilio Alvare Cunha (IPEN), Nelson Batista de Lima (IPEN), Olandir Vercio Correa (IPEN) and Jose Roberto Martinelli (IPEN)

R544 – Two-dimensional protective organic film formed on 11-mercapto-1-undecanol self-assembled on electrodeposited zinc surfaces

francois berger, Joseph Delhalle and Zineb Mekhalif

R545 – Corrosion protection of stainless steel by organic–inorganic hybrid coatings

Fábio Cesar Santos (IQ-UNESP), Mateus Geraldo Schiavetto (IQ-UNESP), Victor Vitorino Sarmento (IQ-UNESP), Peter Hammer (IQ-UNESP), Sandra Helena Pulcinelli (IQ-UNESP), Assis Vicente Benedetti (IQ-UNESP) and Celso Valen- tim Santilli (IQ-UNESP)

R546 – Influence of the Time of Permanence in the Hydrolysed Solution of a Tetrasulfi de Bis-silane Doped with Cerium (IV) on Corrosion Behaviour of Coated Galvannealed Steel

Vera Rosa Capellosi (USP), Patricia Hatsue Suyama (UNESP) and Idalina Vieira Aoki (USP)

R547 – Effects of the pressure and the self-bias voltage on the doped and undoped amorphous hydroge- nated carbon films properties

Marcelo Eduardo Huguenin Maia da Costa (PUC-Rio), Fernando Lázaro Freire Junior (PUC-Rio) and Marcelo EDUARDO HUGUEIN MAIA DA COSTA (PUC-Rio)

R548 – Electrochemical study of silane films and chromate conversion coatings applied on zinc coatings

Marília Vallervius da Costa (UFRGS), Claudia Trindade Oliveira (Fevale), Tiago Lemos Meneses (UFFROS), Iduvirges Lourdes Muller (UFFRS) and
R549 – Influence of DLC coatings on the formation of paraffin surface deposits from crude oils

Kelly Cristina Vieira da Cruz (UFRRJ) and Sérgio Alvaro de Souza Camargo Júnior (UFRRJ)

R550 – Nanostructured surface pre-treatment based on Self-Assembled Molecules for corrosion protection of Al clad 7475-7761 aluminium alloy

Salome de Souza (CCTM/IPEN), Daniel Sierra Yoshikawa (CCTM/IPEN), Wagner Izailino Alves dos Santos (CCTM/IPEN), Sergio Luiz de Assis (CCTM/IPEN) and Isolda Costa (CCTM/IPEN)

R551 – Tribological properties and Corrosion resistance enhancement of AISI H13 hot work steel by means of Chromium Nitride (CrN)/Titanium Nitride (TiN) multilayers

Gilberto Bezerrao Gaiton (Universidade de Antioquia), Jaime Alberto Osorio (Universidade de Antioquia), Maryory Gomez Botero (Universidade de Antioquia), Julio Cesar Caicedo (Universidad del Valle), Maryory de Antioquia), Jaime Alberto Osorio (Universidad del Valle), Alexander Ruden Miranda (AMR/ICTA), Leonardo Barrettti Olivo (AMR/ICTA), Evaldo Luiz Nohara (UNITAU) and Liliana Burakovski Nohara (ICTA)

R552 – Hydrophobicity of Hydrogenated Carbon films as a function of substrate temperature and environment humidity

Monica de Mesquita Lacerda (UDESC), Leandro Lameirao Ferreira (UDESC), Muril de Pauli (UDESC), Carlos Fernando da Silva (UDESC), Jose Fernando Fragalli (UDESC), Andre Luis de Oliveira (UDESC) and Ricardo Antonio de Simone Zanon (UDESC)

R553 – Hydrophobicity of hydrogenated silicon films as a function of substrate temperature

Monica de Mesquita Lacerda (UDESC), Leandro Lameirao Ferreira (UDESC), Muril de Pauli (UDESC), Carlos Fernando da Silva (UDESC), Jose Fernando Fragalli (UDESC), Andre Luis de Oliveira (UDESC) and Ricardo Antonio de Simone Zanon (UDESC)

R554 – Cyanoacrylate Infiltration of vacuum adapters built with selective laser sintering (SLS) – a rapid prototyping technology

Izaique Alves Maia (CTI Renato Archer), Marcelo Fernandes Oliveira (Renato Archer), Thebano Emilio de Almeida Santos (Renato Archer) and Jorge Vicente Lopes Silva (CTI Renato Archer)

R555 – Characterization of the oxide layer on Ni based alloy coatings

Ana Sofia Climalco Monteira d’Oliveira (UFPR), Feliciano José Ricardo Cangue (UFPR), Elizabeth Clark (UCSB) and Carlos Levi (UCSB)

R556 – Deposition of CVD diamond films on WC-Co-TiC inserts for machining

Ruanne Alves Campos (INPE), Daniro Maciel Roque Barquete (UESC), Eliton Rodrigues Edwar (INPE), Evaldo Jose Corat (INPE) and Vladimir Jesus Trav-Airoldi (INPE)

R557 – Silane film with cerium obtained by sol-gel process for post-treatment on AA2024-T3 alloy: effect of corrosion inhibitor concentrations

Matias De Angelis Korb (UFGRS), Marli Valerius da Costa (UFGRS), Celia Fraga malfati (UFGRS), Fernanda Pilla Coutinho (UFGRS), Julien Esteban (UPS), Florense Ansart (UPS) and Jean Pierre Bonino (UPS)

R558 – In-situ optical characterization of plasma deposited a-C:H films during deposition by CH4 plasmas and erosion by N2-H2 plasmas

Fabiano Pinto Pereira (IF-UFF), Dácio Moreira Souza (IF-UFF) and Dante Ferreira Franceschini (IF-UFF)

R559 – THERMALLY SPRAYED HIGH ENTROPY STAINLESS STEEL COATINGS: MICROSTRUCTURE AND PROPERTY EVALUATION

Angelki Lekatou (UOI), Dimitrios Zois (UOI) and Michail Vardavoulias (Pyrogenesis)


Carlos Manuel Sanchez Toscano (IF-UFF), MARCELO EDUARDO HUGUENNIN MAIA DA COSTA (PUC-Rio) and Dante Ferreira Franceschini (IF-UFF)

R561 – Al2O3-TiN nanostructured multilayer thin films obtained by ion-plating

Alexandre Perez Umpierre (UCS), Bernardo Eltz (UCS), Angela Crespi (UCS), Felipe Cemin (UCS), Israel Jacob Robin Baumvol (UCS) and Carlos Alejandro Figueroa (UCS)

R562 – Electrochemical Studies of Ultrathin Films Deposited by Self-Assembly Technique

Everton Carlos Gomes (ITA) and Maria Auxiliadora Silva Oliveira (ITA)

R563 – Stress in thin films: Transition from spherical to cylindrical deformation

Julio Miranda Pureza (UDESC), Fabio Nery (UDESC) and Monica de Mesquita Lacerda (UDESC)

R564 – Corrosion – erosion behavior of magnetron sputtered NbN films in aqueous slurries

Jhon Jairo Olaya Florez (Universidad Nacional), Andrea Caceres (Universidad Nacional) and Edgar Alfonso (Universidad Nacional)

R565 – Nanoindentation behavior and mechanical properties of active screen plasma-modified polypropylene

Alan Pereira Kauling (UCS), Angela Elisa Crespi (UCS), Israel Jacob Robin Baumvol (UCS/UFGRS), Gabriel Vieira Soares (UCS), Carlos Alejandro Figueroa (UCS), Marcelo da Costa (PUC-RJ) and Cristiano Giacomelli (UCS)

R566 – Plasma nitriding of quenched and tempered ductile cast iron without compound layer formation

Daniela Wollmann (UTFPR), Marina Cardozo Vasco (UTFPR) and Julio Klein Neves (UTFPR)

R567 – Study of optimized carbon fiber/PEEK adhesion by scanning electron microscope

Mirbel Cereque Rezende (AMR/ICTA), Leonardo Barrettti Olivo (AMR/ICTA), Evaldo Luiz Nohara (UNITAU) and Liliana Burakovski Nohara (ICTA)

R568 – Nitrogen Plasma Immersion Ion Implantation (PIII) of nickel titanium shape memory alloy

Silmar Cristina Baldissera (INPE), Mário Ueda (INPE), Leonardo Kyo Kabayama (ITA) and Jorge Otuba (ITA)
SYMPOSIUM S
Current Trends in Oxide Materials

Auditorium: Segóvia II

Symposium Organizers:
C. Barry Carter (U. of Connecticut, USA)
Giuseppina Padeletti (CNR, Italy)
Hans-Ulrich Habermeier (Max-Planck, Germany)
José Antonio Eiras (UFSCar, Brazil)

Monday, September 21
11:00 - 11:30
Coffee Break
13:00 - 14:30
Lunch
Session chair: To be informed
14:30 - 15:00
PS1 (invited) – Computer modeling of ZnO-based optical multilayer coatings
Paul David Bristowe (Cambridge University) and Zheshuai Lin (Cambridge University)

15:00 - 15:15
S609 – PFCVAD GROWN n and p-TYPE ZnO THIN FILMS FOR DEVICE APPLICATIONS
Hamide Kavak (Physics Department, Cukur), Necdet Hakan Erdogan (Physics Department, Cukur), Kamuran Kara (Physics Department, Cukur), Havva Yanis (Physics Department, Cukur), Ilker Ozsahin (Physics Department, Cukur), Zeyneb Baz (Physics Department, Cukur) and Ramazan Eser (Physics Department, Cukur)

15:15 - 15:30
S551 – Synthesis and Characterization of Hierarchical ZnO Micro/Nano Structures
Jingyue Liu

15:30 - 15:45
S501 – Conduction Mechanisms in Undoped and Doped ZnO Nanowires
Jia Li (USC), Dong Li (USC), Richard Thompson (USC) and Gerd Bergmann (USC)

15:45 - 16:00
S506 – Variations in optical Constants in Ca doped ZnO thin films
Kamakhya Prakash Misra (University of Lucknow), Sanjay Khare (University of Lucknow), Atul Srivastava (University of Lucknow), Rajesh Kumar Shukla (University of Lucknow) and Anchal Srivastava (University of Lucknow)

16:00 - 16:15
S527 – Absence of Magnetic Ordering in High Quality Bulk Co-doped ZnO

Hugo Bonette de Carvalho (UFABC), Vamir Antonio Chitta (USP), Angela Maria Ortiz de Zevallos Marquez (UNICAMP), Maria José Santos Pompeu Brasil (UNICAMP), Geraldo Magela da Costa (UFOP), Antonio Claret Soares Sabioni (UFOP) and Hugo Bonette de Carvalho (UFOP)

16:15 - 16:30
S544 – Magnetic anisotropy and magnetocaloric effect in charge-ordered Pr$_{0.5}$Sr$_{0.5}$MnO$_3$
Hariparan Srikanta (USF) and M H Phan (USF)

Tuesday, September 22

Session chair: George Rossetti

09:30 - 10:00
PS5 (invited) – Recent advances in synchrotron radiation investigation of ferroic materials
Maria Elena Fuentes–Montero (Univ of Chihuahua, Mexico), Luis Fuentes–Montero (CIMAV, Mexico), Maria Elena Montero-Cabrera (CIMAV, Mexico) and Luis E. Fuentes-Cobas (CIMAV, Mexico)

10:00 - 10:30
PS4 (invited) – Synthesis and TEM characterization of ceria nanoparticles
Joyasurya Basu (Univ of Connecticut), Jonathan Paul Winterstein (Univ of Connecticut), N Ravishankar (IISc) and Barry Carter (University of Connecticut)

10:30 - 10:45
S596 – Metastable phase diagram of nanocrystalline ZrO$_2$–Sc$_2$O$_3$ solid solutions. Effect of varying average crystallite size
Aldo Felix Craievich (IF–USP), Paula Abdala (CITEFA/CONICET), Diego Lamas (CITEFA/CONICET) and Marcia Carvalho de Abreu Fantini (IF–USP)

10:45 - 11:00
S509 – Synthesis and properties of Pd/CeO$_2$-based nanotubes for catalysis
Fernando F Muñoz (CONICET), Leandro Marcelo Acuri (CONICET), Marcelo Daniel Cabezas (CONICET), Diego Germán Lamas (CONICET), A Gabriela Leyva (CNEA), Rodolfo Oscar Fuentes (CONICET) and Richard T Baker (St Andrews)
11:00 – 11:30
Coffee Break
Session chair: Paul Bristowe

11:30 – 11:45
S552 – Electrical Performance and Materials Aspects of Bi-2212 Superconducting Fault Current Limiters
Alexander Polasek (CEPEL), Rodrigo Dias (CEPEL), Daniel Brito Niedu (CEPEL) and Osíneo Borges de Oliveira Filho (CEPEL)

11:45 – 12:00
S526 – Elastic anomalies and electron-phonon coupling constant of \( \text{Zr}_n \) substituted \((\text{Dy},\text{Ca})\text{Ba}_x\text{Cu}_y\text{O}_{z+4}\) superconducting ceramics
Ahmad Kamal Yahya (Universiti Teknologi MARA) and Nor Ashikin Rash (Universiti Teknologi MARA)

12:00 – 12:30
PS3 (invited) – Oxide Interface Engineering – a Route towards Superconductivity?
Hanns – Ulrich Habermeier (MPI-FKF)

12:30 – 12:45
S543 – Development of \( \text{SnO}_2: \text{Sb} \) and \( \text{SnO}_2: \text{Nb} \) films to obtain gas sensors.
José Fernando Dognone Figueiredo (UFPE), Nathália Carreira Alves (UFPE), Tania Regina Giraldo Embraço, Enira Pinto Marinho (UFPE) and Ingrid Tavares Weber (UFPE)

12:45 – 13:00
S529 – High energy Oxygen ion irradiation effects on \( \text{Sr}_{(1-x)} \text{Mg}_x \text{MoO}_3 \text{(x=0.01-0.05)} \) \( \text{Nb}_{0.668} \text{O}_3 \) thin films
Bhuyani S Bishnoi (MS university, baroda)

13:00 – 14:30
Lunch
Session chair: Hans-Ulrich Habermeier

14:30 – 15:00
PS2 (invited) – Physical Phenomena in Ferroelectric Solid Solutions
George Andrew Rossetti, Jr. (University of Connecticut)

15:00 – 15:15
S601 – Intrinsic defects and transport mechanism in BT0
Marcos Vinicius dos Santos Rezende

15:15 – 15:30
S532 – Physical properties of modified \( \text{BaTiO}_3 \) thin films
Ramana Venkata (Hankuk University of Fore), Park Hong Woo (Seoul National University), Kim Jaeyeong (Hankuk University of Fore), Kim Mi-Young (Seoul National University), Lee Bo Wha (Hankuk University of Fore) and Jung Chang Uk (Seoul National University)

15:30 – 15:45
S531 – Oxygen Vacancies Diffusion Model for Electric Pulse Resistance Switching in Oxide Based Memory Devices
Maria Jose Sanchez (CAB-Instituto Balseiro), Marcelo Rozenberg (LPF and Depto Fisica UBA) and Ruben Weht (CNEA – CONICET)

15:45 – 16:00
S522 – Resitive Switching at Reduced Stimulus
Pablo LEVY (CNEA and CONICET), Néstor Ghzeni (CONICET) and Fernando Gomez Marinas (CNEA)

16:00 – 16:15
S604 – Magnetic, structural and morphological characterization of \( \text{Sr}_2 \text{GdRuO}_6 \) perovskite
Laura Teresa Corredor Bohórquez (Univ Nacional de Colombia), David Arsenio Landinez Téllez (Univ Nacional de Colombia), Jorge Luiz Pimentel (Univ Federal do Rio Grande), Paulo Pureur (Univ Federal do Rio Grande) and Jairo Roa Baroda

16:00 – 16:15
S508 – Nano-enhanced Metal Oxide Varistor Ceramics for High Voltage Surge Arresters
José Geraldo de Mello Furtado (CEPEL), Rodrigo Dias (CEPEL) and Maria Cecília de Souza Nobrega (CEPEL)

Poster Session S

Current Trends in Oxide Materials
Room: Louvre
Tuesday, September 22
18:30 to 20:30
S602 – Sintering Analysis of Chemical Synthesized Nanocrystalline 8YSZ Powders
Cristiane Abrantes Silva (CEPEL), José Geraldo de Mello Furtado (CEPEL) and Paulo Emílio Valadão de Miranda (Physics Department, Feder), Denise de Jesus Santos (Physics Department, Feder), Zélia Soares Macedo (Physics Department, Feder), Robert Adam Jackson (School of Physical and Ge) and Mario Ernesto Giraldo Valerio (Physics Department, Feder)

15:00 – 15:15
S503 – Structural and electrical properties of Li-doped \( \text{TiO}_2 \) rutile ceramics
Román Alvarez Roca (UFSCar), Fidel Guerrero (Universidad de Oriente) and José Antônio Eiras (UFSCar)

15:30 – 15:45
S504 – \( Y_2 \text{Mo}_3 \text{O}_{12} \): NEGATIVE THERMAL EXPANSION AND HEAT CAPACITY AT LOW TEMPERATURES
Monica Ari (PUC-Rio), Bojan A Marinkovic (PUC-Rio), Paula Mendes Jardim (PUC-Rio), Roberto de Avillez (PUC-Rio), Fernando Rizzo (PUC-Rio), Fábio Ferreira Furlan (LNLS) and Mary Anne White (Dalhousie University)

S505 – Synthesis and phase transition determination of r-doped \( \text{BiFeO}_3 \)
Julian Andres Muneyar Cagigas (CBPF), Dalber Ruben Sanchez Candela (UFF) and Elisa Maria Baggio Saitovitch (CBPF)

S507 – Effect of HF in the preparation of carbon-ceramic materials by sol-gel process
Sergio Rietcournt Arajio Barros (UNICAMP), Lelia Ticona Arenas (UNICAMP), Abdur Rahim (UNICAMP) and Yoshitaka Gushikem (UNICAMP)

S508 – Nano-enhanced Metal Oxide Varistor Ceramics for High Voltage Surge Arresters
José Geraldo de Mello Furtado (CEPEL), Rodrigo Dias (CEPEL) and Maria Cecília de Souza Nobrega (CEPEL)

S510 – Structure, magnetic and transport properties of ferroelectric/ferromagnetic manganese based multilayers.
Martin Sirena (CAB – CNEA, Argentina), Enrique Kaul (CAB – CNEA, Argentina), Julio Guimel (CAB – CNEA, Argentina), Laura Beatriz Steren (CAB – CNEA, Argentina) and Giancarlo Faini (LPN – CNRS)

S513 – First principles study of the effect of lanthanide substitutions on ferroelectric \( \text{Bi}_5 \text{Ti}_3 \text{O}_{12} \)
Paul David Bristowe (Cambridge University) and Shafqat Shah (Cambridge University)

S515 – Spin-state ordering in lanthanide-transition metal \( \text{LaB}_x \text{Co}_y \text{O}_{z+5} \) cobalt oxides
Dmitry Khalyavin (ISIS, RAL), Dimitriy Starkov (Univ. de Aveiro) and Sergey Argyriou (-Meitner-Institut), Alexander Polasek (-Meitner-Institut), Uwe Hartmann (Institut für Physik, FZ Jülich), Annette Eder (Institut für Physik, FZ Jülich), Aleksei Makarenko (CNRIS, Italy) and Alan T. C. Johnson (CNRIS, Italy)

S516 – Study of the properties of magnetron sputtered indium-tin oxide thin films
Larissa Rodrigues Damian (Escola Politécnica - USP) and Ronaldo Domingues Mansano (Escola Politécnica - USP)

S517 – LAYERD INORGANIC-ORGANIC TALC LIKE HYBRID WITH HETEROCYCLIC CHELATING LIGAND INSIDE THE LAMELLAR SPACES – SYNTHESIS, CHARACTERIZATION AND CATION REMOVAL
Syed badshah (UNICAMP) and Claudio Airoldi (UNICAMP)

S518 – \( \text{CeMoO}_3 \) Thin Films Prepared by Thermal Spray Using Ammonium Molybdate
Nestor Jaime Torres (Universidad Nacional de C), Luis Demetrio López Carreño (Universidad Nacional de C), Luis Carlos Moreno-Aldana (Univ Nat de Colombia), Hector Mauricio Martínez Camargo (Universidad Nacional de C) and Josè Edgar Alfonso (Universidad Nacional de C)

S519 – Structural, Microstructural and Ferroic Characterizations of the \( \text{BiFeO}_3 \) Multiferroic Magnetostrictive Compound Obtained by High-Energy Ball Milling
Gustavo Sanguino Dias (UEM), Valderlei Fernandes Freitas (UEM), Ivair Aparecido Santos (UEM), Ducinei Garcia (UFSCar) and José Antônio Eiras (UFSCar)

S520 – Structural phase relations and ferroic properties of \((\text{BiFeO}_3 - \text{Y})\) \( \text{BiFeO}_3 \) multiferroics ceramics
Ricardo Augusto Mascarelo Gotardo (UEM), Ivair Aparecido Santos (UEM), Luiz Fernando Cótica (University of Aveiro) and José Antônio Eiras (UFSCar)

S521 – Synthesis, structural, microstructural and electrical properties of the \( \text{ThMnO}_3 \) compound obtained by high-energy ball milling
Ricardo Augusto Mascarelo Gotardo, Ivair Aparecido Santos (UEM), Ducinei Garcia (UFSCar) and José Antônio Eiras (UFSCar)

S523 – \( \text{TiO}_2 \) coatings obtained by Cathodic Arc Deposition on silicon substrates
Vladislav Kharton (University of Aveiro)
S524 – FeO(111) ULTRA–THIN FILM STRUCTURE INVESTIGATION  
Guilherme Jean Pereira Abreu (UFMG), Roberto Magalhaes Paniago (UFMG), Edmar Avellar Soares (UFMG), Hans Dietrich Phinnes (UFMG), Vagner Eustáquio de Carvalho (UFMG), Danilo Santos Cruz (UFBA) and Caio Mário Castro de Castilho (UFBA)

S528 – PREPARATION AND CHARACTERIZATION OF MOLYBDENUM OXIDE AND NEODYMIUM THIN FILMS GROWN BY SPRAY PYROLYSIS TECHNIQUE  
José Edgar Alfonsno (Universidad Nacional), Luis Carlos Moreno-Aldana (Univ Nat de Colombia) and Nestor Jaime Torres (Universidad Nacional de C)

S530 – Structural and morphological study of the double perovskite Sr, DyRuO6  
Carlos Augusto Triana (U Nacional De Colombia), Laura Teresa Corredor Bohórquez (Univ Nacional De Colombia), David Arsenio Landínez Téllez (U Nacional De Colombia), Jairo Roa Rojas (U Nacional De Colombia), Fabio E Fojardo (U Nacional De Colombia) and Jairo Arbe Rodriiguez (U Nacional De Colombia)

S533 – Synthesis and Ferroic Properties of Rapid Sintered and Quenched BiFeO3 Magnetolectric Ceramics  
Gustavo Sanguinio Dias (UEM), Valdério Fernandes Preitas (UEM), Ivair Aparecido Santos (UEM), Ducinei Garcia (USFCar) and José Antônio Eiras (USFCar)

S534 – Hybrid Material Based on Colloidal Cerium Oxide and N,N’–(N,N’–dimethylethylene–N’–butyl)-1,4,5,8-di-naphthalimide  
Federico Rezende Tribano (IQ-USP), Mauro Francisco Da Silva (IQ-USP), Magali Rodrigues Aparecido (IQ-USP), Julio Cesar Artur (IQ-USP), Paulo Celso Isolani (IQ-USP), Pedro Berti Filho (IQ-USP) and Mário José Politi (IQ-USP)

S535 – Synthesis, characterization and catalytic properties of ternary hybrid material based on cetyltrimethylammonium bromide and n-hexadecylamine in WO3•H2O  
Aline Turini Bokoni, Joicy Santa-malvina Santos, Manida Dores Assis and Herenilton Paulino Oliveira

S536 – Synthesis, characterization and properties of metastable lamellar MoO3 hydrate  
Thiago Ferreira Luz and Herenilton Paulino Oliveira

S537 – Intercalation of lanthanide ions into vanadyl phosphate dihydrate  
Jodo Paulo Ligabó Ferreira (USP-RP) and Herenilton Paulino Oliveira (USP-RP)

S538 – A SEM Study on the Sintering and Densification of Doped Lanthanum Chromites  
José Geraldo de Melo Furtado (CEPEL), Cristiane Abrantes Silva (CEPEL) and Rodrigo Dias (CEPEL)

S539 – Manganese Influence in the PLZT (96/35/35) relaxor.  
Enrique Pérez Defín (USFCar), Robert González (Universidad de Oriente), Bárbara Maraston Fraygola (USFCar), Fidel Guerrero (Universidad de Oriente) and José Antônio Eiras (USFCar)

S540 – Influence of Sintering Condition on Electric and Dielectric Response of PNN Ceramics  
William Junior Nascimento (USFCar), José António Eiras (USFCar), Bárbara Maraston Fraygola (USFCar), Nayana Frizon (USFCar) and Ducinei Garcia (USFCar)

S541 – Unusually strong coheren response from grain–boundary Josephson network in polycrystalline Pr0.9Y0.1BaCu2O9+δ  
Víctor Anthony García Rivera (DF-USFCar), Cecilia Stari (DF-USFCar), Claudio Antonio Cardoso (DF-USFCar), Cecilia Stari (DF-USFCar), Eudes Borges Araújo (UNESP), Victor Moreira Seara (UNIBH) and José Antônio Eiras (USFCar)

S542 – Barium titanate thin films prepared by dip-coating process  
Helein Silva Andrade (UFMG), Neicy Delta Mohallem (UFMG), Marcelo Machado Viana (UFMG) and Luciana Moreira Seara (UNI-BH)

S545 – Sintering Process and Characterization by Atomic Force Microscopy of Ferroelectric Ceramics: Nanophase KSr2NbO15 + CuO  
Delia del Carmen Vieira (IEAv), Jossano Saldanha Marcuzzo (ITA) and Antonio Carlos da Cunha Migliano (IEAv)

S546 – Sintering Process and Characterization by Atomic Force Microscopy of Nanophase KSr2NbO15 + CuO  
Delia del Carmen Vieira (IEAv), Jossano Saldanha Marcuzzo (ITA) and Antonio Carlos da Cunha Migliano (IEAv)

S547 – Growing and characterization of YBaCo4O7+δ thin films on (1022)–oriented sapphire substrates.  
Juan Fernando Montoya (Universidad Nacional), Jorge Luis Izquierdo (Universidad Nacional), Adrian Gomez (Universidad Nacional), Oscar Arnaque (Universidad de Antioquia), Jaime Alberto Osorio (Universidad de Antioquia) and Jairo Humberto Marín (Universidad Nacional) and Oswaldo Moran (Universidad Nacional)

S548 – Influence of the grain size in the improvement of the crystalline quality of epitaxial Zn0.9Mn0.1O thin films grown by pulsed laser deposition.  
Jenny Mera (Universidad de Nariño), Jose Gregorio Doría (Universidad Nacional), Carlos Cordoba (Universidad de Nariño), Adrian Gomez (Universidad Nacional), Carlos Paucar (Universidad Nacional), Oswaldo Moran (Universidad Nacional) and D Fuchs (Institut für Festkörperph)

S550 – Electrical Properties of Titanate Nanostructure Films  
DIEGO CARVALHO BARBOSA ALVES (UFMG), ERICO LUIZ MARTINS REIS (UFMG), LEONARDO CRISTIANO CAMPOS (UFMG), ERICK DE SOUZA AVILA (UFMG), ALÉM-MAR BERNARDES (UFMG), ROGIRIO GRIEBI LACERDA (UFMG) and ANDRE SANTA-ROSA FERLAUTO (UFMG)

S553 – Experimental and theoretical studies of structural and electronic properties of perovskite Sr3ShMnO9.  
Omar Ortiz-Diaz (Universidad Pedagógica y Tecnológica de Colombia), Carlos Arredondo Sáiz (Universidad Pedagógica y Tecnológica de Colombia), Fredy Gonzalez (Universidad Pedagógica y Tecnológica de Colombia), Jose Ochoa Acosta (Universidad Pedagógica y Tecnológica de Colombia), Walther Osvaldo Soza (Universidad Pedagógica y Tecnológica de Colombia), Rafael Julian Gonzalez Hernandez (Universidad Nacional de C) and Jairo Arbe Rodriiguez (Universidad Nacional de C)

S554 – Sr3 Y5B6O26 as a buffer layer for YBa2Cu3 O7−δ superconducting films  
Omar Ortiz-Díaz (Universidad Nacional de C), Wilmer Saldarriaga (Universidad Nacional de C), David Reyes (Universidad del Valle), Alexander Cortes (Universidad del Valle), Jose Manuel Caicedo (Universidad del Valle), Jairo Roa-Rojas (Universidad Nacional de C) and David Arsenio Landínez Téllez (Téllez)

S555 – Effects of low energy ion sputtering on structure and microstructure of PbTiO3 thin films  
Fulvio Borges Araujo (UNESP), Javier Olvera Cervantes (UAM), José Luis Plaza (UAM), Ernesto Díezeg (UAM) and Marcelo Rubens Bari Andreeta (USP)

S556 – Nano-powders of PZT obtained by high-energy ball milling.  
Yurimiler Leyet Ruiz (Universidad de Oriente), enrique Pérez Defín (USFCar), Fidel Guerrero (Universidad de Oriente) and José Antônio Eiras (USFCar)

S557 – Photo-induced intrinsic defects in single crystalline TiO2 (rutile).  
Frederico Dias Brândão (UFMG), Gilberto Medeiros Ribeiro (LNLS), Klaus Wilhelm Krambrook (UFMG) and Maurício Veloso Brant Pimente (UFMG)

S558 – Weak ferromagnetism at room temperature in the novel cobaltite YBaCo4O7+δ  
Jorge Luis Izquierdo (Universidad Nacional), Juan Fernando Montoya (Universidad Nacional), Adrian Gomez (Universidad Nacional), Carlos Paucar (Universidad Nacional) and Oswaldo Moran (Universidad Nacional)

S560 – Pr–123, superconductor or not?  
Cecilia Stari (DF-USFCar), Victor Anthony Garcia Rivera (DF-USFCar), Leonelio Cichetto Júnior (DF-USFCar), Claudio Cardoso (DF-USFCar), Euclydes Marega (IFSC-USP) and Fernando Manuel Arajuo-Moreira (DF-USFCar)

S561 – First principles study of the electronic and magnetic properties of SnO/CrO2 superlattices  
Pablo Demasceno Borges (USP), Luisa Maria Ribeiro Scofaro (USP), Horacio Wagner Leite Alves (USP), Erondines Felisberto Silva Jr (UFPE) and Lucy Vitória Credidio Assali (IF/USP)

S562 – Behavior of the native defects and hydrogen impurities in SnO2  
Pablo Demasceno Borges (USP), Luisa Maria Ribeiro Scofaro (USP), Horacio Wagner Leite Alves (USP), Erondines Felisberto Silva Jr (UFPE) and Lucy Vitória Credidio Assali (IF/USP)
S563 - Structural, microstructural, electrical and magnetic studies on La$_2$Co$_{1-x}$Mn$_x$O$_4$ produced via combustion synthesis

Petruccio Barrozo da Silva (UFPE), David Arsenio Landínez Téllez (UNAL), Renato Figueiredo Jardim (IFUSP), Petruccio Barrozo da Silva (UFPE), Ana Augusta Mendonca Oliveira (UFPE) and José Albinho Oliveira de Aguiar (UFPE)

S564 - Structural, microstructural, electrical and magnetic characterization of Gd$_{1-x}$M$_x$Ru$_2$O$_3$, where M = La or Ho

Maria Daniele Rodrigues Marques (UFPE), Flavia Santos Portela (UFPE), Petruccio Barrozo da Silva (UFPE), Ana Augusta Mendonca Oliveira (UFPE) and José Albinho Oliveira de Aguiar (UFPE)

S565 - ZnO nanostructures grown by thermal CVD: Synthesis and Characterization

José Roberto Ribeiro Bortoleta (Unesp), Selma Luiza Silva (Unesp), Maria Lucia Pereira Antunes (Unesp), Pedro Kunihiko Kiyohara (Unesp), Humberto Rodrigues Gutierrez (Penn State) and Peter Eklund (Penn State)

S566 - Structural and morphological characterization of LaCo$_2$O$_3$ and LaMnO$_3$ perovskites prepared by the citrate method

José Carlos Moreno - Aldana (Univ. Nacional de Colombia), Julio Mauricio Rendon (Laboratorio de catálisis) and Jesús Sigifredo Valencia (UNIVERSIDAD NACIONAL DE C)

S567 - Plasma nitriding and post-oxidation mechanisms in ferrous alloys

Carlos Alejandro Figueroa (CCET-UCS), Ana Cheila Rovani (CCET-UCS), Felipe Cemin (CCET-UCS), Fernando Graniero Echeverri Gayar (CCET-UCS), Rodrigo Leonardo de Oliveira Basso (CCET-UCS), Israel Jacob Rabin Baumvol (UFRGS), Leonardo Rizzo (PUC-Rio) and Ricardo Retenal Fischer (CCET-UCS)

S568 - Structural characterization of Bi$_2$-2223 Hig-Tc Superconductors (HTS)

Elmer Sousa Dutra (UFSCar), Rafael Sales (UFSCar), Victor Anthony Garcia Rivera (UFSCar), Leónel Chicheto Júnior (UFSCar) and Fernando Manuel Araujo-Moreira (UFSCar)

S569 - Piezoelectric Characterization of BiFeO$_3$ - PbTiO$_3$ Multiferroic Ceramics

Valdirlei Fernandes Freitas, Ivair Aparecido Santos (UFS), Dinediaria Garcia (UFSCar) and José Antônio Eiras (UFSCar)

S570 - Production and characterization of magnetic double perovskite Sr$_x$HoRuO$_6$

Javier Harley Velasco (Univ Nacional de Colombia), Laura Teresa Corredor Bohórquez (Univ Nacional de Colombia), Jairo Roa Rojas (Univ Nacional de Colombia), David Arsenio Landínez Téllez (Univ Nacional de Colombia), Jorge Luis Pimentel (Univ Fudral do Rio Grande) and Paulo Poreur (Univ Fudral do Rio Grande)

S571 - Determination of the thermal coefficient of the optical path length change in the PLZT ceramic by optical interferometric method

Evaristo Alexandre Falção (UFGRD), Dunicie Garcia (UFSCar), José Antônio Eiras (UFSCar), Ivair Aparecido Santos (UFS) and Marcelo Andrade Macedo (UFS)

S572 - Porosity Evaluation of Bi-2223 Hig-Tc Superconductor Samples via Digital Image Processing

Evertton Rangel Bispo (PUC-Rio), George Gilberto Gomes Junior (UFRJ), Rodrigo Dias (CEPEL), Sidnei Paciornik (PUC-Rio), Marcelo Azevedo Neves (UFRRJ), Alexander Polasek (CEPEL) and Fernando Rizzo (PUC-Rio)

S573 - Developing an experimental system to study the Magnetic Levitation Force of High-Temperature Superconductors (HTS)

Elmer Sousa Dutra (UFSCar), Rafael Sales (UFSCar), Victor Anthony Garcia Rivera (UFSCar), Leónel Chicheto Júnior (UFSCar) and Fernando Manuel Araujo-Moreira (UFSCar)

S574 - Effects of DC and AC electric field on the dielectric properties of PZT thin films

Elen Carvalho Lima (Unesp) and Eudes Borges Araújo (Unesp)

S575 - In Search for Recrystallization of (Bi,Pb)-2223 Phase after its Complete Melting

Marcelo Azevedo Neves (DEFIS-ICE/UFRRJ), Everton Rangel Bispo (DCMM/PUC-RJ), George Gilberto Gomes Junior (PEMM/UFSCar), Alexander Polasek (DTE-CEPEL/ELTROBRAS) and Fernando Rizzo (DCMM/PUC-RJ)

S576 - ZnO:Co Diluted magnetic Semiconductor or hybrid nanostructure for Spintronics?

Silvia P Heluani (UFRJ), Manuert Valencia (Universidade de São Paulo), Claudio Rodriguez Torres (UNLP), José Barzola-Quiquia (Leipzig Universität) and Pablo Esquinazi (Leipzig Universität)

S577 - Spin, charge, and lattice coupling close to the colossal magnetoresistivity effect

Fabian E N Ramirez (UFABC), Renato Figueiredo Jardim (IFUSP) and José Antonio Souza (UFABC)

S578 - Effect of Co doping on structural and magnetic properties of ZnO

Shalendra Kumar (IIT Indore), Young Joo Kim (Ewha Womans University), S K Sharma (Universidade Estadual de Feira de Santana) and Chan Gu Lee (Seoul National University)

S579 - Zinc oxide coating of silicon substrates by means of plasma immersion ion implantation and deposition

Maxson Souza Vieira (INPE)

S580 - Solid-state reactions and microstructure in the Ni-Ti-O system

Jonathan Paul Winterstein (Univ of Connecticut), Sanjit Bhowmick (Univ of Connecticut), Joseco Rieste (Univ of Connecticut), Joysurya Basu (Univ of Connecticut) and Barry Carter (University of Connecticut)

S581 - Structural magnetic characterization of Ca$_{1-x}$Sr$_x$Ru$_2$O$_z$ compounds

Ada Lopez Gimenez (UERJ), Jorge Luis Gonzalez (PUC-Rio), Izabel Souza Azevedo (CBFP), Angelo Gomez (UFRRJ), Hortencio Borges (PUC-Rio) and Elisa Maria Baggio Saitovich (CBFP)

S582 - Theoretical study of conductivity of ZnO through the hydrogenation of ZnO surfaces

Andrea Dias Quintao (IFUSP/FAI), Marília Junqueira Caldas (IFUSP) and Regina Lélis de Sousa (IFUSP)

S583 - Nanocrystalline CeO$_2$-$\delta$ compounds

Andrea Dias Quintao (IFUSP/FAI), Manuela Junqueira Caldas (IFUSP) and Regina Lélis de Sousa (IFUSP)

S584 - Determination of the thermal coefficient of the optical path length change in the PLZT ceramic by optical interferometric method

Evaristo Alexandre Falção (UFGRD), Dunicie Garcia (UFSCar), José Antônio Eiras (UFSCar), Ivair Aparecido Santos (UFS) and Marcelo Andrade Macedo (UFS)

S585 - Anelastic parameters of MgB$_2$ obtained by mechanical spectroscopy

marcos ribeiro da silva and Carlos Roberto Grandini (Unesp)

S586 - Structural, microstructural, electrical and magnetic studies on La$_2$Co$_{1-x}$Mn$_x$O$_4$ produced via combustion synthesis

Petruccio Barrozo da Silva (UFPE), David Arsenio Landínez Téllez (UNAL), Renato Figueiredo Jardim (IFUSP), Petruccio Barrozo da Silva (UFPE), Ana Augusta Mendonca Oliveira (UFPE) and José Albinho Oliveira de Aguiar (UFPE)
S598 - Thermal-Diffusivity and Heat Capacity of Iron-Phosphate Glasses
Alexandre Pinheiro da Silva (UFJF)

S599 - QUANTITATIVE ANALYSIS OF PHASES PRESENT IN PARTIALLY MOLT PROCESSED (Bi, Pb) - 2223 SUPERCONDUCTOR
George Gilberto Gomes Junior (UFJF/CEPEL), Everton Rangel Bispo (PUC-Rio/CEPEL), Alexander Polasek (CEPEL), Marcelo Azevedo Neves (UFRRJ), Fernando Rizzo (PUC-Rio), Hélio Salim Amorim (UFJF) and Tunesanu Osagawa (OPPE/UFJF)

S600 - Synthesis of Aluminum Based Heterogeneous Catalysts for the Biodiesel Production
Luiz Fernando Cótica (UNICENTRO), Rafael Francisco Kutkoski (UNICENTRO), Fernando José Rodrigues (UNICENTRO), Antonio Laverde Jr (UNIPAR), Nivaldo Eloi Souza (UEM) and Ivair Aparecido Santos (UEM)

S602 - Mapping different vibrational modes of CM-βCD probe on polymorph of TiO2 by Confocal Raman Microscopy
André Araújo Parussulo (IQ-USP), Juliano Alves Bonacin (IQ-USP), Koiti Araki (IQ-USP) and Henrique Eisi Toma (IQ-USP)

S603 - Characterization of copper bismuth oxides synthesized by citrate and solvothermal methods
Luis Carlos Moreno - Aldana (Univ Nal de Colombia), Luis Carlos Moreno - Aldana (Univ Nal de Colombia), Harold Ivan Lazano (Univ Nal de Colombia) and Jesús Sigifredo Valencia (Univ Nal de Colombia)

S604 - Effect of ZnTe doping on the chromogenic properties of MoO3 thin films
Sergio Tomas Velazquez (CINVESTAV), Miguel Angel Arvizu (CINVESTAV), Orlando Zelaya Angel (Cinestav), Aldo Luna (CINVESTAV) and Fabiola Azucena Gutierrez (CINVESTAV)

S605 - Confocal Raman Microscopy: a powerful technique to characterize intercalated materials
Manuel Fernando Gonzalez Hula (IQ-USP), Ronaldo Adriano Timm (IQ-USP), Koiti Araki (IQ-USP) and Henrique Eisi Toma (IQ-USP)

S612 - Capacitance Spectroscopy Analysis of Polaronic Relaxation in CaCu3Ti4O12 Polycrystalline Systems
Willian Campos Ribeiro (IQ-Araraquara, UNESP), Ednan Joanni (IQ-Araraquara, UNESP), Raluca Savu (IAG-Araraquara, UNESP), José Arana Varela (IQ-Araraquara, UNESP) and Paulo Roberto Bueno (IQ-Araraquara, UNESP)

S613 - Electrical and dielectric properties of PZT based ferroelectric ceramics
Carolina Hatzenherr Rodrigues (UFU, Uberlandia, BR) and José de Santos Guerra (UFU, Uberlandia, BR)

S616 - Formation of homometalic ludwigite Co3O2BO3 as a result of oxidation of amorphous Co-B powder
Rodrigo de Farias Gomes (UFS) and Marcelo Andrade Macedo (UFS)

SYMPOSIUM T
Functional Materials For Organic Electronic and Nanotechnology

Auditorium: Segóvia IV

Simposium Organizers:
Roberto Mendonça Faria (USP, Brazil)
Marco Cremona (PUC-Rio, Brazil)
Giovanni Marletta (U. of Catania, Italy)
Marcel Mayor (University of Basel, Switzerland)
Paolo Samori (Université Louis Pasteur, France)
Monday, September 21

Session chair: To be informed

09:30 – 10:00
PT1 (invited) – Molecules, Surfaces and Symmetry: from Geometry to Nanoscience
Denis Fichou

10:00 – 10:15
T521 – Atomic Force Microscope Direct Write of Inorganic Nanowires
Marco Rolandi (University of Washington), Jessica Torrey (University of Washington), Stephanie Vasko (University of Washington) and Peter Morse (University of Washington)

10:15 – 10:30
T513 – A Field-Effect Transistor for Phonons Based on a Single Molecule
Rodrigo Barbosa Capoz (UFRRJ), Marcos G Menezes (UFRRJ), Aldiene Saraiva-Souza (UFC) and Jordan Del Nero (UFPA)

10:30 – 11:00
PT2 (invited) – Exploring Molecular Assembly at the Nanoscale
Federico Rosei (INRS)

11:00 – 11:30
Coffee Break
Session chair: To be informed

11:30 – 12:00
PT10 (invited) – Surface-Confined Organisation of Magnetic Nanostructures
Mario Ruben (INT Karlsruhe)

12:00 – 12:15
T520 – Structure and Dynamics of Poly(9,9’-diocytfluorene-co-benzothiadiazole) (PF8BT) as revealed by Solid-State NMR, Dynamic Mechanical Thermal Analysis and Wide Angle X-Ray Diffraction
Gregório Couto Faria (USP), Roberto Mendonça Faria (IFSC-USP), Heinz von Seggern (TU Darmstadt) and Eduardo Ribeiro de Azevedo (USP)

12:30 – 13:00
PT13 (invited) – Complex magnetism in FePt nanostructures on Platinum surfaces
Jan Honaka (MPI-FKF)

13:00 – 13:30
Lunch
Session chair: To be informed

13:30 – 15:00
PT7 (invited) – Highly efficient organic devices using doped transport layers
Karl Leo

15:00 – 15:15
T530 – Transport at grain boundaries in polymeric and small molecule organic semiconductors
Alberto Sales (Stanford University)

15:15 – 15:30
T537 – Stochastic Algorithms Applied to the Optimization of Multi-layer OLEDs
Marco Cremona (PUC-Rio), Leonor Fontoura Cupertino (PUC-Rio), Marco Aurélio Cavalcanti Pacheco (PUC-Rio), Omar Paranaira Vieira Neto (PUC-Rio), Welber Gianini Quintino (Inmetro) and Cristiana Legnani (Inmetro)

15:30 – 16:00
PT5 (invited) – From Ambipolar to Unipolar Organic Field-Effect Transistors: A Strategy Towards CMOS Technology
Heinz von Seggern (TU Darmstadt)

16:00 – 16:15
T520 – Free-Carrier Scattering in Transparent Conducting ZnO Films: Grain Boundary Effect and Scattering in the Grain Bulk
Tetsuya Yamamoto (Kochi Univ Tech), Takahiro Yamada (Kochi Univ Tech), Aki Miyake (Kochi Univ Tech), Naoki Yamamoto (Kochi Univ Tech) and Tetsuya Yamamoto (Kochi Univ Tech)

16:15 – 16:30
T522 – Optical absorption spectra of Ga-doped ZnO films affected by O2 flow rate and post-deposition thermal annealing
Hisaos Makino (Kochi Univ of Tech), Takahiro Yamada (Kochi Univ of Tech), Aki Miyake (Kochi Univ of Tech), Naoki Yamamoto (Kochi Univ of Tech) and Tetsuya Yamamoto (Kochi Univ of Tech)

Tuesday, September 22

Session chair: To be informed

09:30 – 10:00
PT12 (invited) – Liquid crystal columnar phases with multicolour tiled superlattices
Martin A Bates (University of York), Benjamin Glettner (University of Halle), Robert Kieffer (University of Halle), Carsten Tschierske (University of Halle), Goran Ungar (University of Sheffield), Martin Walker (University of York) and Xianbing Zeng (University of Sheffield)

10:00 – 10:15
T518 – Probing Molecular Chirality via Electronic Transport
Francisco Piarino Neto (UFPA), Everaldo Ramos Granhen (UFPA), Fabricio Macedo Souza (UFU) and Jordan Del Nero (UFPA)

10:15 – 10:30
T503 – Self-Assembly of Semiconductor Organogelator Nanowires for Photoinduced Charge Separation
André Winklein (MC1 Universität Bayreuth), Suhrut Ghosh (OC2 Universität Würzburg), Michael Sommer (University of Bayreuth), Frank Würthner (OC2 Universität Würzburg) and Mukundan Thelakkat (Universität Bayreuth)

10:30 – 11:00
PT9 (invited) – Liquid crystalline phases by metal nanoparticles
Ewa Gorecka (Warsaw University)

11:00 – 11:30
Coffee Break
Session chair: To be informed

11:30 – 12:00
PT3 (invited) – Flexible Printed Sensor Tape to Diagnose Brain Injury
Ana Claudia Arias (PARC)

12:00 – 12:15
T542 – Substrate induced phase separation and crystals orientation in ultrathin polymeric films for photovoltaics
Giovanni Li Destri (University of Catania), Francesco Purzo (University of Catania), Thomas Keller (University of Jena), Klaus Jandt (University of Jena) and Giovanni Marletta (University of Catania)

12:15 – 12:30
T502 – Novel Concepts in Solid-state dye-sensitized solar cells
Mukundan Thelakkat (University of Bayreuth), Katja Willinger (University of Bayreuth), Johannes Brendel (University of Bayreuth) and Yan Lu (University of Bayreuth)

12:30 – 13:00
PT8 (invited) – Glycopolymer vesicles and tubes
Helmut Schlaad (MPI-KG)

13:00 – 14:30
Lunch
Session chair: To be informed

14:30 – 15:00
PT11 (invited) – Self-Organized Hybrid Devices for Electronic Applications– OLEDs and OPVs using organic-inorganic hybrid materials
Mukundan Thelakkat

15:00 – 15:15
T517 – Influence of polymer structure over optical properties in different azo modified epoxy systems
Maria José Galante (INTEMA), Patricia Angelica Oyanguren (INTEMA), Raquel Fernández (Universidad País Vasco) and Iñaki Mondragon (Universidad País Vasco)

15:15 – 15:30
T504 – Utilizing metal-insulator-semiconductor (MIS) capacitors to extract the temperature dependence of doping density and mobility for the semiconductor (MIS) capacitors
José Alberto Giacometti (UNESP), Fabiano Jesus Trindade (UFABC) and Daniel Zanetti de Florio (UFABC)
**Wednesday, September 23**

**Session chair:** To be informed

09:00 - 10:00

**PT6 (invited)** - Threaded molecular wires as model conjugated polymers with controlled interstrand

Francisco Cacialli

10:00 - 10:15

**T549** - Towards non-substituted blue emitting PPV: Experiments and Simulation

Francisco E Gontijo Guimarães (IFSC-USP), Francisco Carlos Barbosa Maia (IFSC-USP) and Angelo Daniel Faceto (IFSC-USP)

10:15 - 10:30

**T509** - Correlation between negative thermal expansion and polarity reduction in III-V semiconductor films

Shaoqing Wang (Inst Met Res)

**Poster Session T**

**Functional Materials For Organic Electronic and Nanotechnology**

**Room:** Louvre

**Monday, September 21**

18:30 to 20:30

**T506** - The mobility in molecular organic systems with energies given by a charge-induced dipoles interaction

Camila Tonezer (UFPR) and José Arruda Freire (UFPR)

**T507** - Langmuir and langmuir–blodgett (lb) films of hydrophobic azopolymers

Terezia Balogh (USP), Osvaldo Rafaela Cristina Sanfelice (USP), Marilza Junqueira Caldas (USP)

**T508** - Preparation of carboxylic- and hydroxylated-functionalized polythiophenes and their VOCs sensing properties

Vanessa Cristina Gonçalves (IFSC/USP) and Debora Tereza Balogh (IFSC/USP)

**T514** - Molecular Architecture, Photoluminescence, de Electrical Characterization and Sensor Applications of Perylene Derivative Thin Films Thermally Evaporated

Diogo Volpatti (UNESP/FCT - Pres Prudente), Antonio Rúil Jr (USFCar/Sorocaba), Clarissa Almeida Olivati (UNESP/ICGE - Rio Claro) and Carlos José Leopoldo Constantino (UNESP/FCT - Pres Prudente)

**T515** - Photophysical study in stretched polyfluorene thin films

Rafael Henriques Longaresi (IFSC-USP), Gregório Couto Faria (IFSC-USP), Francisco E Gontijo Guimarães (IFSC-USP), and Roberto Mendonça Faria (IFSC-USP)

**T516** - Poly-3-thiophenes layer-by-layer films: sensors applications

Marystela Ferreira (USFCar/Campus Sorocaba), Bruno Bassi (IFSC-USP), Anerise de Barros (USFCar/Campus Sorocaba) and Debora Tereza Balogh (IFSC-USP)

**T523** - Energy Transfer between Au/Polyaniline Nanocomposite and Fluorenes

Etelino José Monteiro Viera Cruz Feijó de Melo (UFPE), Clécio Gomes dos Santos (UFPE) and Celso Pinto de Melo (UFPE)

**T524** - Studies of the electric and morphologic properties of POMA/PMMIA blends deposited by spin coating technique

Nizamara Simenremis Pereira (UnB), Maria José Araujo Sales (UnB) and Artemis Marte Ceschin (UnB)

**T525** - Electrical characterization of polyaniline/poly(vinyl sulfonic acid) layer-by-layer films

Mirela de Castro Santos (UFOP) and Rodrigo Fernando Bianchi (UFOP)

**T526** - DESIGN OF A VERSATILE AND LOW COST ORGANIC DOSIMETER FOR USE IN NEONATAL PHOTOThERAPY

Giovana Ribeiro Ferreira (UFOP), Cláudia Karina Barbosa de Vasconcelos (UFOP) and Rodrigo Fernando Bianchi (UFOP)

**T527** - Miscibility studies of azopolymer /poly3-alkylthiophene mixtures in solution and on Langmuir films

Lucineia Ferreira Cerdá (IFFSC-USP), Vanessa Cristina Gonçalves (USP-Instituto de Física d), Felipe José Pavinatto (USP-Instituto de Física d), Japuani Vitala (KSV Instruments - Finland), Debora Tereza Balogh (IFSC-USP) and Osvaldo Novais Oliveira Jr (USP)

**T528** - Electrical biosensors for triglycerides based on lipase immobilization in layer-by-layer films

Marli Leite Moraes (USFCar/Sorocaba), William Mathiazz Facciana (USFCar/Sorocaba), Clarissa Almeida Olivati (UNESP/ICGE - Rio Claro), Osvaldo Novais Oliveira Jr (USFCar/USP) and Marystela Ferreira (USFCar/Sorocaba)

**T529** - Investigation of Polyfluorene Based Polymers-Regenerated Cellulose Interaction Using Fluorescence Spectroscopy

Raquei Aparecido Domingues (UNICAMP) and Teresa Dib Zambon Atvars (UNICAMP)

**T531** - Non-Electroneutrality in Polythiophenes and their VOCs Sensing Properties

Novais Oliveira Jr (IFSC/USP) and Sérgio Mergulhão (UFSCar)

**T534** - Irradiation of MEH-PPV with gamma rays in alkyl halide

Eríko Soares Bronze Uhle (UNESP), João Francisco Borin (USP), Marcus Vinicius Gonçalves Vismara (UNESP), Andrei Paulo de Assis (UNESP) and Carlos Frederico de Oliveira Graeff (PC-UNESP)

**T535** - Determination of Carrier Mobility in MEH-PPV by Time-of-Flight, Dark Injection SCLC and Charge Extraction in a Linearly Increasing Voltage (CELIV) techniques

Cleber Alexandre de Amorim (USFCar), Fernando Bernardo Sousa (USFCar), Marco Roberto Cavallari (EP-USP), Gerson dos Santos (EP-USP), Fernando Josepetti Fonseca (EP-USP), Adnei Andreade (EE-USP) and Sérgio Mergulhão (USFCar)

**T536** - Study of charge carriers mobility in poly (9, 9-diocytfluoren-2-yl, 7-diy) capped with N, N-Bis (4-methylphenyl)-4-aniline (PFO)

Cleber Alexandre de Amorim (USFCar), Gergorio Couto Faria (IFSC-USP), Roberto Mendonça Faria (IFSC-USP) and Sérgio Mergulhão (USFCar)

**T539** - Functionalized adaman- tane: fundamental building blocks for nanosystem self-assembly

Joelson Cott Garcia (IF/USP), João Francisco Justo (EP/USP), Wanda Vall Marcondes Machado (IF/USP) and Luícia Vitória Credito Assali (IF/USP)

**T540** - Hybrid photovoltaic devices using a carboxylated poly(3-hexyl thiophene) derivative

Roberto Mendonça Faria (IFSC-USP), Helmut Neugebauer (ULOSKU) and Serdar Niyazi Sariciftci (ULOSKU)

**T541** - Non-electroneutrality of silica surfaces: role of water adsorption

Rubia Figueiredo Gouveia (Unicamp) and Fernando Galembeck (Unicamp)

**T543** - Micro-channel fabrication in an e-tongue system

Antonio Rúil Jr. (USFCar), Maria Helena Piazzetta (LNLS), Angelo Luiz Gobbi (LNLS) and Cleber Aparecido Rocha Dantas (PCT/UNESP)

**T544** - Theoretical-study on the contribution of oxygen and chloroform to the sensibility of organic dosimeter

Cláudia Karina Barbosa de Vasconcelos (UFOP), Giovana Ribeiro Ferreira (UFOP), Pedro Alves da Silva Autreto (UNICAMP), Marcelo Zimmer Sampaio Flores (UNICAMP), Douglas Soares Galvão (UNICAMP), Eduardo Ribeiro de Azevedo (USP) and Rodrigo Fernando Bianchi (UFOP)

**T546** - Complex networks to simulate electrical properties in...
T547 – Enhancement of the performance in organic solar cells through incorporation of gold nanoparticles.
Giovanni de Lima Cabral Conturbia (IQ/UNICAMP), João Hermes Clerice (IFGW/UNICAMP), Mônica Alonso Cotta (IFGW/UNICAMP), Jiljan Freitas (IQ/UNICAMP) and Ana Flavia Nogueira (IQ/UNICAMP)

T548 – Characterization of anti-genic peptide p17-1 from HIV-1 in nanostructured films
Luis Petri (UFSCar), Marli Leite Moraes (UFSCar) and Marystela Ferreira (UFSCar)

T550 – Investigation of Magnetoresistance in Europium Based Organic Devices Using Magnetic Field Modulation Technique
Marco Cremona (PUC-Rio), Rafael MB dos Santos (PUC-Rio), Helio R Carvalho (PUC-Rio) and Antonio Carlos O Bruno (PUC-Rio)

T551 – Study of Charge Transport in Polyvinyl Alcohol Organic Matrix/Cadmium Sulphide Particles Composite Material
HAROLDO NAOYUKI MAGASHIMA (UNESP - Ilha Solteira) and HERMES ADOLFO AQUINO (UNESP - Ilha Solteira)

T552 – Synthesis and characterization of new materials derived from 4-methoxy-aniline
 João Marcos Maduro (UFU), Ana Grazzi Brito-Maduro (UFU), Ana Consuelo Felipe (UFU) and Diego Leoni Franco (UFU)

T554 – MIS capacitor using polyaniline as semiconductor
Neri Alves (Unesp), Efraim Antônio Caprioli (Unesp), Fernando Pereira Sabino (Unesp), Aldo Elói E Job (Unesp), Donizete Aparecido Buscati Junior (Unesp) and José Alberto Giacometti (Unesp)

T555 – Photodegradation of the Hole Transporting Layer by Synchrotron Radiation
Aunar Vinagre da Silva Mota (UNIFAP), Maria Luiza de Miranda Rocco (UFRJ), Marco Cremona (PUC-RIO), Antônio Maia de Jesus chaves neto (UFPA), Welber Gianinni Quirino (PUC-RIO), Erlandsson Anthony Sousa (UFRJ) and Marcos Rafael Mendonça Chagas (UFS)

T556 – Simulations of C-V and C-f curves for organic MIS capacitor: effects of accumulation layer width and front edge of depletion layer
José Alberto Giacometti (FCT - Unesp), Fernando Pereira Sabino (FCT - Unesp), Éder Mantovani (FCT - Unesp) and Neri Alves (FCT - Unesp)

T557 – Controlling degradation process on thin layers of conjugated polymers
Rawlinson Medeiros Iapaing (DF-CCN-UFPI), Maria Alessandra Rios (DO-CCN-UFPI), André Alexander Hidalgo (DF-CCN-UFPI) and João Mariz Gimaardes Neto (DF-CCN-UFPI)

T559 – Transparent Nanocomposite Bacterial Cellulose Used as Flexible Substrate for OLED
Cristiano Leogani (Inmetro/Dimat), Henane da Silva Barros (Unesp/IQ), Welber Gianinni Quirino (Inmetro), José Mauricio Almeida Caiut (Unesp/IQ), Sidney José Lima Ribeiro (Unesp/IQ), Carlos Alberto Acchite (Inmetro/Coppe) and Marco Cremora (PUC-Rio)

T560 – Light-emission simulation of organic light-emitting diodes by using discrete ray-trace optical computation
Lucas Fugikawa Santos (UNESP/SJRP)

T561 – Integration of PLED Structures to Microchannel Arrays for Analytical Systems
Tabata Vital (UNESP/SJRP), Guilherme Oliveira Silva (UNESP/SJRP) and Lucas Fugikawa Santos (UNESP/SJRP)

T563 – Optical characterization of phthalocyanine compounds at different pH
Luiz Pereira da Silva Neto (DF-CCN-UFPI), Bruno de Jesus Oliveira (DF-CCN-UFPI), Edgar Alves Araujo Junior (DO-CCN-UFPI), Maria Alessandra Rios (DO-CCN-UFPI), André Alexander Hidalgo (DF-CCN-UFPI), Helder Nunes da Cunha (DF-CCN-UFPI) and Maria Letícia Vega (DF-CCN-UFPI)

T564 – Luminescent properties of light emitting devices based on a new terbium b-diketonate complex
Alessandro Pereira (IF-UFSC), Gilmar Conte (IQ-UFSC), Hugo Gallardo (IQ-UFSC), Welber Gianinni Quirino (Inmetro), Ivan Helmuth Bechtold (IF-UFSC), Francisco Gontijo Guimardes (IFSC) and Luiz Antônio de Oliveira

T565 – Simulations of C-V and C-f curves for organic MIS capacitor: effects of accumulation layer width and front edge of depletion layer
José Alberto Giacometti (FCT - Unesp), Fernando Pereira Sabino (FCT - Unesp), Éder Mantovani (FCT - Unesp) and Neri Alves (FCT - Unesp)

T566 – Influence of an electron transport layer of a White Polymer Light Emitting Diode
Gerson dos Santos (EPUSP), Fernando Josepetti Forsco (LME, PSI, EPUSP, Brasil), Jefferson De Deus (UFPR), Leni Campos Accelrud (UFPR), Adrei Melges Andrade (EPUSP, IEE-USP) and Luiz Fernando Pereira (UA)

T567 – Photo-physical properties of a new luminescent polymer
Gerson dos Santos (EPUSP), Fernando Josepetti Forsco (LME, PSI, EPUSP, Brasil), Isabel Romero Grova (UFPR), Leni Campos Accelrud (UFPR), Adrei Melges Andrade (EPUSP, IEE-USP), Luis Rino (UA) and Luiz Fernando Pereira (UA)

T568 – Effects of functionalization by carboxylic groups of carbon nanotubes on the formation of composites with MEHPPV
Sandra Lucía Nogueira (UFU), Cláudia Aparecida Furtado (CDTN/CNEN), Newton Martins Barbosa Neto (UFU), Cristiano Fantini (UFMG), Adelia Pinheiro Santos (CDTN/CNEN), Alexandre Marletta (UFU) and Ragnhild Augusta Silva (UFU)

T569 – Bandgap in one thienylene-phenylene conjugated polymer
Sandra Lucía Nogueira (UFU), Hugo Santos Silva (UFU), Alexandre Marletta (UFU), Newton Martins Barbosa Neto (UFU) and Ragnhild Augusta Silva (UFU)

T570 – Impedance Spectroscopy of organic azo compound under pH variation
Sheila Cristina Santos Costa (UFPI), Luana Alves de Souza Liberato (UFPI), Bruno de Jesus Oliveira (UFPI), Maria Leticia Vega (UFPI) and André Alexander Hidalgo (UFPI)

T571 – Negative Capacitance Effect on Metal/Pentacene/Metal Structures
Françoise Toledo Reis, Lucas Fugikawa Santos (UNESP/SJRP) and Heinz von Seggern (TU Darmstadt)

T572 – E.I.S evaluation of Chitosan Polymeric Luminescent Devices Having IZO as Cathode
Gonçalo Pedro Gonçalves, Edvaldo Luiz Queixa, Elvira Fortunato, Rodrigo Martins and Roberto Mendonça Faria

T574 – Electrical Analysis of Polymer Luminescent Devices Having IZO as Cathode
Gonçalo Pedro Gonçalves, Edvaldo Luiz Queixa, Elvira Fortunato, Rodrigo Martins and Roberto Mendonça Faria

T575 – Photovoltaic effect observed in junctions based on Buriti oil
Artemis Marti Cescin (UnB) and Elizete Rocha da Silva (UnB)

T576 – Structural and Molecular Dynamic Studies of Poly(9,9-dioctylfluorene) Crystalline Phases
Gregório Couto Faria (IFSIC/USP), Wesley de Souza Bezerra (IFSIC/USP) and Eduardo Ribeiro de Azevedo (IFSIC/USP)

T577 – Aluminium doped ZnO thin films deposited by r.f. magnetron sputtering at low frequency and room temperature
Nelson dos Santos Ferreira (UFP/ COPPE/ PEMMI), Leandro José Roriero (UFP) and Renata Antaun Simão
Monday, September 21

Session chair: Dachamir Hotza

09:30 - 10:00
PU5 (invited) - Fabrication of Ceramic Composites by Rapid Prototyping Techniques
Nahum Travitzky (ZMP/UniErlangen)

10:00 - 10:15
US40 - Optimization of Sintering Conditions and Structural Characterization of Neodymium Doped SrBi2Nb2O9 (SBN) Ceramics
Puja Goel (NPL INDIA), Ashok Manikrao Biradar (NPL INDIA) and Kanhaiya Lal Yadav (IIT Roorkee, INDIA)

10:15 - 10:30
US12 - Abrasive machining of advanced technical ceramics
Eckart Uhlmann (Fraunhofer IPK and IWF), Tiago Borsai Klein (Fraunhofer IPK), Tom Hoghé (IWF TU Berlin) and Christoph Sammler (IWF TU Berlin)

10:30 - 10:45
US63 - Thermo-stable Diamond Composite
Guerold Sergueevitch Bobrovnitchii (UENF), Ana Lucia Diegues Skury (UENF), Marcello Filgueira (UENF) and Romulo Crespo Tardim (UENF)

10:45 - 11:00
US21 - Influence of the scratching radius on the grinding process of glassy ceramics
Fabio Jose Pinheiro Sousa (FBK), Jan Christian Aurich (FBK), Walter Lindolf Weingaertner (LMP) and Orestes Estevam Alarcón (UFSC)

11:00 - 11:30
Coffee Break

Session chair: Carlos R. Rambo

11:30 - 12:00
PU1 (invited) - Novel porous Metal@SiCN ceramics via molecular approach
Günter Motz (Universität Bayreuth CME), Germund Glatz (Universität Bayreuth ACII), Thomas Schmalz (Universität Bayreuth CME) and Rhett Kempe (Universität Bayreuth ACII)

12:00 - 12:15
US75 - Thermal properties of SiC particle-dispersed ZrB2 matrix composites
Katsumori Matsumura (The University of Tokyo), Masahide Ikegami (The University of Tokyo) and Yutaka Kagawa (The University of Tokyo)

12:15 - 12:30
US58 - Sintering by Activated Surface - A New Method for Cermet Consolidation
Thomaz Augusto Guisard-Restivo (IPEN), Chieko Yamagata (IPEN) and Sonia Regina Homem Mello-Castanho (IPEN)

12:30 - 12:45
US62 - HPHT Sintering of Dual Bits
Romulo Crespo Tardim (UENF), Guerold Sergueevitch Bobrovnitchii (UENF), Ana Lucia Diegues Skury (UENF) and Marcello Filgueira (UENF)

13:00 - 14:30
Lunch

Session chair: Joe da Costa

14:30 - 15:00
PU4 (invited) - Hot Gas Cleaning by Porous Ceramics; the Effect of Microstructures on Degradation and Durability
Tapio Mäntylä and Pirjo Laurila

15:00 - 15:15
US31 - High temperature mechanical testing of cordierite porous ceramics
ANALIA GLADYS TOMBA MARTINEZ (INTEMA), Laura Sandovar (INTEMA), MARIANO TALOU (INTEMA) and MARIA ANDREA CAMERUCCI (INTEMA)

15:15 - 15:30
US35 - Effect of Additives on Manufacturing of Ceramic Foams
Sergio Yesid Gómez (Universidad de los Andes), Oscar Alberto Álvarez (Universidad de los Andes), Dachamir Hotza (UFSC), Carlos Renato Rambo (UFSC) and Jairo Arturo Escobar (Universidad de los Andes)

15:30 - 15:45
US43 - Gelcasting of alumina
Tuesday, September 22

Session chair: Tapio Mäntylä

09:30 - 10:00

U53 (invited) - Ceramic Membranes in Carbon Capture Processes
José da Costa (University of Queensland)

10:00 - 10:15

U541 - Autoclaved pozolanic bodies
Daniel Veras Ribeiro (UFSCar / UA), Inacio Regiani (ITA) and Aureomar Ferreira Martins (ITA)

10:00 - 10:15

U520 - Cold roll pressing of thin porcelain tiles by the dry route
Anselmo Ortega Boschi (UFSCar)

10:15 - 10:30

U522 - Generation of texture on the surface of porcelain stoneware tiles during the polishing process
Fabio José Pinheiro Sousa (FBK), Jan Christian Aurich (FBK), Walter Lindolf Weingaertner (LMP) and Orestes Estevam Alaron (UFSC)

10:45 - 11:00

U523 - Effects of Raw Material Contents on Technological Properties of Multicomponent Ceramic Bodies
Silvadlo Leite Correia (UDESC), Edina Lurdes Broot (UDESC), Marilena Valedores Folqueas (UDESC), Dachamir Hotza (UFSC) and Ana Maria Segadães (UA/Portugal)

11:00 - 12:00

Lunch

Session chair: Vicent Cantavella Soler

12:00 - 12:15

U572 - Viability of producing porcelain tiles from processing to application
Marcio Raymundo Morelli (UFSCar)

12:15 - 12:30

U577 - Extrusion of thin tubular bodies in Carbon Capture
Rafael Goncalves Souza (UFSC), Giovana Colledetti (UFSC), Fernanda Pirolla (UFSC), Philippe Jean Gleize (UFSC) and Orestes Estevam Alaron (UFSC)

12:30 - 12:45

U564 - PHYSICAL AND MECHANICAL PROPERTIES OF NEW PORTLAND- LATEX COMPOSITE FOR CEMENTING OIL WELL SUBJECT THE STEAM INJECTION
Jose Heriberto O Nascimento (Universidade do Minho), Antonio Eduardo Martinelli (UFRRN), Dániel Henrique de Macedo Martinelli (UFRRN), Jose Daniel Diniz Melo (UFRRN) and Dulce Maria Araujo Melo (UFRRN)

12:45 - 13:00

U582 - Generation of texture on the surface of porcelain stoneware tiles during the polishing process
Fabio José Pinheiro Sousa (FBK), Jan Christian Aurich (FBK), Walter Lindolf Weingaertner (LMP) and Orestes Estevam Alaron (UFSC)

13:00 - 14:30

Session chair: Michele Dondi

14:30 - 15:00

U524 - Hierarchical properties of oxide and non-oxide technical ceramics derived from Ti/Al/Al2O3-filled polysiloxane
Francisco de Paula Calderon Piñar (IMRE), Jose Martin Yánez-Limón (CINVESTAV) and Celia Fraga malafaia (Universidade Federal do R)

15:00 - 15:15

U573 - STRESSES IN THE SYSTEM GLAZE–ENGOBE–SUPPORT AND THE CURVATURE OF CERAMIC TILES
Anselmo Ortega Boschi (UFSCar)

15:15 - 15:30

U519 - Microscopic residual stresses on quartz particles in porcelain tile as a function of microstructure
Agenor De Noni Junior (IMG), Dachamir Hotza (UFSC), Enrique Sanchez (ITC) and Vicent Cantavella (ITC)

15:30 - 16:00

U518 - Ceramic composites derived from Ti/Al/Al2O3-filled polysiloxane
Francisco Caninde Camilo da Costa (UFRRN), Wilson Acchar (UFRRN) and Micheline Reis de Araújo (UFRRN)

16:00 - 16:15

U509 - SYNTHESIS SIMULTÁNEA DEL COMPOSITE SiC–A 6 O 3 MEDIANTE METALOTERMIA CON ASISTENCIA DEL ARCO ELÉCTRICO
Jorge Luis Garcia Jacomino (UCLV), Idalia Gomez de la Fuente (UA), Gema Gonzalez (UCLV), Rafael Quintana Puchol (UCLV) and Amado Cruz Crespo (UCLV)

16:45 - 17:00

U511 - Heteromorphic Hematite Pigments from Steel Scrap
Viviana Possamai Delia (UFSC), Janaina Junkes (UFSC), Pedro Novaes (UFSC) and Dachamir Hotza (UFSC)

17:00 - 17:15

U510 - Heteromorphic Hematite Pigments for Porcelainized Stoneware
Viviana Possamai Delia (UFSC), Janaina Junkes (UFSC), Pedro Novaes (UFSC) and Dachamir Hotza (UFSC)
U525 - Leucite Crystallization: Kinetics of Nucleation and Growth
Marta Duarte da Fonseca (COPPE/UFRJ), Tsuneharu Ogasawara (COPPE/UFRJ) and Flávio Teixeira da Silva (COPPE/UFRJ)

U527 - Microstructural and mechanical study of ZrO$_2$-Y$_2$O$_3$ sintered at different times and sintering temperatures
Fabiana Ribeiro da Silva (UFRJ), Luiz Carlos Pereira (UFRJ), Rodrigo Reis (Unigranrio) and Wilson Acchar (UFRN)

U528 - Synthesis and characterization of moldable electric conductive ceramic matrix composites
Raphael Rodrigues Lage (UNICAMP), Carlos Pereira (UFRJ), Rodrigo Reis (UFRJ), Luiz Mota (UFRJ) and Cláudio Andrade (UFRJ)

U529 - Properties of Mortars Containing Brick Manufacturing Clays Using Factorial Design
Sílvio Leite Correia (UDESC), Everton Pinto Rosa (UDESC), Juliano Pedro Scandolara (UDESC) and Ana Maria Segaldes (UA/Portugal)

U532 - Correlation between abrasive wear and microstructure of zirconia and alumina
Maria Maria Balzaretti (UFRGS), Rodrigo Buchfink souza (UFRGS), Rafael Vieira Camerini (UFRGS), Felipe Vogt (UFRGS) and Jodo Alzino Jornada (INMETRO)

U533 - Processing Reaction Bonded Silicon Carbide - Preliminary Results
Célio Albano Costa (COPPE/UFRJ), Rodrigo P Silva (EP/UFRJ) and Eduardo Albuquerque Brochi (PUC-RJ)

U534 - Evaluation of Flexure Strength of SiC Degraded in Acid and Base Media
Célio Albano Costa (COPPE/UFRJ) and Maria G S Pereira (COPPE/UFRJ)

U536 - Influence of Fabrication Parameters on Crystallization, Microstructure and Surface Composition of NbN Thin Films Deposited by RF Magnetron Sputtering
José Edgar Alfonso (Universidade Nacional de C), José Francisco Marco (Universidade Nacional de C), Nestor Jaime Torres (Universidade Nacional de C), Jaime Buitrago Arrigui (Universidade nacional de C) and Benito Santos (Universidade Automa de Mad)

U537 - Mullite nanostructured synthesis in thin film-like shape by employing liquid crystal as template
Adriana Silva Pascoli (ITA) and Elizabete Yoshie Kawachi (ITA)

U538 - Quantitative Determination of the Amorphous and Crystalline Phases of the Ceramic Materials
Claudia Terezinha Knies (UFSC/UNIB), Nivaldo Cabral Kuhnen (UFSC), Humberto Gracher Riela (UFSC), Patricia Bodanese Prates (UFSC), João Cardoso de Lima (UFSC) and Eliza Urano Frandich (IPEN)

U539 - Development of a System for Immersion Ultrasonic Analysis on UO$_3$ Pellets
Douglas Brandão Baroni (IEN), Marcelo Siqueira Bittencourt (IEN), Carla Souza Lucas (IEN) and Antônio Mario Costa (IEN)

U542 - Synthesis, dielectric properties and structural characterization of Ba$_2$Ca$_2$Zr$_2$O$_7$ ferroelectric ceramic system
Higor Rogerio Favarim (IFSC/USP), Valmor Roberto Mastelaro (IFSC/USP), Alain Michelowicz (ICMPE/Paris 12) and Person Pereira Neves (UNIFAL)

U545 - Stereological Study of Whisker Reinforced Silicon Nitride Ceramics
Célio Albano Costa (COPPE/UFRJ) and Cláudio Vasconcelos Rocha (COPPE/UFRJ)

U546 - Influence of load cycling in wet environment on the bending strength of 3Y-TZP three unit FPDs processed via CAD-CAM
FLAVIO TEIXEIRA DA SILVA (COPPE/ UFRJ)

U547 - Short range investigation on A$_2$Zr$_2$O$_7$ with A = Gd and Y synthesized by solid state reaction
María Cristina Caracoche (UNLP), Jorge Alberto Martinez (UNLP), Patricia Claudia Rivas (UNLP) and Federica Bondioli (UNIMORE)

U548 - Study of the Development of an Ultralow CEM CORDIERITE CASTABLE MIX FOR THE INDUSTRIAL PRODUCTION OF CORDIERITE PLATES
Ana Maria Paniquet Mercado (IPN), Paulino Estrada Díaz (Manuchar), Arturo Mendez Sanchez (IPN), Elvia Diaz Valdez (IPN), Leonor Perez Trejo (IPN), Lucia Diaz Barriga (IPN) and Concepción Mejia (IPN)

U549 - Superconductor Substrate with Critical Temperature at 212 for Planar Antenna
HUMBERTO CESAR CHAVES FERNANDES (UFRRN), HUGO MICHEL MEDEIROS MAIA (UFRN) and LEONARDO MARTINS CAETANO (UFRRN, ENGESET)

U550 - Synthesis and characterization of CdS yellow ceramic pigment from Cd of Ni-Cd batteries
Carlos Renato Rombo (UFSC), Sandra Lacerda (UFSC), Ana Paula Margarido Menegazzo (CCB), Luciano Henrique Campestini (UFSC), Dachamir Hotza (UFSC) and Orestes Estevam Alarcon (UFSC)

U551 - Cement Slurry for cementation of wells subject to High Temperature with addition of Silica Flour and Metakaolin
Marcos Alessandro Anjos (IFRN), Tiago Renovo Santos (UFRRN), Pablo Pinheiro Souza (UFRRN), Dulce Maria Araujo Melo (UFRRN), Marcus Antonio de Freitas Melo (UFRRN) and Julio Cesar Freitas (UFRRN)

U552 - Studies spectroscopy impedance of the Y-type Hexagonal Ferrite [Ba$_2$Co$_2$Fe$_{12}$O$_{22}$ (Co$_2$Y)] Doped with PbO
Mauro Miguel Costa (UFMT), Antonio Bezerra Sombra (UF), Julio Cesar Goes (UF) and Guillerme Francisco Morais Pires Jr (UF)

U553 - Preparation of alumina ceramic foam with low environmental impact for application in oil industry
Luciana Benedita Barbosa (UFS), Ronaldos Santos da Silva (UFS), Lilian Menezes de Jesus (UFS), Silvaneide de Jesus Matos (UFS) and Zélia Soares Macedo (UFS)

U554 - Property-Microstructure Relationship in Aluminous Porcelain Incorporated with Ornamental Rock Waste
José Nilson Franca Holanda (UENF/LAMAV), Myrian Aparecido Silva (UENF/PPGECM) and Herval Ramos Pires Junior (UENF/LAMAV)

U556 - Development of materials for turbine coatings.
Daniele Aparecida Pereira Reis (ITA), Daniel Soares de Almeida (IAE-CTA), Carlos Levi (UCA-EUA), Vinicius Rodrigues Henriques (IAE-CTA), Francisco Piorino Neto (IAE-CTA) and Rafael Leckie (UCA-EUA)

U557 - Effect of atmosphere on stability of PLMN-13PT powder
Fernando Andrade Londoño (UFSCar), Jose Eiras (UFSCar) and Duciene Garcia (UFSCar)

U559 - Mechanisms of Radioluminescence of Rare Earths doped SrAl$_2$O$_4$ and Ca$_{12}$Al$_{14}$O$_{33}$ Excited by X-Ray
Paulo Montes (UFS-Araçuaí) and Maria Ernesto Giroldo Valério (UFS-Araçuaí)

U560 - The influence of nanoparticle agglomerates and aggregates on mechanical properties of Ce-TZP sintered ceramics
Maria da Comora Andrade (INPE)

U566 - Development of materials for turbine coatings.
Daniele Aparecida Pereira Reis (ITA), Daniel Soares de Almeida (IAE-CTA), Carlos Levi (UCA-EUA), Vinicius Rodrigues Henriques (IAE-CTA), Francisco Piorino Neto (IAE-CTA) and Rafael Leckie (UCA-EUA)

U567 - Thermal Barrier Coatings by Electron Beam-Physical Vapor Deposition of Zirconia Co-Doped with Yttria and Niobia.
Daniele Aparecida Pereira Reis (ITA), Daniel Soares de Almeida (IAE-CTA), Carlos Alves Caira (IAE-CTA), Vinicius Rodrigues Henriques (IAE-CTA), Francisco Piorino Neto (IAE-CTA) and Carlos de Moura Neto (ITA)

U576 - BInNbO$_4$ Ceramics in Microwave: Synthesis and Characterization
Tatiana Saireyna Maia Fernandes (UFS), Antonio Jefferson Maguire Sales (UFS), José Silva de Almeida (UFS), Marcelo Antonio Santos da Silva (UFS), Ana Carolina Fontinele Silva (UFS) and Antonio Sergio Bezerra Sombra (UFS)
SYMPOSIUM V

Structures and Properties of Metastable Materials

Auditorium: Segóvia III

Simposium Organizers:

Walter José Botta Filho (UFSCar, Brazil)
Dilson Silva dos Santos (UFRJ, Brazil)
Alain Reza Yavari (INPG, France)
Robert Schulz (Hydro-Québec, Canada)

Monday, September 21

Session chair: Walter Jose Botta

09:30 - 10:00
PV3 (invited) - Critically-Percolated Cluster-Packed Structure in Zr-Al-Ni Bulk Metallic Glass Created with Molecular Dynamics Simulations Based on Plastic Crystal Model
Akira Takeuchi (WPI, Tohoku University), Kunio Yubuta (IMR, Tohoku University) and Akihisa Inoue (WPI, Tohoku University)

10:00 - 10:30
PV16 (invited) - The accuracy of the topological instability-electro-negativity criterion in predicting the glass forming ability of alloys
Marcelo Falcão de Oliveira (EESC-USP), Claudemiro Bolfarini (Dema-UFSCar), Claudio Shyinti Kiminami (Dema-UFSCar) and Walter Jose Botta (Dema-UFSCar)

10:45 - 11:00
V552 - Shear bands operation in metallic glasses
Konstantinos Georgarakis (WPI-Tohoku University), Alain Reza Yavari (SIMaP - INP Grenoble), Moustafa Aljerf (SIMaP - INP Grenoble), Yan Li (SIMaP - INP Grenoble), Dina Dudina (SIMaP - INP Grenoble), Alain LeMoulec (SIMaP - INP Grenoble) and Akihisa Inoue (WPI-Tohoku University)

11:00 - 11:30
Coffee Break

Session chair: Peter Svec

11:30 - 12:00
PV7 (invited) - Topological Instability and Glass Forming Ability in the Ti-Ni-Cu System
Claudio Shyinti Kiminami (UFSCar), Piter Gargarella (PPGCEM-UFSCar), Marcelo Falcão Oliveira (EESC-USP), Igor Pereira Franco (PPGCEM-UFSCar), Claudemiro Bolfarini (UFSCar) and Walter Jose Botta (UFSCar)

12:00 - 12:30
PV5 (invited) - Comparative study of the thermal, elastic and mechanical properties of various families of metallic glasses
Maria Dolors Baró (UAB)

12:30 - 13:00
PV18 (invited) - Malleable Hypoeutectic Zr-Ni-Cu-Al Bulk Glassy Alloys with Tensile Plastic Elongation at Room Temperature
Alain Reza Yavari

13:00 - 14:30
Lunch

Session chair: Claudio Shyinti Kiminami

14:30 - 15:00
PV1 (invited) - Magnetic properties of FeCoBSiNb BMGs with Cu additions
Mihai Stoca (IFW Dresden), Ran Li (IFW Dresden), Stefan Roth (IFW Dresden), Jürgen Eckert (IFW Dresden), Gavin Vaughan (ESRF Grenoble) and Alain Reza Yavari (INPG Grenoble)

15:00 - 15:30
PV10 (invited) - Glassy alloy composites for IT applications
Nobuyuki Nishiyama (RIMCOF Tohoku University), Kana Takenaka (RIMCOF Tohoku University), Nozomu Togashi (RIMCOF Tohoku University), Noriko Saidoh (RIMCOF Tohoku University) and Akihisa Inoue (IMR Tohoku University)

15:30 - 16:00
PV12 (invited) - Efficient atomic packing and amorphous phase separation in Al-rare earth metallic glasses
Jerzy Antonowicz

16:00 - 16:15
V524 - Cu-NbC Nanocomposite Coatings Developed by Laser Cladding
Amelia Almeida (ISCTecnico), Sônia Eugénio (ISCTecnico), Rui Vilar (ISCTecnico), Teresa Marques (INETI) and Jose Brito Correia (INETI)

16:15 - 16:30
V510 - Influence of nitrogen on structural materials
Tuesday, September 22

Session chair: Robert Schulz

09:30 – 10:00
PV17 (invited) – NANOSTRUCTURED MgH2 FOR HYDROGEN STORAGE APPLICATIONS

Daniel Fruchart (Institut Néel), Patricia De Rango (Institut Néel), Sylvain Garray (Institut Néel), Gregory Girard (Institut Néel), Salvatore Mira (Institut Néel), Philippe Marty (Université J Fourier), Nataliya Skryabin (Perm State University)

10:00 – 10:30
PV2 (invited) – Reaction mechanism and kinetics of MgH2/boro-hydrides based Reactive Hydride Composites

Martin Damhien (GKSS-Forschungszentrum)

10:30 – 11:00
PV11 (invited) – Hydride formation in mechanically-activated Mg-based systems

Stefano Deledda (IFE) and Bjorn C Hauskaer (IFE)

11:00 – 11:30
Coffee Break

Session chair: Dilson Silva dos Santos

11:30 – 12:00
PV13 (invited) – Effect of cold rolling on hydrogen storage behavior of BCC and Mg-based alloys

Jacques Huit (UQTR), Sofiane Amira (Aluminium Technology, NRC), Sydney Ferrera Santos (CECS, Fed University ABC), Jean-Louis Bobet (ICMCS, Université Bordeaux) and Etsuo Akiba (AIST)

12:00 – 12:30
PV8 (invited) – Graphite hydrogen storage properties in controlled reactive ball milling

Zbigniew S. Wronski (CANMET Energy), Andrew Calka (U Wolongong) and D Weeler (U Wolongong)

12:30 – 12:45
V518 – Metastable Systems for Wettable Cathodes in the Aluminium Industry

Robert Schulz (Hydro-Quebec) and Sylvio Savoie (Hydro-Quebec)

12:45 – 13:00
V521 – EBSPP Analysis for Tensile Deformation Behavior of Martensitic Steel

Mitsugu Michiuchi (The University of Tokyo), Shochi Nambu (The University of Tokyo), Junya Inoue (The University of Tokyo) and Toshikiki Koseki (The University of Tokyo)

13:00 – 14:30
Lunch

Session chair: Mihai Stoica

14:30 – 15:00
PV6 (invited) – Plasticity and Deformation Mechanisms of Fully Dense Bulk Nanocrystalline fcc and bcc Metals

Hans Jorge Fecht (Ulm University)

15:00 – 15:30
PV14 (invited) – Physical processing of rapidly quenched alloys – the case of nanocrystalline Fe-B

Peter Svec (Instit of Physics SAS), Ivan Skorovane, Dusan Janickovic and Peter Svec Sr

15:30 – 16:00
PV9 (invited) – The Ways to Synthesize Amorphous or Nanocrystalline material from a Vapor Phase

Elisabeth Blanquet (CNRS)

16:00 – 16:30
PV4 (invited) – The Effect of Metastability on Room Temperature Deformation Behavior of Beta Titanium Alloys

Sreeramamurthy Ankem (University of Maryland) and Zane W Wyatt (University of Maryland)

Poster Session V

Structures and Properties of Metastable Materials

Room: Louvre

Monday, September 21

18:30 to 20:30
V501 – Microstructural and magnetic characterization of metastable solid solutions in the Cu-Co-Ni system obtained by mechanical alloying

Marta Lopez Jenessen (U de CONCEPCION CHILE), M Elena Gome (U del VALLE CALI COLOMBI), Ramam Koduri (U de CONCEPCION), David Reyes (CENM COLOMBIA), Mangalaraj Ramalinga Visvanathan (U de CONCEPCION), Jose Jimenez (CENIM SPAIN) and Pedro Prieto (CENM COLOMBIA)

V513 – WALL COVERING POZZOLANIC ALLOYED FOR PASSIVE CONTROL OF ENVIRONMENTS

Fabiano Ruopp Pereira (UFSC) and Humberto Roman (UFSC), Orestes Estevam Alarcon (UFSC), Victor Ferreira (UA) and João Labrincha (UA)

V514 – Thermoelectricity – Superplasticity and Shape Memory Mechanism in Copper Based Shape Memory Alloys

Osman Adeguzel

V516 – Laser Surface Cladding of Fe-based metallic glassy Piter Gangarella (PPGCEM-DEMA-UFSCar), Rui Vilar (Demat-IST-UTI), Claudia Shyinti Kiminami (DEMA-UFSCar), Walter Jose Botta (DEMA-UFSCar), Carlos Trivero Rios (DEMA-UFSCar) and Claudemiro Bolfarini (DEMA-UFSCar)

V517 – Mg2FeH6-based nanocomposites for hydrogen storage containing different additives

Daniel Rodrigo Leiva (DEMA-UFSCar), Andre Castro Souza Villela (DEMA-UFSCar), Guilherme Zepon (DEMA-UFSCar), Daniel Fruchart (Institut Néel/CNRS et UFRGS), Salvatore Miraglia (Institut Néel/CNRS et UFRGS), Tomasz Toshiki Ichikawa (DEMA-UFSCar) and Walter Jose Botta (DEMA-UFSCar)

V519 – Structural and magnetic properties of mechanically alloyed Fe50Mn50Si2O2 glass

Kontan Tanigan (CBNU, Korea), Dong Seok Yang (CBNU, Korea), Suhk Kun Oh (CBNU, Korea) and Seong Cho Yu (CBNU, Korea)

V520 – Sorption properties of the system NaBH4/MgH2 milled with different additives

Santiago Sarihach (UAB), Chiara Milanese (UNIPV), Alessandro Girella (UNIPV), Amedeo Marin (UNIPV), Gabriele Mulas (UNIJS), Sebastiano Garroni (UAB) and Maria Dolores Baró (UAB)

V522 – Glass forming ability of Al-Ni-Gd alloys

Luis César Rodríguez Aliaga (DEMA-UFSCar), Claudio Shyinti Kiminami (DEMA-UFSCar), Claudemiro Bolfarini (DEMA-UFSCar) and Walter Jose Botta (DEMA-UFSCar)

V523 – Raman and structural studies on potassium-ammmonium dehydrogenate phosphate system

Jesus Fabian Jurado (UNAL de Colombia), Carlos Vargas Hernandez (UNAL de Colombia) and Jhon Eder Sanchez (UNAL de Colombia)

V526 – Correlation between the topological instability-electro-negativity criterion and the glass forming ability in the Zr-Cu-Al system

Luis César Rodríguez Aliaga (DEMA-UFSCar), Marcelo Falcão de Oliveira (SMMT – EESC), Claudemiro Bolfarini (DEMA-UFSCar), Claudio Shyinti Kiminami (DEMA-UFSCar) and Walter Jose Botta (DEMA-UFSCar)

V527 – Crystallization kinetics of Cu-Zr-Al amorphous alloys

Flavio Salgado Politi (IFMA), Luis Cesar Rodriguez Aliaga (DEMA-UFSCar), Claudio Shyinti Kiminami (DEMA-UFSCar), Claudemiro Bolfarini (DEMA-UFSCar) and Walter Jose Botta (DEMA-UFSCar)

V528 – Mechanical Behavior of the Polycrystalline Cu-13.7%Al-4%Ni Alloy

Elaine Cristina Pereira (UENF), Anatoly Nikolaeveich Matlakhov (UENF), Carlos José Araujo (UFCG) and Lidudinha Aleksandravna Matlakhovna (UENF)

V529 – MICROSTRUCTURAL CHARACTERIZATION OF Al-Fe-Cr-Ce ALLOYS

Ana Martha Branquinha Silva (DEMA-UFSCar), Luis César Rodríguez Aliaga (DEMA-UFSCar), Claudio Shyinti Kiminami (DEMA-UFSCar), Claudemiro Bolfarini (DEMA-UFSCar) and Walter Jose Botta (DEMA-UFSCar)

V531 – Effect of High-Pressure on the Thermal Properties of a Li2O+2SiO2 glass

Silvio Buchner (UFROs), Paulo Cesar Soares Junior (PUCPR), Altair Soria Pereira (UFROs), Eduardo Bellini Ferreira (UNESP) and Naira Maria Balzaretti (UFROs)

V532 – Experimental investigation of explosive welding of Ni-Al based alloy
V533 - Structural changes and surface layer strengthening of the one-phase, fine-grained Ni3Al intermetallic compound during incubation period of cavitation
Pawel Jozwik (Military University of Te), Zbigniew Bojar (Military University of Te), Dariusz Zasada (Military University of Te) and Jüzel Paszula (Military University of Te)

V534 - Desertion Influence of Water on Structural, Electrical Properties and Molecular Order of V2O5.nH2O films
Jesus Fabian Jurado (UNAL-Colombia), Cesar Leonardo Londondo (UNAL-Colombia) and Carlos Vargas Hernandez (UNAL de Colombia)

V535 - Hydrogen diffusivity and solubility in Pd-34.6Fe-4Nb alloy
Viviane Monteiro Azambuja (IFES), Dilson Silva dos Santos (UFRJ/COPPE/PEMM) and Daniel Fruchart (Institut N el/CNRS et UJF)

V536 - Synthesis, structural characterization and H-sorption properties of Mg3FeH4-based nanocomposites processed by reactive miling
Alexandre Augusto Asselli (PPG-CERM/UFSCar), Claudia Shyinti Kiminami (DEMA-USFCar), Tomaz Toshimi Ishikawa (UFRJ/COPPE/PEMM) and Walter Jose Botta (DEMA-USFCar)

V537 - ORIENTED MESOPOROUS MATERIALS FROM LIQUID CRYSTAL TEMPLATES
Fernanda Gabriel Freitas (Unesp), Sandra Helena Pulcini (Unesp) and Celso Valenìm Santilli (Unesp)

V538 - Conventional and Ultra-rapid Microwave Sintering of Nanostructured ZnO: a Comparison
Rodolfo Foster Klein - Gunnnewik (USFCar) and Ruth H G A Kiminami (USFCar)

V539 - Effect of the Thermal Treatments in the Mechanical Behavior of the Ni-Ti wire with Shape Memory Effect
Euclides Apolinário Pina (Ufpe), Cezar Henrique Gonçalves (Ufpe), Carlos Augusto Oliveira (Ufpe), Severino Léopoldo Urtiga (Ufpe), Oscar Olimpio Araújo (Ufpe) and Carlos José Araújo (Ufsc)

V540 - The martensitic transformation as a complementary mechanism of plastic deformation in metallic materials: effects in mechanical tests
Arcelio Hernandez Fereira (University of Ciencias and Technology) and Boris Alekseivich Potekhin (Ural State Forest Academy)

V541 - Comparison of the atomic structure of Zr-Cu amorphous alloys and the effect of Al, Ti, and Ni addition using synchrotron radiation in transmission
Konstantinos Georgarakis (WPI-Tohoku University), Alain Reza Yavari (SIMaP - INP Grenoble), Dina Dudina (SIMaP - INP Grenoble), Yan Li (SIMaP - INP Grenoble), Moustafa Aljerf (SIMaP - INP Grenoble), Gavin Vaughan (ESRF - Grenoble) and Akihisa Inoue (WPI-Tohoku University)

V542 - STRUCTURAL PROPERTIES OF GLASSES NaPO3 - SrO3
Murilo Montesino (IQ - UNESP Araraquara), Danilo Manzani (IQ - UNESP Araraquara), Younes Messadeq (IQ - UNESP Araraquara), Sidney José Lima Ribeiro (IQ - UNESP Araraquara) and Marcelo Nalin (UNESP - Bauru)

V543 - Superelasticity Behaviour in Stress-Electrical Resistivity-Strain Coupled Tests on Cu-Based Shape Memory Single Crystals
Euclides Apolinário Pina (Ufpe), Cezar Henrique González (Ufpe), Carlos Augusto Oliveira (Ufpe), Severino Léopoldo Urtiga (Ufpe), Oscar Olimpio Araújo (Ufpe) and Carlos José Araújo (Ufsc)

V544 - OPTICAL STUDY OF NOVEL HIGH NON LINEARITY PHOSPHATE GLASS
Danilo Manzani (UNESP), Younes Messadeq (UNESP), Sidney José Lima Ribeiro (UNESP) and Frederic Smetkala (Université de Bourgogne)

V545 - PRODUCTION OF PHOTONIC CRYSTAL FIBER BASED ON HEAVY OXIDE GLASSES
Danilo Manzani (UNESP), Younes Messadeq (UNESP), Sidney José Lima Ribeiro (UNESP) and Frederic Smetkala (Université de Bourgogne)

V546 - Structural characterization of siloxane-POE hybrid matrix as controlled drug delivery devices
Leandro Lopes (IQ-UNESP), Sandra Helena Pulcini (IQ-UNESP), Leila Aparecida Chiovacci (CFCAR-UNESP), Eduardo Ferreira Molina (IQ-UNESP) and Celso Valenìm Santilli (IQ-UNESP)

V547 - High-temperature Raman spectroscopy study of the amorphous-to-crystalline transition in zirconium tungstate
Jadna Catarina (UFSCar), Altair Soria Pereira (UFSCar), Gustavo Roberto Ramos (UCS) and Claudio Antônio Perottini (UCS)

V548 - Study of Hydrogen Sorption in Mg-Pd-Nb nano-oxide alloys
Monique Ossorio Talarico Conceição (UFSCar), Eduardo Ribeiro Lagreca (UFSCar), Viviane Monteiro Azambuja (IFES) and Dilson Silva dos Santos (UFSCar)

V549 - “Hydrogen gas Permeation studies of Pd-Zr internally oxidized alloys”
Eduardo Ribeiro Lagreca (UFRJ/COPPE/PEMM), Viviane Monteiro Azambuja (IFES) and Dilson Silva dos Santos (UFRJ/COPPE/PEMM)

V550 - The martensitic transformation as a complementary mechanism of plastic deformation in metallic materials: effects in mechanical tests
Arcelio Hernandez Fereira (University of Ciencias and Technology) and Boris Alekseivich Potekhin (Ural State Forest Academy)

V551 - Spray forming of glassy alloy Fe30B30Nb4Ti1
Fausto Lopes Catto (USFCar), Valdemar Leal (UEMa), Claudio Shyinti Kiminami (USFCar), Walter Jose Botta (USFCar) and Claudemiro Balfarin (DEMA-USFCar)

V552 - Characterization of VO2 Structures Performed by Electrodeposition
Alex Boarski Cezar (UFPR) and Ney Mattoso (UFPR)

V553 - Ti13Cu6NiZr22 and (TiZr)9Co12Fe9 Bulk Amorphous Alloys: Processing and Characterization
Bruno Bellini Medeiras (DEMA-USFCar), Marcia Moreira Medeiros (DEMA-USFCar), Walter Jose Botta (DEMA-USFCar), Claudio Shyinti Kiminami (DEMA-USFCar), Marcelo Falcão de Oliveira (SMM - EESC) and Claudemiro Balfarin (DEMA-USFCar)

V554 - Thermal and structural properties of 20Li2O-80TeO2 glasses
Eudes Borges Araujo (UNESP) and Elio Idalgol (UNESP)

V555 - Study of physical and structural properties of lead phosphates glasses
Karina Almeida Rancan (UNESP), Danilo Manzani (UNESP), Silvia Helena Santagneli (UNESP), Younes Messadeq (UNESP) and Sidney José Lima Ribeiro (UNESP)

V556 - Coarsening of Nanosized Polycrystalline Thin Films
Zacarias Eduardo Fabreim (UFRGS), Flavia Piegas Luce (UFRGS), Paulo Fernando Papaleo Fitchner (UFRGS), Fernando Claudio Zawislak (UFRGS) and Gerson Feldmann (UTPR)

V557 - Local structure of magnetic fluids: from a dilute gas to a colloidal glass
Fábio Luís de Oliveira Paula (UnB), Priscilla Coppola (UnB), Jerome Depeyrot (UnB), Juliano de Andrade Gomes (UnB), Renato Aquino (Faculdade da UnB Planalto) and Francisco Augusto Tourinho (UnB)

V558 - Desertion Influence of Water on Structural, Electrical Properties and Molecular Order of V2O5.nH2O films
Jesus Fabian Jurado (UNAL-Colombia), Cesar Leonardo Londondo (UNAL-Colombia) and Carlos Vargas Hernandez (UNAL de Colombia)

V559 - “Hydrogen gas Permeation studies of Pd-Zr internally oxidized alloys”
Eduardo Ribeiro Lagreca (UFRJ/COPPE/PEMM), Viviane Monteiro Azambuja (IFES) and Dilson Silva dos Santos (UFRJ/COPPE/PEMM)

V560 - Study of Hydrogen Sorption in Mg-Pd-Nb nano-oxide alloys
Monique Ossorio Talarico Conceição (UFSCar), Eduardo Ribeiro Lagreca (UFSCar), Viviane Monteiro Azambuja (IFES) and Dilson Silva dos Santos (UFSCar)

V561 - Spray forming of glassy alloy Fe30B30Nb4Ti1
Fausto Lopes Catto (USFCar), Valdemar Leal (UEMa), Claudio Shyinti Kiminami (USFCar), Walter Jose Botta (USFCar) and Claudemiro Balfarin (DEMA-USFCar)

V562 - Characterization of VO2 Structures Performed by Electrodeposition
Alex Boarski Cezar (UFPR) and Ney Mattoso (UFPR)

V563 - Ti13Cu6NiZr22 and (TiZr)9Co12Fe9 Bulk Amorphous Alloys: Processing and Characterization
Bruno Bellini Medeiras (DEMA-USFCar), Marcia Moreira Medeiros (DEMA-USFCar), Walter Jose Botta (DEMA-USFCar), Claudio Shyinti Kiminami (DEMA-USFCar), Marcelo Falcão de Oliveira (SMM - EESC) and Claudemiro Balfarin (DEMA-USFCar)

V564 - Processing of bulk metallic glasses by injection and suction casting techniques – a comparative study
Fabricio Simão dos Santos (USFCar), Igor Pareira Franco (USFCar), Michel Issao Miyamoto (USFCar), Claudemiro Balfarin (USFCar), Walter Jose Botta (USFCar) and Claudio Shyinti Kiminami (USFCar)

V565 - Processing of PVDF/PMMA blends by high-energy ball milling
Eustévo Freire (UFRN), Tanise Camini (UFS) and Glauco Almeida Carvalho (UFS)

V566 - Nanoscale grain refinement of commercial MgH2 powders using different mechanical processing routes
Daniel Rodrigo Leiva (USFCar), Dilson Silva dos Santos (UFRB), Albert Moreira Jorge Jr (USFCar), Tomaz Toshimi Ishikawa (USFCar) and Walter Jose Botta (USFCar)
SYMPOSIUM W

New Developments in the Processing and Applications of Cu-ad Mo-Base Alloys

Auditorium: Catete

Simposium Organizers:

Fernando Lund (U. of Chile, Chile)
Luis Amestica (CIMAT, Chile)
Eduardo Brocchi (PUC-Rio, Brazil)
Hal Stillman (Int. Copper Association, USA)
Nicole Kinsman (International Molybdenum Association, UK)

Thursday, September 24

Session chair: To be informed

09:30 - 10:00
PW4 (invited) - Alternative synthesis processes for molybdenum content compounds
ricardo yoshima

10:00 - 10:15
W508 - OBTAINING MoO3 FOR THE MOLYBDENUM ALLOYS PRODUCTION
Eduardo Albuquerque Brocchi (PUC-Rio), Ana Cristina Nunes Vidal (PUC-Rio) and Carlos Augusto Ribeiro Queiroz (PUC-Rio)

10:15 - 10:45
PW3 (invited) - Increased Copper Surface Stability in Solutions
Yair Ein - Eli (Technion)

10:45 - 11:00
W503 - Evaluation of Cu-Ag-Ce Alloys used as Filler Metals in Al2O3 Brazed Joints Pre-Metalized with Ti
Theophilo Moura Maciel (UFCG), Mary Roberto Meira Marinho (CEFET-PB), Edjalmy Almeida (UFRN), Clodomiro Alves Jr (UFRN) and Walman Benicio Castro (UFCG)

11:00 - 11:30
Coffee Break

Session chair: To be informed

11:30 - 12:00
PW1 (invited) - Cu-based shape memory strips elaborated by one-step rapid solidification techniques: structural and functional properties.
Jorge Malarría (IFIR (CONICET-UNR))

12:00 - 12:15
W509 - Characterisation of Rare Earth Doped Neodymium Cuprates for Solid Oxide Fuel Applications
Mark Cassidy (University of St Andrews), Chami Patabendige (University of St Andrews) and John Irvine (University of St Andrews)

12:15 - 12:45
PW2 (invited) - New insights into the antimicrobial properties of copper alloy surfaces
C William Keevil (University of Southampton), Sarah Wares (University of Southampton) and Harold Michels (Copper Development Assoc)

Poster Session W

New Developments in the Processing and Applications of Cu-ad Mo-Base Alloys

Room: Louvre

Wednesday, September 23

11:30 to 13:00
W501 - Cu-Mo and Cr alloys synthesized by mechanical alloying
Claudio Eduardo Aguilar (UACh), Stella Ordoñez (USACH), Paula Rojas (PUCV), Danny Guzman (UDA) and Rolando Rios (UACh)

W504 - Cyclic behavior of cold-formed polycrystalline copper
Andreia de Souza Martins Cardoso (EEL/USP), Gustavo Aristides Santana Martinez (EEL/USP) and Carlos Antonio Reis Pereira Baptista (EEL/USP)

W506 - Influence of Co Addition to Fe-Cu Alloys
Marcello Filgueira (UENF), Pedro Mendes Gomes (UENF), Anderson Paula Barbosa (UENF) and Hugo Millward Luna (UENF)

W507 - Influence of processing on microstructure and properties of copper reinforced with ceramic particles
MARTA LOPEZ JENSEN (Universidad de Concepcion), Jose Jimenez (CENIM-CSIC) and DERY CORREDOR PULIDO (Universidad LOS ANDES)

W510 - Creep of Cu-V and Cu-Ti alloys, obtained by reactive milling.
Rodrigo Herberto Palma (Universidad de Chile), Aquiles Horacio Sepúlveda (Universidad de Chile), Alejandro Zúñiga (Universidad de Chile), Eduardo Danoso (Universidad de Chile), Juan Pablo Lozano (Universidad de Chile) and Ricardo Ariel Ordenes (Universidad de Chile)
SYMPOSIUM X
Processing, structure and properties of advanced metallic materials

Auditorium: El Pardo I

Simposium Organizers:

Leonardo Godefroid (Federal University of Ouro Preto, Brazil)
Luiz Carlos Rolim Lopes (Federal University of Volta Redonda, Brazil)
Charles Martins (ArcelorMittal Tubarão, Brazil)
Claudio Ruggieri (EPUSP – University of São Paulo, Brazil)
Túlio Magno Fúzessy de Melo (Usiminas, Brazil)
Juan Perez Ipiña (Universidad Nacional del Comahue, Argentina)

Thursday, September 24
Session chair: To be informed
09:30 - 10:00
PX3 (invited) – Modelling Crack Closure and Damage In Variable Amplitude Fatigue Using Smooth Specimen Fatigue Test Data
Timothy H Topper (University of Waterloo), Maria El-Zeghayar (University of Waterloo), F A Conle (AET Integration) and John JF Bonnen (Ford Motor Co)
10:00 - 10:15
X520 – EVALUATION OF J-R CURVES FOR API 5L X70 PIPELINE STEELS USING SE(T) SPECIMENS
Woldek Waldimir Bose Filho (EESC - USP), Cassius Olivia Figueiredo Terra Ruchert (EESC – USP) and Julio Cesar de Souza Francisco (EESC - USP)
10:15 - 10:30
X534 – Development of New Alloys for High-Temperature Applications
Vicente Braz Trindade (UFOP / Uni-Siegen), Bronislava Gorr (Uni-Siegen), Stefan Burk (Uni-Siegen) and Hans Juergen Christ (Uni-Siegen)
10:30 - 10:45
X530 – DEVELOPMENT OF API 5L-X80 AS HOT STEEL COILS AT ARCELORMITTAL TUBARÃO
Ricardo Porto (ArcelorMittal Tubarão), Paulo de Tarso Lourenço (ArcelorMittal Tubarão), Marden Valente de Souza (ArcelorMittal Tubarão), Gleyson Marcos Barbosa (ArcelorMittal Tubarão), Júlio Cezar Bellan (ArcelorMittal Tubarão), Renato Diniz Carvalho (ArcelorMittal Tubarão) and Leonardo Barbosa Godefroid (leonardo@demet.em.ufop.br)
10:45 - 11:00
X512 – A note on the short crack behavior at elongated notch roots
Jaime Tupiassú Pinho de Castro (PUC-Rio), Marco Antonio Meggioaro (PUC-Rio), Antonio Carlos de Oliveira Miranda (PUC-Rio), Hao Wu (USTL-France) and Abdelatif Imad (USTL-France)
11:00 - 11:30
Coffee Break

11:30 - 11:45
X535 – Enhancement of High-Temperature Oxidation Resistance of Cr-Steels by Applying Surface Modification Using Shot-Peening
Vicente Braz Trindade (UFOP / Uni-Siegen), Naraparaju Ravisankar (Uni-Siegen), Adilson Rodrigues Costa (UFOP), Flávio Lays Cassio (UFOP) and Hans Juergen Christ (Uni-Siegen)
11:45 - 12:00
X536 – Controlled residual stresses introduction to improve fatigue resistance of rotary shouldered connections used in oil drilling industry
Juan Korin (Conicet/San Antonio Inter) and Juan Elias Perez Ipiña (Conicet / UN Comahue)
12:00 - 12:15
X549 – Friction Stir Welding of ISO 3183 X80M (API 5L X80) steel joints
Tiago Felipe de Abreu Santos (LNLS), Davi Munhoz Benatti (LNLS), Taiana Franciska Conceição Hermenegildo (LNLS), Cornado Ramos Moreira Afonso (LNLS), Ricardo Reppold Marinho (Petrobras), Marcelo Torres Pisa Paes (Petrobras) and Antonio Jose Ramirez (LNLS)
12:15 - 12:30
X535 – Oxidation and abrasive wear in Fe-Si and Fe-Al intermetallic alloys
Artur Mariano de Sousa Malafaia (SMM - EESC - USP), Marcelo Tadeu Milan (Materials Inst of Brazil), Omar Maluf (Materials Inst of Brazil), Rosamel Melita Muñoz Ríoana (Materials Inst of Brazil) and Marcelo Falcão de Oliveira (SMM - EESC - USP)
12:30 - 12:45
X571 – Corrosion and Wear Resistance of Zn-Al Alloys with Columnar, Equiaxed and Columnar-to-Equiaxed Transition Structures
Alicia Esther Ares (CONICET/FCEyN-UNaM), Liliana Mabel Gassa (CONICET/INIFTA), Mario Roberto Rosenberger (CONICET/FCEyN-UNaM) and Carlos Enrique Schulzav (Conicet- UNaM)
12:45 - 13:00  
X523 - Hydrogen-Microstructure interaction of High Strength Low Alloy Steels (HSLA) used in the oil industry  
Maria Jose Cancio (Tenaris R), Pablo Bruzoni (CNEA), Teresa Estela Perez (Tenaris R) and Juan Ramon Collet Locoste (CNEA)

13:00 - 14:30  
Lunch

Session chair: To be informed

14:30 - 14:45  
X580 - Direct Atomic Scale Observation of the Structure and Composition Across Order/Disorder Gamma Prime/Gamma Interfaces in Nickel Base Superalloys  
Srinivasan Rajagopalan (Ohio State Univ), Rajarsi Banerjee (Univ of North Texas), Junyeon Hwang (Univ of North Texas), Gopal Babu Viswanathan (Ohio State Univ), Jaimie Tiley (Air Force Research Lab), Dennis Dimiduk (Air Force Research Lab) and Hamish L Fraser (Ohio State Univ)

14:45 - 15:00  
X526 - ANALYSIS OF THRESHOLD-ASSOCIATED SCREW DISLOCATION DISPLACEMENT IN POLYGONIZED ALUMINUM  
Pedro Antonio Tamayo (IPN), Pablo Samuel Schobes-Retchkiman (UNAM), Pedro Antonio Tamayo (IPN), Pedro Antonio Tamayo (IPN) and Pedro Antonio Tamayo (IPN)

15:00 - 15:15  
X528 - Determination of optimal parameters in the hardening and tempering process of SAE 6150 steel as an alternative for the manufacturing of springs  
Nelly Cecilia de Sanchez (Universidad Autonoma de O), Hector Enrique Jaramillo (Universidad Autonoma de O), Lyda Cielo Pantoja (Universidad Autonoma de O) and Julian Arnaudo Avila (Universidad Autonoma de O)

15:15 - 15:30  
X540 - Analytical TEM characterization of nanometric carbides in a microalloyed (HSLA) steel replica  
Conrado Ramos Moreira Afonso (UNLS), Maria Jose Cancio (Tenaris R), Antonio Jose Ramirez (UNLS) and Teresa Estela Perez (Tenaris R)

15:30 - 15:45  
X542 - Hot Deformation and Processing Maps of a High Strength Alloy Steel  
Yong - Cheng Lin (Central South University) and Ge Liu (Central South University)

15:45 - 16:00  
X561 - On Thermo-Mechanical Processing Interpretation by Introducing Microstructure Dependent Local Behavior  
Raúl Eduardo Bolmaro (Instituto Fisica Rosario), Anaíl Roatta (Instituto Fisica Rosario), Andrea Laura Fourty (Instituto Fisica Rosario), Pablo Andrés Turner (Instituto Fisica Rosario), Gladys Charca Ramos (Instituto Fisica Rosario), César Sobrero (IFIR, Instituto de Física Rosario) and Javier Walter Signorelli (Instituto Fisica Rosario)

16:00 - 16:15  
X522 - Unconventional Thermomechanical Treatment of Advanced High Strength Low-Alloyed Steel  
Bohuslav Masek (University of West Boh), Hana Jirkova (University of West Boh), Danuse Klauberova (University of West Boh), Martin Petrenec (Institute of Physics) and Premysl Beran (Nuclear Physics Inst)

16:15 - 16:30  
X519 - Improved Strength-Ductility Combination by Layer-Integrated Steels  
Shoichi Nambu (The University of Tokyo), Masato Michiuchi (The University of Tokyo), Junya Inoue (The University of Tokyo) and Toshikiho Koseki (The University of Tokyo)

16:45 - 17:00  
X541 - Processing of electrolytic naural amkal chelagh (University of Malaya) and mohd rafie johan (University of Malaya)

17:00 - 17:15  
X505 - Semi Quantitative Analysis of Oxygen to Silicon Ratio and Oxygen Content Determination in Thermally Sprayed pc-Si Sheet for Solar Cells Substrate  
Jaime Canalejo Silva Carvalho (CETEC), Ricardo Luiz Ribiero (CETEC), Eduardo Perini Muniz (CELUNES) and Jose Tavares Branco (CETEC)

17:15 - 17:30  
Coffee Break

Session chair: To be informed

17:30 - 17:45  
X518 - Transient liquid phase bonding between Mg alloys and steels  
Toshio Araki (The University of Tokyo), Masaki Koba (The University of Tokyo), Junya Inoue (The University of Tokyo) and Toshikiho Koseki (The University of Tokyo)

17:45 - 18:00  
X529 - Chloride Adsorption over Gold Surface: An Amperometric Sensor of Cl-  
Fernando Luis de Almeida (LSI-USP), German Dario Serrano (CETEC), Ricardo Luiz Ribiero (CETEC) and Sebastião Gomes dos Santos Filho (CETEC)

18:00 - 18:15  
X541 - Processing of electrolytic Cu metal foams by molten metal infiltration technique  
Enrique Mariano Costadaza (Universidad de Concepcion, Alfonso Oscar Viñas (Universidad de Concepcion) and Carlo Magelli (Politecnico di Milano)

18:15 - 18:30  
X552 - Diffusion of non-magnetic impurities in ferromagnetic α-Fe rods  
Rodolfo Ariel PEREZ (CNEA)

18:30 - 20:30  
Room: Louvre

Thursday, September 24

18:30 to 20:30  
X501 - Mechanical Properties and Microstructures of Mg-Li Alloys Containing Sc and Be  
Chiang Chih - Te (Department of Mechanical), Chu Chun Lin (Department of Mechanical), Wang Jian-Yi (Department of Materials S) and Lee Shyong (Department of Mechanical)

19:00 - 20:00  
X503 - Microstructure and mechanical properties of Fe-Cu-Sn hot pressed materials  
Elisa Maria Baggio Saiitovitch (CBPF), Dalber Ruben Sanchez Candela (UFT), Mariella Alzamora Camarena (CBPF), Sergey Budko (Ameslab), Paul Canfield (Ameslab) and Nan Lin Wang (BNLCPM)

Poster Session X

Processing, structure and properties of advanced metallic materials

Room: Louvre
X506 - Addition of nano-Al2O3 effects on microstructures and properties of WC-8Co composites
Jan Sun, Ji Xiong and Zhixing Guo

X507 - Analysis of Sintered Materials Used for Low-temperature Fuel Cell Plates
Agata Katarzyna Dudek (Czestochowa Technical Un), Zygmunt Nirkiewicz (Czestochowa Technical Un) and Renata Katarzyna Wlodarcyzk (Czestochowa University of)

X509 - RAPID SOLIDIFICATION OF Ni-49at.%Ti SHAPE MEMORY ALLOY
George Carlos Anselmo (UFCS) and Walmer Benicio Castro (UFCS) and Carlos José Araújo (UFCS)

X510 - Sono-electrolessplating of tin from acud bath
Chiba Atsushi (Yokohama National University), Hirono Natsuko and Wu Wen-Chang (Tainan University of Tech)

X511 - Sono-electroplating of Zn-Ni alloy film from ammonia bath
Chiba Atsushi (Yokohama National University), Matsutani Takahiro and Wu Wen-Chang (Tainan University of Tech)

X513 - Selective laser sintering of magnesium powder for fabrication of porous structures
Ng Chi Chung (HKPOLYU)

X514 - Weld pool microstructure in plasma pulsed welded supermartensitic stainless steel
Sérgio Luiz Henke (LACTEC), Ramon Cortes Paredes (UFPR) and André Ricardo Capra (LACTEC)

X515 - Characterization of copper-silicon nitride composite electrocoatings
Alain Robin (EEL-USP), Julio Cesar Pinheiro de Santana (EEL-USP) and Antonio Fernando Sartori (EEL-USP)

X516 - NANO-FRAGMENTATION TREATMENT OF THE STRUCTURE - BOOSTED MECHANICAL CHARACTERISTICS IN CARBON STEELS
Pedro Antonio Tamayo (IPN), Vichaslesv Yermishkin (Russian Acad of Science) and Pablo Samuel Schabes-Retchkin (UNAM)

X517 - In-situ study of mechanical properties of 1CrMoV steel using neutron and synchrotron x-ray diffraction
Alice Gonçalves Osório (PSI), Michael Weisser (PSI), Steven Van Petegem (PSI), Alexander Evans (PSI), Helena Van Swygenhoven (PSI), Stuart Richard Holdsworth (EMPA) and Edoardo Mazza (EMPA)

X525 - Polyurethane Structural Adhesive Applied in Automotive Composite Joints
Josue Garcia Quilini (Masterpol) and Gerson Marinucci (IPEN)

X527 - Microstructural Characterization of the Polycrystalline Cu-13.7%Al-4%Ni Alloy
Elaine Cristina Pereira (UFEN), Anatoly Nikolaevich Matlashov (UFEN), Carlos José Araújo (UFCS) and Lioudmila Aleksandrovna Matlashova (UFEN)

X531 - Creep behavior of plasma nitrided Ti-6Al-4V alloy
Miguel Justino Ribeiro Barboza (EEL/USP), Verónica Mara Cortez Alves Oliveira (EEL/USP), Cátia Gisele Pinto (EEL/USP), Mariane Capellari Leite Silva (EEL/USP), João Paulo Barros Machado (LAS/INPE), Daniele Aparecida Pereira Reis (ITA/CTA) and Francisco Piorino Neto (ITA/CTA)

X532 - Creep properties of plasma carburized Ti-6Al-4V
Miguel Justino Ribeiro Barboza (EEL/USP), Verónica Mara Cortez Alves Oliveira (EEL/USP), Mariane Capellari Leite Silva (EEL/USP), Cátia Gisele Pinto (EEL/USP), João Paulo Barros Machado (LAS/INPE), Daniele Aparecida Pereira Reis (ITA/CTA) and Francisco Piorino Neto (ITA/CTA)

X537 - Study of the electrical properties of poly(p-phenylene sulfide) PPS doped with Copper Phthalocyanine (CuPc)
Edilton Morais Cocalcente (UNESP)

X538 - Effect of solution heat treatments in nanoscale mechanical properties of ASTM A 744Gr. CN3Mn superaustenitic stainless steel
Fabiana Cristina Nascimento (UEPG), Emerson Cantielli (UEPG), M Ritoni (Sulser), Paulo Roberto Mez (Unicamp) and Carlos Mauricio Lepienski (UFPR)

X539 - Effects of Sodium Nitrite, Sodium Dichromate and Benzoic Acid as Inhibitors in the Protection of Mild Steel in Water
José Wilson Silva (UNESP), Eduardo Noberto Codaro (UNESP) and Luis Rogerio de Oliveira Hein (UNESP)

X543 - MICROSTRUCTURAL CHARACTERIZATION AND EVALUATION OF MECHANICAL PROPERTIES OF AA 2198-T8 FRICTION STIR WELDED
Jodo Luis Bilia Lopes (UFSCar)

X544 - Effect of retained austenite resulting from tempering of supermartensitics stainless steel welded
Marcos Alexandre Fernandes (USP), neide aparecida mariano (USP) and conrado fantini (USP)

X545 - High Strength and Ductility of DSR Processed Mg-Al-Zn Magnesium Alloys
Ha Guk Jeong (KITECH)

X547 - Dynamic recrystallized grain size of the 38MnSiV55 medium carbon microalloyed steel under hot working conditions
Rialberto Matos Cutrím (UFSCar), Edén Santos Silva (UFSCar), Fabio Henrique Casanini Geronimo (UFSCar) and Oscar Balancín (UFSCar)

X548 - Annealing behavior of the AISI 430 ferritic stainless steel obtained by directional solidification
Miran de Loures Noronha Mota Melo (PUCC), Alexandre de Oliveira France Hayama (UNICAMP), Bruna Clarissa Guimardes (USP) and Neide Aparecida Mariano (USP)

X550 - Earlier stages of erosive damage during cavitation of austenitic stainless steels: the role of the grain boundary character
Dario Hernán Mesa (USP, UTP-Colômbia), Carlos Mario Garzón (UNAL-Colômbia) and André Paulo Tschipschtnis (USP)

X554 - Tensile properties of MAR-M247 superalloy
Renate Baldan (USP), Carlos Angelo Nunes (USP), Gilberto Carvalho Coelho (USP), Alex Matos Costa (USP), Rafael Bogado (USP) and Miguel Justino Ribeiro Barboza (UFSCar)

X555 - EVALUATION OF AN INCONEL 718 SUPERALLOY IN CREEP TESTS AFTER AGING TREATMENT
Ana Claudia Oliveira Herrschmann (ITA/CTA), Daniele Aparecida Pereira Reis (ITA/CTA), Carlos Moura (ITA/CTA), Francisco Piorino Neto (CTA/IAE) and Antonio Couto (IPEN)

X556 - Effect of rolling conditions on the structure and shape memory properties in Fe-Mn-Si alloys
Ana

X558 - Comparison of the shape memory effect obtained from R and B19’ NiTi martensites using nanoindentation and atomic force microscopy
Margarthe Spangler Andrade (CETEC), José Mario Carneiro Vilcic (CETEC) and Jardel Oliveira Magela (CETEC)

X559 - Mechanical Behavior of Cobalt-Chromium Odontological Alloys after Successive Recasting
Elsidangela Barros Dantas (UFURN), Harrison Almeida Dantas (UFURN), Antonio Eduardo Martinelli (UFURN), Dulce Maria Araujo Melo (UFURN), Marcus Antonio de Freitas Melo (UFURN) and Brunna Freitas Guedes (UFURN)

X560 - Texture Development in CuAlNiTi Shape Memory Alloys Subject to Different Thermo-Mechanical Processes
César Sobredo (IFR, Instituto de Física), Paula La Roca (IFR, Instituto de Física), Jorge Malanira (IFR, Instituto de Física), Jan Bonasky (Polish Academy of Science) and Roel Eduardo Bolmanaro (IFR, Instituto de Física)

X562 - Fe-6.5wt%Si thin sheets obtained by spray forming and co-deposition of Fe-Si particles
Claudemir Boltarini (DEMA-UFSCar), Claudia Shyinti Kiminami (DEMA-UFSCar), Walter Jose Botta (UFSCar), Regis Daniel Cava (UFSCar) and Diego Pedreira Oliveira (UFSCar)

X563 - Tribocorrosion of High Nitrogen 15-5PH Stainless Steel Obtained by Plasma Nitriding and Solution Heat Treatments
Paulo César Borges (UFTPFR), Luis Augusto Sousa Marques da Rocha (UMINHO) and José Manuel Ramos Gomes (UMINHO)

X564 - Structural effects on superconducting properties of Sn doped CaAlSi
Mariella Alzamora Camarena (CBPF), Magda Bittencourt Fontes (CBPF), Dalber Ruben Sanchez Candela (UFJF) and Elisa Maria Baggio Saltovitch (CBPF)

X565 - Magnetoelastic Effects in DyNiBC and ThNiBC studied by High Resolution Synchrotron X-ray Scattering
X566 – Oxides of UNS S30400 Stainless Steel Formed in Offshore Environment

Dalber Ruben Sanchez Candela (UFF), Maria Penha Cindra Fonseca (UFF), Ivan Napoleão Bastos (IPRJ/UERJ), Dalber Ruben Sanchez Candela (UFF) and Elisa Maria Baggio Saitovitch (CBPF)

X567 – Oxides of UNS S30400 Stainless Steel Formed in Offshore Environment

Dalber Ruben Sanchez Candela (UFF), Maria Penha Cindra Fonseca (UFF), Ivan Napoleão Bastos (IPRJ/UERJ), Dalber Ruben Sanchez Candela (UFF) and Elisa Maria Baggio Saitovitch (CBPF)

X568 – Micro-Pattern Forming of Zr65Al10Ni10Cu15 BMG Alloy

Ha - Guk Jeong (KITECH)

X569 – Mechanical and atomic attrition effects on low temperature plasma nitriding of ferrous alloys

Carlos Alejandro Figueroa (CCET-UCS), Felipe Cemin (CCET-UCS), Fernando Graniero Echeverriagray (CCET-UCS), Cintia Lugnani Gomes de Amorim (CCET-UCS), Rodrigo Leonardo de Oliveira Bassa (CCET-UCS) and Israel Jacob Rabin Baumvol (CCET-UCS e IF-UFRGS)

X570 – Electrochemical characteristics of Pd-P electroless thin films deposited on carbon steel

Eveline De Robertis (INMETRO), Rodrigo de Santis Neves (IQSC-USP), Luísa Maria Abrantes (CQB-FCUL) and Artur de Jesus Motheo (IQSC-USP)

X571 – Electrochemical characteristics of Pd-P electroless thin films deposited on carbon steel

Eveline De Robertis (INMETRO), Rodrigo de Santis Neves (IQSC-USP), Luísa Maria Abrantes (CQB-FCUL) and Artur de Jesus Motheo (IQSC-USP)

X572 – Mechanical and atomic attrition effects on low temperature plasma nitriding of ferrous alloys

Carlos Alejandro Figueroa (CCET-UCS), Felipe Cemin (CCET-UCS), Fernando Graniero Echeverriagray (CCET-UCS), Cintia Lugnani Gomes de Amorim (CCET-UCS), Rodrigo Leonardo de Oliveira Bassa (CCET-UCS) and Israel Jacob Rabin Baumvol (CCET-UCS e IF-UFRGS)

X573 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X574 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X575 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X576 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X577 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X578 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X579 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X580 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X581 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X582 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X583 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X584 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X585 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X586 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X587 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X588 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X589 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X590 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)

X591 – Microstructural analysis of magnesium diboride (MgB2) doped with ZrB2 and TaB2 through high energy ball milling and heat treated using HIP

Durval Rodrigues Jr. (EEU USP Brazil) and Durval Rodrigues Jr. (EEU USP Brazil)
Thursday, September 24
Session chair: K. Rajan
09:45 - 10:15
Y559 - New Perspectives in Efficient Large-Scale Modeling
Volker Eyert (University of Augsburg)
10:15 - 10:30
Y524 - Rational design of TiO$_2$-based anode materials using computer modeling
Marina Vladimirovna Koudriachova (UCl)
10:30 - 10:45
Y537 - Surface Effects on the Electronic and Structural Properties of ZnO Nanocrystals
Gustavo Martini Dalpian (UFABC), Aline L Schoenhalz (UFABC), Jeoverson Teodoro Arantes Junior (UFABC) and Adalberto Fazzio (UFABC)
10:45 - 11:00
Y554 - Computer simulations of double-doped LiNbO$_3$
ROMEL M ARAUJO (UFS-Araucá), Mario Ernesto Giroldo Valerio (UFS-Araucá) and Robert Adam Jackson (KEELE UNIVERSITY-England)
11:00 - 11:30
Coffee Break
Session chair: G. Gutierrez
11:30 - 12:00
Y564 - The Hammond Postulate in the Theory of mechanical Behavior
Mark E Eberhart (Colorado School of Mines) and Travis E Jones (Colorado School of Mines)
12:00 - 12:15
Y566 - Atomistic Simulation as a Predictive Tool: The Case of Gallium
Maurice de Koning (Universidade de Minas)
12:15 - 12:45
Y565 - Energy Dissipation and Temperature Distribution in Materials Subjected to Repeated Stresses
Luis Moraga (Universidad de Chile)
12:45 - 13:00
Y518 - Numerical Simulation of Solute Trapping using Phase-Field Model for Dilute Binary Alloys Solidification
Henrique Silva Furtado (AcelorMittal Tubarão), Américo Tristão Bernardes (DEPIS e REDEMAT/UFOP), Romuel Figueiredo Machado (DEPIS/UFOP) and Carlos Antônio Silva (REDEMAT/UFOP)
13:00 - 14:30
Lunch
Session chair: Jose Pedro Rino
14:30 - 15:00
Y560 - Thermodynamic and physical databases and their combinatorial applications
SURENDRAXXAX (FLORIDA INTERNATIONAL UNI) and ROSS HRUBIAK (FLORIDA INTL UNIV)
15:00 - 15:15
Y508 - Serial Pushing Model for the Self-Assembly in Dip-Pen Nanolithography
Joonkyung Jang (Pusan National University), Hyyeong Kim (Pusan National University) and Leton Chandra Saha (Pusan National University)
15:15 - 15:30
Y503 - First-principles calculation of P-T phase diagram of boron nitride
Shaoqin Wang
15:30 - 15:45
Y511 - Molecular Dynamics Simulations of Indium Antimonite Under High Pressure
Adalberto Picinin (UFU) and José Pedro Rino (UFSCar)
15:45 - 16:00
Y519 - Negative compressibility: mechanism in Platinum Sulfide amorph Marmier
16:00 - 16:30
Y569 - Metastable equilibria unveiled by DFT calculations and CALPHAD extrapolations used in phase field microstructure simulations
Susana Fries (Ruhr University)
16:30 - 17:00
Friday, September 25
Session chair: G. Gutierrez
09:45 - 10:15
PY1 (invited) - Hydrogen adsorption and storage in defective single-wall carbon nanotubes
Walter Orellana (Universidad Andres Bello)
10:15 - 10:30
Y553 - Study of the reduction process of rare earth ions in BaAl2O4 hosts via computer simulations
Marcos Vinícius dos Santos Rezende (UFS-Arauçá) and Mario Ernesto Giroldo Valerio (UFS-Arauçá)
10:30 - 11:00
Y563 - Computational Materials Science for Hydrogen Storage Studies
Rajeev Ahuja (Uppsala University)
11:00 - 11:30
Coffee Break
Session chair: Jose Pedro Rino
11:45 - 12:15
Y561 - How data mining can reduce computational complexity in the design of new materials
Hafid Aourag (University of Tlemcen), Abrar M Lemma (University of Tlemcen) and Rino (UFSCar)
12:15 - 12:30
Y514 - A Chemometric Study of Methane Adsorption in Model MOFs
Diego de Paula Santos (UFPE), Ricardo Luiz Longo (UFPE) and Benicio de Barros Neto (UFPE)
12:30 - 12:45
Y516 - The use of ANN technique to model the mechanical behavior of nanocomposites
Leandro Fontoura Cupertino (PUC-Rio), Omar Paraiba Vilela Neto (PUC-Rio), Marco Aurélio Cavalcanti Pacheco (PUC-Rio), Marley Maria B Reuzzi Velasco (PUC-Rio), Mauricio Pampolina Pires (UFUFRJ) and Patricio Lustoza de Souza (PUC-Rio)
12:45 - 13:00
Y549 - Search of Transition Structures by means of Coevolutionary Genetic Algorithms
Bruno Matos Souza de Souza Melo (PUC-Rio), Omar Paraiba Vilela Neto (PUC-Rio) and Marco Aurélio Cavalcanti Pacheco (PUC-Rio)
13:00 - 14:30
Lunch
14:30 - 15:00
Y562 - A Mesoscale approach to structural transformations
Turab Lookman (Los Alamos Nat’l Lab)
15:00 - 15:15
Y505 - High-throughput Quantum Chemistry and Virtual Screening for Materials Solutions
Mathew David Halls (Accelrys, Inc)
15:15 - 15:30
Y532 - Atomistic Molecular Dynamics Simulation of the CeO$_2$ Nanoparticle Aggregation
Osman Vital Oliveira (UFSCar), Andre Farias Moura (UFSCar), Luiz Carlos Gornide Freitas (UFSCar), Edison Roberto Leite (UFSCar) and Ceciric Jose Dalmaschio (UFSCar)
15:30 - 15:45
Y520 - Modeling of the Growth of Quantum Dots by Neural Network
Ömar Paraiba Vilela Neto (PUC-Rio), Anderson Pires Singulani (PUC-Rio), Marco Aurélio Cavalcanti Pacheco (PUC-Rio), Marley Maria B Reuzzi Velasco (PUC-Rio), Mauricio Pampolina Pires (UFUFRJ) and Patricia Lustoza de Souza (PUC-Rio)
15:45 - 16:00
Y541 - CdS/ZnS core shell nanocrystal
Jeoverson Teodoro Arantes Junior (UFABC) and Gustavo Martini Dalpian (UFABC)
Poster Session Y
Computational Modeling and Data Driven Materials Discovery
Room: Louvre
Tuesday, September 22
18:30 to 20:30
Y501 - MORPHOLOGICAL STUDY OF SEAL ROCKS USING NITROGEN ADSORPTION ISOTHERMS
Mayra Schmitt (UFSC), Célso Peres Fernandes (UFSC), José Antônio Bellini Cunha Neto (UFSC), Fabiana Gilberto
Y506 - Models Analysis of the Hydrogenation Reaction of Sucrose for the Production of Sorbitol and Mannitol
Leocídio Diogene Tavares Cârrega (IPRJ-UFRRJ), Leocídio Diogene Tavares Cârrega (IPRJ-UFRRJ) and Donato Alexandre Gomes Aranda (UFRRJ)

Y507 - NUMERICAL MODELING OF THE INTERACTION OF SPHERICAL PARTICLES WITH AN ADVANCING CONVEX SOLIDIFYING FRONT
Elíana Mabel Agaliotis (Conicet-UNaM), Mario Roberto Rosenberger (Conicet-UNaM), Alicia Esther Ares (Conicet-UNaM) and Carlos Enrique Schvezov (Conicet-UNaM)

Y509 - Molecular dynamics calculations of InSb nanowires thermal conductivity
Giovano de Oliveira Carvalho (UFSCar) and José Pedro Rino (UFSCar)

Y510 - Molecular Dynamics Simulation in CaTiO3
James Alves Souza (UFSCar) and José Pedro Rino (UFSCar)

Y512 - Computer Simulation of the Natural Gas Adsorption on New Metal-Organic Frameworks (MOFs) Porous Materials
Enio Dikran Vasconcelos Bruce (UFPE), Elisa Soares Leite (UFPE) and Ricardo Luiz Longo (UFPE)

Y513 - Nernst-Planck-Poisson modelling of properties and electrochemical response of sensing materials
Jery Janusz Jaszczak (Ab Akademi University), Tomasz Sokalski (Ab Akademi University), Robert Filipk (AGH-UST) and Andrzej Levenstam (Ab Akademi University)

Y517 - Multi-coating inhomogeneous micromechanical model for the effective thermo-electro-mechanical properties of piezoelectric composite materials.
Fabio Biscani (CRP-HT, POLITO) and Yao Koutsawa (CRP-HT)

Y521 - Composition of complex amorphous insulators from ab initio calculations and X-ray photoelectron spectra
Alexis Adolfo Amézaga (UACH - GNIM), Erik Holmstrom (UACH), Raquel Lizarraga (UACH) and Eduardo Menéndez-Pröupin (GNM (U de Chile))

Y522 - Ferroelectric and piezoelectric properties of SrBi2Ta2O9
Rodrigo Machado (IFIR, Argentina), Marcelo Claudio Sepliarsky (IFIR, Argentina) and Marcelo Gabriel Stachiotti (IFIR, Argentina)

Y523 - ZN SUBSTITUTION ON HYDROXYAPATITE 001 SURFACES
MARIA OSWALD MACHADO MATOS (PUC-Rio), JOICE TERRA (CBPP) and DONALD ELLIS (Northwestern University)

Y525 - Structural and vibrational properties of amorphous GeO2 under pressure: a molecular dynamics study
Joaquín Andrés Peñalta (Universidad de Chile) and Gonzalo Javier Gutierrez (Universidad de Chile)

Y526 - Magnetic and electronic properties of V doped GaN: An ab initio study
Rafael Julian Gonzalez Hernandez (Univ del Norte), Cesar Ortega (Univ de Cordoba), William Rafael Lopez (Univ del Norte) and Jairo Arrey Rodriguez (Univ nacional de Colombia)

Y527 - Water Influence in Fe(100) corrosion process using MD simulation
Flaviano Williams Fernandes (ITA), Bruno Cecarelli (ITA), Choyu Otani (ITA) and Gilmar Patrocinio Thim (ITA)

Y528 - Modeling of carbides precipitation during weld solidification of solid solution strengthened Ni–Cr–Fe alloys with Hf, Mo and Nb additions
Jimy Unfried (LNLS - Unicamp), Eduardo Bertoni Fonseca (LNLS - Unicamp) and Antonio Jose Ramirez (LNLS)

Y529 - First principle based phase stability in PMN-xP1
Marcelo Claudio Sepliarsky (IFIR) and Ronald E Cohen (CWL)

Y530 - Theoretical Study of a Quantum Dot Interacting with Different Functionalizers
elisa soares leite (ufpe) and jeanlex soares souza (ufpe)

Y531 - Molecular and electronic structure of sulfonic acid/platinum cluster systems
Robson Pacheco Pereira (GMCE / UEZo) and Ana Maria Rocco (UFRRJ)

Y533 - Theoretical quantum-chemical study of the interaction of Mo6+-porphyrin with O2
Gustavo Martini Dalpian (UFABC) and Gustavo Martini Dalpian (UFABC)

Y535 - Corrosion Localized Study in ABNT 310S Stainless Steel Austenitic After Exposition in Salt Spray
Jose Wilson Silva (UNESP), Rosinei Batista Ribeiro (UNESP), Eduardo Noberto Codaro (UNESP) and Luís Rogerio de Oliveira Heim (UNESP)

Y536 - Ab initio study of structural and electronic properties of (0001) RuN/GaN short-period superlattices
Rafael Julian Gonzalez Hernandez (Univ del Norte), Cesar Ortega (Univ del Norte) and Jairo Arrey Rodriguez (Univ nacional de Colombia)

Y538 - Theoretical Study of the Colloidal Stoichiometry of Metal Oxide Nanoparticles by means of Molecular Dynamic Simulations
Andre Farias Moura (UFSCar) and Edison Roberto Leite (UFSCar)

Y539 - Rodlike Electrolytes using Lattice Boltzmann
Frank Rodolfo Fonseca Fonseca (Universidad de Chile) and Gonzalo Javier Gutierrez (Universidad de Chile)

Y540 - Nonlinear diffusion equation using Lattice-Boltzmann simulations
Carlos Felipe Pinheiro (CDTN)

Y542 - Systematic study of the electronic and structural properties of two dimensional semiconductors with graphene-like structure
Maria Isabel Almeida de Oliveira (UACH) and Eduardo Menéndez-Pröupin (GNM (U de Chile))

Y543 - Theoretical study of bond-formation and vibrational models of the ethoxy radical adsorbed on transition metal surfaces
Juan Radilla (UAM-Azcapotzalco), Mercedes Boronat (UPV) and Francesc Ilias (UB)

Y544 - Numerical and experimental analysis of laser surface remelting of Al–1.5wt%Fe alloy samples
Felelge Bertelli (UNICAMP), Elíasengan dos Santos Meza (UFPG), Moisés Meza Pariona (UFPG), Néu Cheung (UNICAMP), Rudimar Riva (IEAv-IT) and Ana Maria Garcia (UNICAMP)

Y545 - Adsorption of Gold on Ti(001) and ZrC(001) : Au-C interactions and charge polarizations
Elizabeth Florez (Universidad de Chile), Francesc Ilias (UB) and Leticia Femia (UB)

Y546 - Onset of spallation in solid argon by a shockwave: a molecular dynamics study
Claudia Cristina Loyola (Universidade de Chile), Joaquín Andres Peralta (Universidade de Chile), Sergio Davis (Royal Institute of Techno) and Gonzalo Javier Gutierrez (Universidade de Chile)

Y547 - On the track of nanovehicles: A Molecular Dynamics Approach
Marcelo Zimmer Sangano Flores (UNICAMP), Gustavo Brunetto (UNICAMP) and Douglas Soares Galvão (UNICAMP)

Y548 - Structure and Dynamics of Boron Nitride Nanoscrolls
Eric Perim Martins (Unicamp) and Douglas Soares Galvão (UNICAMP)

Y550 - Monte Carlo simulation of a mixture of carbon nanotubes and surfactants in aqueous solution
América Tristão Bernardes (UFOP), Leandro Lopes Hernsorff (UFOP) and Carlos Felipe Pinheiro (CDTN)

Jeanderson Melo Dantas (UFS), Adilmo Francisco Lima (UFS) and Milan Loaic (UFS)

Y552 - Ab-initial study of the electronic structure and optical properties of the BaY,F, pure
Jeanderson Melo Dantas (UFS) and Milan Loaic (UFS)

Y555 - Fe–Porphyrin adsorbed and single-wall carbon nanotubes for heterogeneous catalysis
Igor Ruiz - tagle (Universidad Andres Bello) and Walter Orellana (Universidad Andres Bello)

Y557 - Automated Measure-
Y558 - Measurements method to obtain lifetime profile using OCVD
Armando Rojas Hernandez (UNICAMP), Jacobus Swart (UNICAMP), Wanderley Marzano (AEGIS), Peter Tatsch (UNICAMP) and Alicia Vera Marquina (UNISON)

Y567 - Atomistic study of vibrational properties of gama-Al2O3
Claudia Cristina Loyola (Universidad de Chile), Gonzalo Javier Gutierrez (Universidad de Chile) and Menendez Proupin Eduardo (Universidad de Chile)

Y568 - Computer simulations study of amorphous compounds
Gonzalo Javier Gutierrez (Universidad de Chile), Eduardo Menendez (U de Chile), Claudia Loyola (U de Chile) and Joaquin Peralta (U de Chile)

SYMPOSIUM Z
Phase Transformation in Metallic Systems: Current issues

Auditorium: Liberdade

Simposium Organizers:

Hélio Goldenstein (USP, Brazil)
Diana Farkas (Virginia Tech, USA)
James Howe (U. of Virginia, USA)
Yves Brechet (LTM, Grenoble, France)
Thursday, September 24

Session chair: To be informed

09:45 - 10:15
PZ2 (invited) - Small-Angle scattering techniques: tools for the understanding of the kinetics of complex precipitation phenomena in metallic alloys
Alexis Deschamps (Grenoble INP)

10:15 - 10:30
Z501 - Microstructural evolution of cold-rolled Dual Phase steel with different initial microstructure
Felipe Manuel Castro Cerda (U de Santiago de Chile), Alberto Monsalve (U de Santiago de Chile), Alfredo Artigas (U de Santiago de Chile), Bernd Schulz (U de Santiago de Chile), Ivan Houbertz (Ghent University) and Daniel Cabello (U de Santiago de Chile)

12:15 - 12:30
Z526 - Formation of Intragranular Austenite During Delta Ferrite Decomposition in a Duplex Stainless Steel
Eduardo Franco de Monevade (Universidade de São Paulo), Helio Goldenstein (Universidade de São Paulo) and Ivan Gilberto Sandoval Falleiros (Universidade de São Paulo)

12:30 - 12:45
Z529 - Microstructural Evolution of Cr-Mo Bainitic Steels During Tempering
Luis Fernando Lemus Torres (UFJR/ COPPE/PEMM), Janyne Rodrigues (CENPES-Petrobras), Dilson Silva dos Santos (UFJR/COPPE/PEMM) and Luiz Henrique de Almeida (UFJR/COPPE/PEMM)

12:45 - 13:00
Z536 - Influence of previous deformation on the deleterious phases precipitation in duplex stainless steel UNS S31803
Sérgio Souto Maior Tavares (UFF), Juan Manuel Pardal (UFF), Gustavo Ferreira da Silva (UFF), Raissa Rodrigues Alves Corte (UFF) and Manoel Ribeiro da Silva (UNIFEI)

13:00 - 14:30
Lunch
Session chair: To be informed

15:15 - 15:30
Z540 - Effect of Stress Relief on the Amount of Retained Austenite After Cryogenic Treatment and on the Wear Resistance of a Tool Steel
Paula Fernanda da Silva Farina (EPUSP), Rafael Agnelli Mesquita (Villas Metals SA), Celso Antonio Barbosa (Villas Metals SA) and Helio Goldenstein (EPUSP)

15:30 - 15:45
Z544 - Characterization of the Precipitation Sequence of a ASTM A890M Grade E Duplex Stainless Steel Using Computation Thermodynamics and X-ray Diffraction of Extracted Precipitates
Alexandre Bellegard Farina (Universidade de São Paulo), Marcelo Martins (Sulzer) and Helio Goldenstein (Universidade de São Paulo)

Friday, September 25

Session chair: To be informed

09:30 - 10:00
PZ4 (invited) - Formation of monodisperse Al3(Sc, Li) ordered precipitates in an Al-rich matrix
Velimir Radmilovic (National Center for Elect), Marta Rossel (National Center for Elect), Emmanuel Marquis (Department of Materials), Mark Asta (Department of Materials a) and Ulrich Dahmen

10:00 - 10:15
Z535 - Austenite Formation in Co-Cr-Mo Alloys by Discontinuous Reaction
Rubens Canom (University of Campinas)

10:15 - 10:30
Z546 - Coupling between precipitation and plasticity in a precipitation-hardening aluminium alloy
Alexis Deschamps (Grenoble INP)

10:30 - 10:45
Z505 - Damping behavior of a NiTi Shape Memory Alloy
Nécdson José da Silva (UFFC), Estephania Nobre Dantas Grass (UFFC) and Carlos José Araújo (UFFC)

10:45 - 11:00
Z506 - A comparative study of dynamic properties between NiTi SMA and classical structural materials
Nécdson José da Silva (UFFC), Estephania Nobre Dantas Grass (UFFC) and Carlos José Araújo (UFFC)

11:00 - 11:30
Coffee Break
Session chair: To be informed

11:30 - 11:45
Z522 - Twin emission and phase transformations in Zr crack tips
Moragrita Ruda (CNEA-CAB-UNComahue, Ar), Diana farkas (VirginiaTech,US) and Gricelda Bertolin (CONICET-CAB-Argentina)

11:45 - 12:00
Z525 - Calphad-simulated second-phase precipitation kinetics during welding of a Ni-30Cr-10Fe alloy modified with Ti and Nb additions
Antonio Jose Ramirez (UNLS) and Carlos Mario Garzón (UNAL)

12:00 - 12:15
Z528 - Thermodynamic properties and phase transitions of metals at high temperatures
Konstantin Vladimirovich Khishchenko (JIHT RAS, Moscow, Russia)

12:15 - 12:30
Z534 - Computational modelling of structural, electronic and thermodynamic properties of Cu-In intermetallic phases: ab-initio and phase diagram calculations
Susa M Beatitude (Université Clermont-Ferrand), Jihoon Kim (Korea Tech), Gabriela Fernanda de la Caba (CNEA-CAB-CONICET), Gisberto Rueda (CONICET-CAB-CONICET) and Carlos José Araújo (UFFC)

12:30 - 12:45
Z530 - Some New Insights into the Beta to Omega Solid State Phase Transformation in Titanium Alloys
Arun Devaraj (Univ North Texas), Rob-
**Z511 - Effect of Ag additions on the martensitic phase aging kinetics in the Cu-11wt.%Al**

Aroldo Geraldo Magdalena (IQ/UNESP-Araraquara-SP), Antonio Tallarico Adorno (IQ/UNESP-Araraquara-SP), Thaisa Mary Carvalho (IQ/UNESP-Araraquara-SP) and Ricardo Alexandre Galdino Silva (Núcleo de Química/UFS)

**Z512 - Phase formation in the Cu-11wt.%Al alloy with Ag additions**

Thaisa Mary Carvalho (IQ/UNESP-Araraquara-SP), Antonio Tallarico Adorno (IQ/UNESP-Araraquara-SP), Aroldo Geraldo Magdalena (IQ/UNESP-Araraquara-SP) and Ricardo Alexandre Galdino Silva (Núcleo de Química/UFS)

**Z513 - Intermetallic Phases Precipitation in the Duplex Stainless Steels UNS S31803 and UNS S32520 after Aging Heat Treatment at 700 °C**

Doris Maribel Escriba (University of S Paulo), Edelfrdo Materna Morris (Forschungszentrum Karlsruhe), Ronald Lesley Paut (University of S Paulo) and Angelo Fernando Padilha (University of S Paulo)

**Z515 - Nanocrystallization kinetics of amorphous soft magnetic Fe84Nb7B9 alloy**

Wei Lu (Tongji University), Xuxin Wang (Tongji University) and Biao Yan (Tongji University)

**Z516 - Martensitic transformation of Fe-27%Ni alloy**

Cláudio Nazaré dos Santos (UNILESTE), Andersen S Paula (CSN) and Carlos Sérgio da Costa Viana (UFF)

**Z517 - Annealing behavior of Ti-35Nb alloy deformed by cold rolling**

Alexandra de Oliveira França Hayama (UNICAMP), Juliana Feletto Silveira Costa Lopes (UNICAMP) and Rubens Caram (UNICAMP)

**Z518 - Microstructural characterization of β Ti-35Nb alloy after cold rolling**

Juliana Feletto Silveira Costa Lopes (UNICAMP), Alexandra de Oliveira França Hayama (UNICAMP) and Rubens Caram (UNICAMP)

**Z519 - Effect of Hydrogen Release at Room Temperature on Ductility of a Steel Wire Rod for Pre-stressed Concrete**

Marcelo Borges Mansur (UFMG), Carlos José Carneira (Gerdau Açominas), Paulo José Modenesi (UFMG) and Berenice Mendonça Gonzalez (UFMG)

**Z521 - Ab-initio calculations of the BCC Mo–Fe Phase Diagram**

Ney Sodré (IFUSP), Pablo Guilhermo Gonzales-Ormeño (CIBERTEC), Claudio Geraldo Schon (EPUSP) and Helena Souto Maior (IFUSP - São Paulo)

**Z522 - Phase transformations in diffusion-reaction Cu/In couples**

Carlos Ararat-Ibar기에 (UNCOMAHUE), Jorge Galvis (UNCOMAHUE), Silvana Andrae Sommadossi (UNCOMAHUE), Susana Ramos de Debiaggi (CONICET-UNCOMAHUE), Margarita Rueda (CNEA-CAB-UNCOMAHUE), Marcelo Esquivel (CNEA-CAB-CONICET Argentin) and Armando Jorge Fernandez-Guillermet (CONICET-UNCOMAHUE)

**Z523 - Phase transformations in Cu-In couples**

Carlos Ararat-Ibargene (UNCOMAHUE), Jorge Galvis (UNCOMAHUE), Silvana Andrae Sommadossi (UNCOMAHUE), Susana Ramos de Debiaggi (CONICET-UNCOMAHUE), Margarita Rueda (CNEA-CAB-UNCOMAHUE), Marcelo Esquivel (CNEA-CAB-CONICET Argentin) and Armando Jorge Fernandez-Guillermet (CONICET-UNCOMAHUE)

**Z524 - Effect of milling process over the structural properties of Ni2Mn1.44Sn0.56 Heusler alloys**

André Luiz Alves (UFES)

**Z527 - Processing of hard white cast iron surfaces by PTA alloying**

Cristiano Brunetti (UFPR), Diogo Yano (UTFPR), Giuseppe Pintaúde (UTFPR) and Ana Sofia Climaco Monteiro d’Oliveira (UFPR)

**Z528 - Heat Treatment and Electrothermal annealing Effect on the R-phase Evolution in Ti-Ni Alloys**

Carlos Augusto Oliveira (UFPE), Cezar Henrique Gonzalez (UFPE), Carlos José Araújo (UFCEG), Severino Leopoldino Urtiga (UFPE) and Pedro Igor Barbosa (UFPE)

**Z529 - Phase Transformations and Aging Heat Treatments in Ti-30Nb alloy**

Eder Nojar Lopes (UNICAMP), Alessandra Cremasco (UNICAMP), Giorgia Alexio Taiaacol (UNICAMP), Conrado Ramos Moreira Afonso (LNLS) and Rubens Caram (UNICAMP)

**Z530 - Phase Transformations and Aging Heat Treatments of Ti-Mo-Sn Alloys for Biomedical Applications**

Flavia Farias Cardsosa (UNICAMP), Cristiano Bronzoni (UNICAMP), Mariana Gerard de Melo (UNICAMP) and Rubens Caram (UNICAMP)

**Z531 - EXPERIMENTAL STUDY OF HAFNIUM-SILICON PHASE DIAGRAM**

jodo carlos júlio gigolotti (EEL/USP), Carlos Angelo Nunes (EEL/USP) and Gilberto Carvalho Coelho (EEL/USP)

**Z532 - Heat Treatment and Electrothermal annealing Effect on the R-phase Evolution in Ti-Ni Alloys**

Carlos Augusto Oliveira (UFPE), Cezar Henrique Gonzalez (UFPE), Carlos José Araújo (UFCEG), Severino Leopoldino Urtiga (UFPE) and Pedro Igor Barbosa (UFPE)

**Z533 - Microstructural and properties changes observed in the AISI 310S steel during aging at 6000C and 8000C**

Sérgio Souto Maior Tavares (UFF), Elmoedin Pinho de Moura (UFF), Vitor da Costa (UFF), Cherlio Scandian (UFES) and Flávio José da Silva (UFES)

**Z534 - Martensitic transformation during Aging Heat Treatments in Ti-30Nb alloy**

Aroldo Geraldo Magdalena (IQ/UNESP-Araraquara-SP), Antonio Tallarico Adorno (IQ/UNESP-Araraquara-SP), Juliana Feletto Silveira Costa Lopes (UNICAMP), Alexandra de Oliveira França Hayama (UNICAMP) and Rubens Caram (UNICAMP)

**Z535 - EXPERIMENTAL STUDY OF HAFNIUM–SILICON PHASE DIAGRAM**

jodo carlos júlio gigolotti (EEL/USP), Carlos Angelo Nunes (EEL/USP) and Gilberto Carvalho Coelho (EEL/USP)

**Z536 - Martensite decomposition in the Cu-22.55at.%Al alloy with Ag additions**

Thaisa Mary Carvalho (IQ/UNESP-Araraquara-SP), Antonio Tallarico Adorno (IQ/UNESP-Araraquara-SP), Aroldo Geraldo Magdalena (IQ/UNESP-Araraquara-SP) and Ricardo Alexandre Galdino Silva (Núcleo de Química/UFS)

**Z537 - Microstructural transformation of Fe-27%Ni alloy**

Cláudio Nazaré dos Santos (UNILESTE), Andersen S Paula (CSN) and Carlos Sérgio da Costa Viana (UFF)

**Z538 - Martensitic transformation of Fe-27%Ni alloy**

Cláudio Nazaré dos Santos (UNILESTE), Andersen S Paula (CSN) and Carlos Sérgio da Costa Viana (UFF)

**Z539 - Phase Transformations during Aging Heat Treatments in Ti-30Nb alloy**

Eder Nojar Lopes (UNICAMP), Alessandra Cremasco (UNICAMP), Giorgia Alexio Taiaacol (UNICAMP), Conrado Ramos Moreira Afonso (LNLS) and Rubens Caram (UNICAMP)

**Z540 - CONDUCTIVITY FLUCTUATIONS AND CRITICAL PARAMETERS OF CaLaBaCu3-xGaxO7-d SUPERCONDUCTING MATERIAL**

David Arsenio Landínez Téllez (UN nacional de Colombia), Magda P Rojas sarmiento (UN nacional de Colombia) and Jairo Roa Rojas (UN nacional de Colombia)
Monday, September 21

Session chair: J. Baglin

09:30 - 10:15
PAA13 (invited) - Materials Education: Globalization opens new frontiers, opportunities and challenges
Sérgio Mascarenhas (Univ Sao Paulo, SanCarlos)

10:15 - 10:45
PAA4 (invited) - Incorporating Nanomaterials into a New Ceramics Textbook
Grant Norton (Washington State University) and Barry Carter (University of Connecticut)

10:45 - 11:00
AA515 - Physics and Material Science: opportunities of the interdisciplinary link in the Mechanical Engineering curriculum.
Arcelio Hernández Fereira (University of Cienfuegos) and Liubov Del Risco Cabrera (University of Cienfuegos)

11:00 - 11:30
Coffee Break
Session chair: E. Lucas

11:30 - 12:00
PAA7 (invited) - The perception of nanoscience and nanotechnology by children and adolescents
Marcelo Knobel (Unicamp), Sandra E Muniello (Labjor/Unicamp), Astrid Bengtsson (Instituto Balseiro) and Adriana Cascón (Instituto Balseiro)

12:00 - 12:15
AA522 - Modeling of superconducting current limiter as an application of multiphysics finite element model
Renata Pires Ferreiro (EEL USP), Matheus Martini (EEL USP), Jérika Suely Lamas (EEL USP), Carlos Alberto Baldan (EEL USP, FEG Unesp), Ernesto Ruppert Filho (FEDEC Unicamp) and Carlos Yujiro Yujiro (EEL USP)

12:15 - 12:30
AA506 - LEDs: A Paradigm for Chemistry Curriculum Modernization
Aquinaldo Robinson de Souza (Unesp), Julio Ricardo Sambrano (Unesp), José Humberto da Silva (Unesp) and João Carlos Angélico (Unesp)

12:30 - 13:00
PAA12 (invited) - Proposal of a new graduate course in Science and Technology of Polymer in Brazil
Andrea Medeiros Salgado (EQ/UFRJ), Elizabete Fernandes Lucas (IMA/UFRJ), Bluma Guenther Soares (IMA/UFRJ) and Luiz Antonio DAvila (EQ/UFRJ)

13:00 - 14:00
PAA16 (invited) - The Choice of Educational Technology
Claudio Moura Castro

14:00 - 14:30
PAA6 (invited) - THE IMPORTANCE OF SCIENCE EDUCATION FOR ECONOMIC PROSPERITY IN DEVELOPING AND EMERGING COUNTRIES
Hanns-Ulrich Habermeier (MPI-FKF Stuttgart)

13:00 - 14:00
Lunch-box Forum: The Choice of Educational Technology
Claudio Moura Castro

14:00 - 14:30
Lunch-Box Forum: The Importance of Science Education for Economic Prosperity in Developing and Emerging Countries
Hanns-Ulrich Habermeier (MPI-FKF Stuttgart)

14:30 - 15:15
PAA9 (invited) - The Need for New Educational International Institutes in nanomaterials. Globalisation of the European GENNESYS model
Marcel Hubert Van de Voorde (Delft University)

15:15 - 15:45
PAA5 (invited) - Teaching Nanoscale Science and Engineering
Robert P. H. Chang (Northwestern...
Tuesday, September 22

Session chair: E. Lucas

09:30 - 10:00
PAA11 (invited) – Development of Two Educational Web Games: Chemical Sudoku and Nanotechnology Puzzle
Luanna Lopes Lobato (UFG UFPE), Thiago Jabur Bittar (ICMC-USP), Rodrigo Pedra Brum (USP ICMC), Danilo Augusto Peres (USP ICMC), André Ricardo Cintra (USP ICMC) and Elson Longo (UNESP)

10:00 - 10:15
AAS16 – Polymer Week
Claudia Regina Elias Mansur (IMA/UFRJ), Ricardo Cunha Michel (IMA/UFRJ), Luciana Spinelli (IMA/UFRJ) and Lea Maria de Almeida Lopes (IMA/UFRJ)

10:15 - 10:30
AAS19 – Taking materials engineering to high school
Frank Patrick Missell (UCS), Valquiria Villas-Boas (UCS), Ana M C Grisa (UCS), Maria A R Pacheco (UCS), O I Rochefort (UCS) and Janete Eunice Zorzi (UCS)

10:30 - 11:00
PAA10 (invited) – Road-Mapping for Community Awareness of the Concepts of Science and Technology
John E. E. Baglin [IBM Almaden Research Ctr]

11:00 - 11:30
Coffee Break
Session chair: M.G. Norton

11:30 - 12:00
PAA1 (invited) – Survival Skills for Scientists
Federico Rosei (INRS)

12:00 – 12:30
PAA8 (invited) – Materials Science Education: an Excellent Opportunity for Pan-American Cooperation
Luis Fuentes - Cobas (CIMAV)

12:30– 13:00
PAA14 (invited) – The Challenge of Materials Education for Medical Physics Students
Adelaide de Almeida

13:00 - 14:30
Lunch
Session chair: M.G. Norton

14:30 - 15:00
PAA3 (invited) – AESTHETICS AS A DRIVING FORCE IN SCIENCE AND TECHNOLOGY: THE CASE OF THE NANOWORLD
Víctor Castaño

15:00 – 15:15
AAS24 – Integration between Post-Graduation in Polymer Science and Technology (IMA/UFRJ) and High School
Elizabete Fernandes Lucas (UFRJ/IMA) and Esperanza Amelia Roldan (UFRJ/IMA)

15:15 - 15:45
PAA2 (invited) – Materials Science and Engineering research and Education at the Center for Irradiation of Materials of Alabama A&M University
Darvush I.A. (AAMU)

15:45 - 16:00
AAS20 – The Fingernail Polish Solvent Sensor
Ricardo Cunha Michel (IMA / UFRJ), Fernando Gomes de Souza Junior (IMA / UFRJ), Carla Silva de Matos (IMA / UFRJ), Diogo Leonardo Azevedo Ferreira (IMA / UFRJ) and Frederico Anderson Passos Schoene (IMA / UFRJ)

16:00 – 16:15
AAS29 – City of Materials: Interacting in a Virtual World
Jan Edwards (JE Consulting, USA), Sarah Lewis, Timothy J Boyle and Bernadette A Hernandez-Sanchez
Monday, September 21

Session chair: J. R. Sambrano

09:30 - 10:15
PBB12 (invited) – The modeling of materials ad of the formation of materials
Marco Antonio Cafer Jr. (UFRJ)

10:15 - 10:30
BB560 – Adsorption and Catalysis within Porous Materials: A Computational Approach
Ricardo Luiz Langa (UFPE), Diego de Paulo Santos (UFPE), Enio Dikran Vasconcelos Bruce (UFPE), Maria Carolina Pacheco Lima (UFPE) and Marcus Vinicius Pereira dos Santos (UFPE)

10:30 - 10:45
BB651 – Microstructural and Electrochemistry Study of La0.50Li0.50TiO3
Beatriz Antoniassi (UNESP/Bauru), António Herturic Miranda Gonzalez (UNESP) and Carlos Frederico de Oliveira Grealff (UNESP)

10:45 - 11:00
BB555 – SnO2 Supported on Vermiculite for Biodiesel Production
Herbert Bezerra Sales (UFPR), Francisco Savio Mendes Sinfronio (UFPR), Maria Guedes Lima Cavalcante (UFPR), Danieli Gomes Lima Cavalcante (UFPR), Severino Jackson Gomes Lima (UFPR), Antonio Gouveia Souza (UFPR) and Ieda Maria Garcia dos Santos (UFPR)

11:00 - 11:30
Coffee Break

Session chair: W. A. Lester Jr.

11:30 - 12:00
PBB6 (invited) – Structural disorder and its effects on the electrical and optical properties of perovskite materials
Jose A Varela (UNESP)

12:00 - 12:15
BB564 – Evaluation of density-functional studies to understand the emission spectra of cationic and anionic dyes
Fernanda Bettanin (CCNH/UFABC), Janice Rodrigues Perussi (IQSC/USP), Alberico Borges Ferreira Da Silva (IQSC/USP) and Paula Homem-de-Mello (CCNH/UFABC)

12:15 - 12:30
BB654 – Grain size and magnetic properties of steel
Fernando Jose gomes Landrauf (USP), João Ricardo Filhpini Silveira (USP), Daniely Melo Ribeiro (UFPR), Eric Seiji Yamasaki (USP) and Guilherme Daikive Sato (USP)

12:30 - 12:45
BB638 – Light grout compositions containing calcareous quarry and clay minerals for oilwell cementing
Maria Luiza Lopes de Oliveira Santos (UFRR), Priscilla Siqueira de Gouveia (UFRR), Antonio Eduardo Martinelli (UFRR), Dulce Maria Araujo Melo (UFRR), Marcus Antonio de Freitas Melo (UFRR) and Kellyane Alves (UFRR)

12:45 - 13:00
BB514 – Time Dependent Density Functional Theory applied to study the optical absorption of PPP and PT oligomers
Raphaela Bahia Soares Cabral (UFSJ) and Horacio Wagner Leite Alves (UFSJ)

13:00 - 14:30
Lunch
Session chair: V. Bouquet

14:30 - 15:00
PBB10 (invited) – Understanding the Formation Mechanism in Solution Crystallization of Mesocrystals. A Dialog of Theory with Experiment
Juan Andres (University of Turku)

15:15 - 15:30
BB682 – Ytrria-stabilized zirconia thick films prepared by mixed method (alcoholic suspension and polymerization route)
Paulo Roberto Barreca (UFPE), Eliana Navarro dos Santos Muccilo (IPEN) and Ingrid Tavora Weber (UFPE)

15:30 - 15:45
BB576 – The non-extensive spinodal line: implications for the early stage solid-solid precipitation in alloys
Claudio Geraldo Schoen (EPUSP), Toru Miyazaki (Nagoya Inst Tech) and Silvio Roberto de Azevedo Salinas (IUSP)

Tuesday, September 22

Session chair: R. Longo

09:30 - 10:15
PBB2 (invited) – Understanding the Formation Mechanism in Solution Crystallization of Mesocrystals.

10:15 - 10:30
BB556 – Persistent luminescence BaAl2O4:Eu2+,Dy3+ phosphor incorporated in silica: water resistance
Ana Valeria Santos de Loureiro (IQ/USP-Sp), Lucas Carvalho Veloz Rodrigues (IQ/USP-Sp), Claudia Akemi Kodaira (IPEN), Roberval Stefani (IQ/USP-Sp), Hermi Felinto Brito (IQ/USP-Sp), Maria Claudia Franca da Cunha Felinto (IPEN) and Jorma P K Holsa (University of Turku)

10:30 - 10:45
BB627 – Photoluminescence in the SrTi1-xNdxO3 System
Marcia Rejane Santos do Silva (UFBA), Elane Cristina Paris (IPFSU), Paulo Sergio Pizani (UFSCar), Maximo Siu Li (IFSC-USP), Elson Longo (Unesp-Araquara), Antonio Gouveia Souza (UFPR) and Ieda Maria Garcia dos Santos (UFPE)

10:45 - 11:00
BB600 – Expanding new materials and strategies to develop biotechnological processes in mature oil fields
Paulo Fernando Almeida (UFBA)

11:00 - 11:30
Coffee Break

Session chair: C. Zicovich-Wilson

11:30 - 12:00
PBB14 (invited) – Semiempirical models: on the way to combinatorial molecular design, large metal complexes architecture, and nanoscale bioassemblies
Alfredo Mayall Simos (UFPe)

12:00 - 12:15
BB595 – Electronic properties of hydrazones: planning new complexes for spectrophotometric analysis
Sara Abou Mrad (CCNH/UFABC), Bruno Caletti (CCNH/UFABC), Ivanise Gouveur (CCNH/UFABC) and Paula Homem de Mello (CCNH/UFABC)

12:15 - 12:30
BB551 – Energy density of the silicon ball-lightning-like luminous balls
gersan silva paiva (CBPP), A C Pavao (UFPE), Yuhua Zhang (CBPP), Joacy Ferreira (UFPE), Marcus Vinicius Pereira dos Santos (UFPE) and Carlton Anthony Taft (CBPP)

12:30 - 12:45
BB573 – Structural and electronic properties of aggregates and crystals formed from Ti@Si16Sc@Si16K, and V@Si16F super-molecular units: a first principles study
Maria Begoña Torres (Universidad de Burgos), Eva Maria Fernandez (ICMM-Madrid CSC) and Luis Carlos Babiss (Universidad de Valladolid)

14:30 - 15:00
BB629 – Color tuning systems of polymer doped with rare earth complexes
Jiang Kai (IQ/USP-Sp), Roberval Stefani (IQ/USP-Sp), Maria Claudia Franca da Cunha Felinto (IPEN) and Hermi Felinto Brito (IQ/USP-Sp)

13:00 - 14:30
Lunch

Session chair: J. D. Santos

14:30 - 15:00
PBB17 (invited) – Recent advances
in tunable materials development
Danilo Suvorov (Jozef Stefan Institute) and Matjaz Spreitzer (Jozef Stefan Institute)

15:00 - 15:15
BB526 - Interaction of H$_2$ and CO with zinc oxide nanotubes
Eduardo Moraes (UEG), José Divino dos Santos (UEG), João Batista Lopes Martins (UnB), Carlton Anthony Taft (CBPF) and Elson Longo (Unesp-Ararauquara)

15:15 - 15:30
BB513 - Theoretical study of the As surfactant effect on the nitridation of GaAs (001) surfaces
Ranyele Amorim Martins (UFJF), Alda de Paiva Castro (UFUFS), Carlota dos Santos (UFPB) and Antonio Carlos Dias Ángelo (UNESP)

15:45 - 16:00
BB567 - Broken symmetry calculations of magnetic coupling constants in complexes of [M(PHTFAC)$_2$(NTPy)] (M=Co, Mn, Cu)
Antonio da Silva Filho (UFF), Denise Almeida Souza (UFF), Maria das Graças Fialho Vaz (UFF) and José Walkimar de Mesquita Carneiro (UFF)

16:00 - 16:30
PBB4 (invited) - Energy density calculations of the silicon ball-lightning-like
Antonio Carlos Pavão (UFPE)

Wednesday, September 23

Session chair: V. Bouquet

09:30 - 10:15
PBB16 (invited) - Computer Modelling as a Tool in the Chemistry of Materials
Richard Catlow (U C London)

10:15 - 10:30
BB618 - Theoretical study of FeO$_2$
Nelson H Morgan (UNICAMP)

10:30 - 10:45
BB550 - The molecular basis for the behavior of Niobia species in oxidation reaction probed by theoretical calculations and experimental techniques
Teodoro Castro Ramalho (UFLA), Luiz CA Oliveira (UFLA), Kele T G Carvalho (UFLA), Eugenio F Souza (UFLA) and Elaine FF da Cunha (UFLA)

10:45 - 11:00
BB620 - Photoluminescence in the SrSnO$_3$:Nd$^{3+}$ perovskite
Soraya Carvalho de Souza (UFRJ), Fagner T Gomes Vieira (UFRJ), Elaine Cristina Paris (IUEC - UFSCor), Maximo Siu Li (USP-São Carlos), Elson Longo (Unesp-Ararauquara), Antonio Gouveia Souza (UFRJ) and Ieda Maria Garcia dos Santos (UFRJ)

11:00 - 11:30
Coffee Break

Session chair: A. C. Pavão

11:30 - 12:00
PBB15 (invited) - The roles of fluoride in the synthesis of silica zealites: Periodic quantum chemical studies
Cladio M Zicovich-Wilson (Univ. Cuernavaca)

12:00 - 12:15
BB512 - Gas separation unit: Experimental analysis of Jatropha oil transesterification by Heterogeneous Basic Catalysts
Nevaldo Togame (UFRJ), Donato Alexandre Gomes Aranda (UFRJ), Paulo Jannotta Girardi (UFRJ), Cheng-Hong Lei, Therezinha Emilia Soares (PNL) and Pedro Geraldo Pucciutti (UFRJ)

12:15 - 12:30
BB609 - Synthesis of Ca$_1$~xSr$_x$SnO$_3$ thin films by Pulsed Laser Deposition
Mary Cristina Ferreira Alves (Université Rennes1), Stephanie Boursicot (Université Rennes1), Valerie Bouquet (Université Rennes1), Stephanie Deputer (Université Rennes1), Maryline Guilloux-Viry (Université Rennes1), Ieda Maria Garcia dos Santos (UFRJ) and Antonio Gouveia Souza (UFRJ)

12:30 - 12:45
BB504 - A Theoretical investigation of magnetic, optical and electron-conduction properties of transition metal nanowires
Yuhua Zhang, X Q Zhang, H Li and Carlton Anthony Taft

12:45 - 13:00
BB538 - Modification of the rutile plane of [(SnO$_3$)$_n$]$_m$ to a nanotube
Mário Leonel de Almeida (UFG), José Divino dos Santos (UFG), Carlton Anthony Taft (CBPF), Elson Longo (Unesp-Ararauquara) and João Batista Lopes Martins (UnB)

Thursday, September 24

Session chair: F. Illas

09:30 - 10:15
PBB3 (invited) - The special properties of ultrathin films on metals
Gianfranco Pacchioni (Unimib)

10:15 - 10:30
BB703 - New Technologies Based on Biological Catalysis
Diego Barreto Gomes (UFRJ), Arian da Silva Gonçalves (UFRJ), Rafael Cassio Bernardi (UFRJ), Pedro Lapido Loureiro (UFRJ), Cheng-Hong Lei, Therezinha Emilia Soares (PNL) and Pedro Geraldo Pucciutti (UFRJ)

10:30 - 10:45
BB681 - Theoretical and experimental analysis of Jatropha oil transesterification by Heterogeneous Basic Catalysts
Nevaldo Togame (UFRJ), Donato Alexandre Gomes Aranda (UFRJ), and José Walkimar de Mesquita Carneiro (UFF)

10:45 - 11:00
BB583 - Aluminosilicate Nano-tubes – Imogolite and Halloysite
Luciana Guimarães (UFMG), Andrey N Enyashin (Russia), Gotthard Seifert (Universität Rennes1), Stephanie Dier) and Ahmad Varvani-Faharani (Ryerson University)

11:00 - 11:30
Coffee Break

Session chair: J. W. Carneiro

11:30 - 12:00
PBB9 (invited) - Mechanism of Surface Reactions: Insights from First Principles Calculations
Javier F Sanz (Universidad de Sevilla)

12:00 - 12:15
BB699 - Relativistic Electronic Basis set
Mat Compaction on the Perme-

12:30 - 12:45
BB534 - Interaction of BUCKY-BALLS in (100) planes of FULLER-ITES [C60], [C70], [C80] and [C96]: Study of the HOMO-LUMO, charges, distances, dipoles, using the MNDO, HF and DFT methods with Huzinaga 6-31G basis set
Marcos dos Reis vargas (UEG), José Divino dos Santos (UEG), João Batista Lopes Martins (UnB), Elson Longo (Unesp-Ararauquara) and Carlton Anthony Taft (CBPF)

12:45 - 13:00
BB646 - Tailoring Microcellular Biomorphic Ceramic Composites: a Computational Fluid Dynamic Approach
Clíntia Soares (UFSC / CTC / EQA), Luís Ismar Marques Porto (UFSC / CTC / EQA), Dachamir Hotza (UFSC / CTC / EQA) and Carlos Renato Rambo (UFSC / CTC / EQA)

13:00 - 14:30
Lunch

Session chair: W. A. Lester Jr.

14:30 - 15:00
PBB11 (invited) - The Influence of Biaxial Strain Ratio and Strain Range on Crack Growth Mode and Crack Shape
Timothy H Topper (University of Waterloo), John JF Eunre (Ford Motor Company), Mohamed Khalil (Bombar-
dier) and Ahmad Varvani-Faharani (Ryerson University)

15:00 - 15:15
BB579 - Influence of the modifier cation in the photoluminescent emission of Zn$_1$XCo$_X$VO$_4$
Jailson Machado Ferreira (IFPB), José Waldio Martinez Espinoza (UFSCar), Maria Aldeiza Meierles Almeida Mau-
reiro (UFRJ), Elson Longo (Unesp-Ara-
raquara), Paulo Sérgio Pizani (UFSCar), Ieda Maria Garcia dos Santos (UFRJ) and Antonio Gouveia Souza (UFRJ)

15:15 - 15:30
BB683 - Influence of the Fiber Mat Compaction on the Perme-
ability of Hybrid Composites
Sandra Campos Amico (UFRGS), Tiago de M Schmidt (UFRGS), Rafael DS Silva (UFRGS) and Thiago M Goss (UFRGS)

15:45 - 16:00
BB621 - Orientation, morphology and photocatalytic properties of ZnO thin films grown by PLD with or without oxygen on various substrates
Vanessa Farias Silva (Université Rennes1/UFPE), Stephanie Deputier (Université Rennes1), Valerie Bouquet (Université Rennes1), Sophie Olivier (Université Rennes1), Maryline Guilloux-Very (Université Rennes1), Valdine Lins da Silva (UFPE) and Ingrid Távora Weber (UFPE)

16:00 - 16:30
PBB7 (invited) - SIMULATING ADSORPTION PHENOMENA ON SMALL CLUSTERS
Jose W Carneiro (UFF)

Friday, September 25

Session chair: J. Sanz

09:30 - 10:15
PBB1 (invited) - Electron and magnetic structure of LaOAsFe: similarities and differences between pnictides and cuprate superconducting parent compounds
Francesc Illas (Universitat de Barcelona)

10:15 - 10:30
BB704 - The Use of Polyester/Glass Fiber Residues as Fillers for Composites
Sandra Campos Amico (UFRGS), Lois Viasconcelos (UFRRJ), Clarissa C Angri zoni (UFRRJ), J R Souza (UFRRJ) and J N Medeiros (UFRRJ)

10:30 - 10:45
BB707 - Ultrasound as a Probe of Plasticity? Theory
Fernando Lund, Agnes Maurel, Vincent Pagneux and Felipe Barra

10:45 - 11:00
BB708 - Ultrasound as a Probe of Plasticity? Resonant Acoustic Spectroscopy Measurements with Aluminum
Fernando Lund, Felipe Barra, Maria Teresa Cerda, Andres Caru, Rodrigo Espinazo, Alejandro Jara and Nicolas Mujica

11:00 - 11:30
Coffee Break
Session chair: J. R. Sambrano

11:30 - 12:00
PBB5 (invited) - Theoretical study of adsorbed molecules over ZnO surfaces
Joa B. L. Martins (UnB)

12:00 - 12:15
BB619 - Determination of the optimal factors for the process of contraction obtained for ceramic electrical insulation way conventional and microwave
Natalia Isabel Jaramillo (Universidad Nacional), Juan Fernando Montoya (Universidad Nacional) and Jairo Humberto Marín (Universidad Nacional)

12:15 - 12:30
BB666 - Damage in adhesive joints during Impact fatigue
Juan Pablo Casas (Unianides), J A Ashcroft (Lboro) and VV Silberschmidt (Lboro)

12:30 - 12:45
BB690 - Gelatin and DNA-based ionic conducting membranes
Anjieska Pawlicka (IQSC-USP) and Alessandra Firmino (IQSC-USP)

12:45 - 13:00
BB518 - Catalytic Ammoxidation of o-Xylene to Phthalonitrile in Vapour Phase
Prem Nath Tiwari (BHU), Priyank Maheshwari (BHU) and Jitendra Kumar (BHU)

13:00 - 14:30
Lunch
Session chair: J. D. Santos

14:30 - 15:00
PBB8 (invited) - DFT calculations of isotopic (including Ps) effects in water clusters
José Rachid Mohalem (UFMG)

15:00 - 15:15
BB502 - Theoretical study in the differentiations of psychoactivity in biological active cannabinoid compounds and its metabolites
Tania Brito Silva (UNSC/BA), Maria-no Alves Pereira (UFAL/AL), Valeira Santos Malta (UFAL/AL), Silvania Marques Rodrigues (UNEB/BA) and Roberta Lourenço Zoli (PUC/RS)

15:15 - 15:30
BB503 - The use of atomic-chain scaled Si nanowires to detect molecules
Yuhua Zhang, X Q Zhang, H Li, Carlos Anthony Taft and Ga Paiva

15:30 - 15:45
BB505 - Electronic, structural, optical and pressure effects of Sin@SWCNs
Carlos Anthony Taft (CBPF), J Meng (CAC), X Q Zhang (OUC), H Li (OUC) and Yuhua Zhang (CBPF)

15:45 - 16:00
BB506 - An investigation of the electronic and magnetic structure of LiV2O4
Carlos Anthony Taft (CBPF), J Meng (CAC) and Yuhua Zhang (CBPF)

16:00 - 18:30
Poster Session BB
From Theory to Experiment: Advances in engineering materials
Room: Louvre

Monday, September 21

18:30 to 20:30
BB507 - A comparison between different data reduction schemes to evaluate the mode 1 fracture toughness in carbon-epoxy composite laminates
Diogo Jurdi Toyota (ITA), Mauricio Vicente Donadon (ITA) and Sergio Frascino Almeida (ITA)

BB508 - Influence of spins on the electronic transport coefficients of the icosahedral Al64Cu23Fe13 quasicrystal
Robert Marino Espinazo Bernardo (UNMSM) and Carlos Vladimir Landaura Saenz (UNMSM)

BB509 - A comparative study of energy density (ED) due to silicon oxidation and black body radiation in silicon ball-lightning-like luminous balls
Agnes Silva Paiva (CBPF) and A C Pavao (UFPE)

BB510 - An experimental study of the nanostructured i-Al64Cu23Fe13 quasicrystal produced by arc-fusion and mechanical-alloying
Manolo Marcial Taquire De la Cruz (UNMSM), Justiniano Quispe Marcatoma (UNMSM), Carlos Vladimir Landaura Saenz (UNMSM), Alfredo Tolley (CBPF) and Victor Antonio Peña Rodriguez (CF-UNMSM)

BB511 - Atomic and electronic properties of copper nano-particles: theoretical and experimental results
Juan José Torres Vega (UNMSM), Carlos Landaura Saenz (UNMSM), Justo Rojas (UNMSM), Solis Reategui (UNMSM), Aldo Gúzman (UNMSM), Leonardo Medrano (UNMSM) and Juan Arroyo (UNMSM)

BB515 - Controlled free radical copolymerization of styrene and divinylbenzene by bimolecular NMRP using TEMPO
Telma Regina Nogueira (UNICAMP), Liliane Ferrareo Lona (UNICAMP), Neil McManus (University of Waterloo), Eduardo Vidalho Lima (UNAM) and Alex Penidis (University of Waterloo)

BB517 - Thermal stability of hydroxyapatite prepared by mechano-chemical reaction
Justiniano Quispe Marcatoma (FCF-UNMSM), Maximiliano Moreno Zapata (FCF-UNMSM), Mirtha Piliaco Quispe (FCF-UNMSM), Rosa Julia Medina Sandoval (FGMGM-UNMSM) and Victor Antonio Peña Rodriguez (FCF-UNMSM)

BB520 - Theoretical study of the interaction between O2 and cation exchanged Chabazite MCHA (M = H+, Na+ or Cu+ )
Yoana Pérez – Badell (Universidad de La Habana), Xavier Solans-Monfort (Universitat Autònoma Barc), Mariona Sodupe (Universitat Autònoma Barc) and Luis Alberto Montero (Universidad de La Habana)

BB521 - Model Aluminosilicate sites on nanowires stabilize singlet O2 state
Yoana Pérez – Badell (Universidad de La Habana), Rachel Crespo-Otero (Universidad de La Habana) and Luis Alberto Montero (Universidad de La Habana)

BB522 - ADSORPTION OF WATER ON MgO NANO-STRUCTURED SURFACES IN THE PRESENCE OF DEFECTS, DOPANTS AND VACAN-CIES
Neil De La Cruz Centeno (PUC-Rio) and Carlton Anthony Taft (CBPF)

BB523 - DISSOCIATION OF WATER ON MgO NANO-STRUCTURED SURFACES IN THE PRESENCE OF DEFECTS, DOPANTS AND VACAN-CIES
Neil De La Cruz Centeno (PUC-Rio) and Carlton Anthony Taft (CBPF)

BB524 - An investigation of ZrO2...
doped with Ca and Sc
José Gabriel Solano (Univ Ros), Carlton Anthony Taft (CBPF) and Arles Gil Rebaza (Univ Plata)

BB525 - An investigation of the effects of oxidation and reduction on the energy gaps of C_{60} and C_{70} fullerenes
José Divino dos Santos (UEG), Marcos dos Reis vargas (UEG), João Batista Lopes Martins (UnB), Carlton Anthony Taft (CBPF), Elson Longo (Unesp-Araquara) and Gerson Silva Paiva (CBPF)

BB527 - Theoretical models of zinc oxide nanotubes
Eduardo Moraes (UEG), José Divino dos Santos (UEG), João Batista Lopes Martins (UnB), Carlton Anthony Taft (CBPF) and Elson Longo (Unesp-Araquara)

BB528 - Diversity of the nanotubes, which are possible?
José Divino dos Santos (UEG), Eduardo Moraes (UEG), João Batista Lopes Martins (UnB), Carlton Anthony Taft (CBPF) and Elson Longo (Unesp-Araquara)

BB529 - Slab Plane wave model for the adsorption of Pt on cubic and tetragonal ZrO₂ (001)
José Gabriel Solano (Univ Ros), Carlton Anthony Taft (CBPF) and Arles Gil Rebaza (Univ Plata)

BB531 - A theoretical study of PbWO₄ disordered models and their electronic levels into a band gap.
Rafael Luiz Erla (UFSCar), Laécio Santos Cavalcante (UFSCar) and Elson Longo (Unesp-Araquara)

BB532 - The Effect of the dn/dc parameter in Free Radical Polymerization using a Multifunctional Initiator
Paula Forte de Magalhães Pinheiro Bonassí Machado (UNICAMP) and Liliane Ferreira Lona (UNICAMP)

BB533 - Semiempirical strain energy for nanotubes
João Batista Lopes Martins (UnB), José Divino dos Santos (UEG), Eduardo Moraes (UEG), Carlton Anthony Taft (CBPF) and Elson Longo (Unesp)

BB535 - Study of the local environments of iron sites in nanostructured (FeCo)₇₅Si₁₅B₁₀ powders obtained by Mechanical-Alloying
Chachi Rojas Ávila (UNMSM), Víctor Antonio Peña Rodríguez (UNMSM), Justiniano Quispe Marcatoma (UNMSM), Elisa Maria Baggio Saitovitch (CBPF) and Edson Passamani Caetano (UFES)

BB536 - EXAFS analysis of local environments around Fe and Co sites in Fe-Co alloys
Chachi Rojas Ávila (UNMSM), Víctor Antonio Peña Rodríguez (UNMSM), Justiniano Quispe Marcatoma (UNMSM), Elisa Maria Baggio Saitovitch (CBPF) and Edson Passamani Caetano (UFES)

BB537 - Carbide and Nitride nanotubes
Marcio Douvel Ferreira (UEG), José Divino dos Santos (UEG), Carlton Anthony Taft (CBPF), Elson Longo (Unesp-Araquara) and João Batista Lopes Martins (UnB)

BB539 - Zigzag and armchair nanotubes interacting in the forms \( \{ [XY]n \}_m \) X: B, Al, C, Si, Ge, N, P, O, S; n, m = 4, ..., 10
José Divino dos Santos (UEG), João Batista Lopes Martins (UnB) and Carlton Anthony Taft (CBPF)

BB541 - Oxi-reduction of nanotube structures of the form \([XY]n \)_m, with ARMCHAIR and ZIGZAG configurations, +1, 0, −1 charges, using both semiempirical, Ab-initio HF, and DFT methods with k = 2, ..., 5; X e Y: B, Al, C, Si, Ge, N, P, O, S
Elson Longo (Unesp-Araquara), José Divino dos Santos (UEG), João Batista Lopes Martins (UnB) and Carlton Anthony Taft (CBPF)

BB544 - Luminescent BaMoO₄: Eu⁺⁺ thin films
ANA PAULA DE AZEVEDO MARQUES (UFSCar-São Carlos), Mariana de Abreu Cruz (UFSCar-São Carlos), Fabiana Vilileia Motta (Unesp-Araquara), Elson Longo (Unesp-Araquara) and Ieda Lucia Viana Rosa (UFSCar-São Carlos)

BB545 - Microwave-hydrothermal method used to prepare molybdates nanostructures
ANA PAULA DE AZEVEDO MARQUES (UFSCar-São Carlos), Maria Fernanda Cagnin Abreu (UFSCar-São Carlos), Fabiana Vilileia Motta (Unesp-Araquara), Renata Cristina Lima (UFU-Uberlândia), Elson Longo (Unesp-Araquara) and Ieda Lucia Viana Rosa (UFSCar-São Carlos)

BB546 - An investigation of magnetism in ZrO₂ with low doping of transition metals
Arles Gil Rebaza (Univ Plata), José Gabriel Solano (Univ Ros) and Carlton Anthony Taft (CBPF)

BB548 - 1,3-Butadiene polymerization by Ziegler–Natta catalyst containing fluorine atoms as halogenating agent
Júlio Cesar Oliveira Freitas (UFRJ), Álvaro Uesley dos Santos (CBPF) and Edson Longo (Unesp-Araquara)

BB549 - Nb-doped nano-hematites (Fe₂₋ₓNbₓO₃): theoretical and empirical evidence of surface reactivity by in situ CO adsorption
Teodorico Castro Ramaílho (UFLA), Luiz CA Oliveira (UFLA), Adilson Cândido Silva (UFLA) and Francisco Zaera (University of California)

BB552 - The free-energy profile of a fullerene molecule crossing a bio-membrane
Rafael Cássio Bernardi (UFRJ), Pedro Geraldo Pascutti (UFRJ) and Carlton Anthony Taft (CBPF)

BB554 - Photoluminescent study of Y₂O₃: Eu³⁺ powder prepared by Microwave-Hydrothermal Method
Ieda Lucia Viana Rosa (UFSCar), Ana Paula de Moura (UFSCar), Larissa Helena Oliveira (UFSCar), José Arana Varela (Unesp-Araquara) and Elson Longo (Unesp-Araquara)

BB557 - Structural study of ß-TeO₃: Raman Spectrum Interpretation by Quantum Chemistry
Emmanuelle Orhan (Université de Limoges), Therese Merle-Mejean (Université de Limoges), Andrei Mirgorodski (Université de Limoges), Maggy Colas (Université de Limoges), Emmanuelle Orhan (Université de Limoges) and Philippe Thomas (Université de Limoges)

BB563 - Synthesis of CaTiO₃ nanoparticles using Hydrothermal Microwave Method
Ranilson Angelo Silva (UNESP-Presidência), Antônia Eunice Souza (UNESP-Presidência), Gleyson Tadeu Almeida Santos (UNESP-Presidência), Maria Lucia Moreira (UFSCar), Diogo Paschoalino Volanti (UNESP-Araquara), Silvio Rainho Teixeira (UNESP-Presidência) and Elson Longo (Unesp-Araquara)

SB564 - Acid leaching resistance of composite Portland-polymeric oilwell slurries
Maria Rosane Pontes Fernandes (UFRRN), Petroniá Duarte Silva (UFRRN), Antonio Eduardo Martinieli (UFRRN), Dulce Maria Araujo Melo (UFRRN), Marcos Antônio Freitas Melo (UFRRN) and Júlio Cesar Oliveira Freitas (UFRRN)

BB623 - Thermoluminescence and synchrotron radiation studies on the persistent luminescence of BaAl₂O₄:Eu²⁺, Dy³⁺
Lucas Carvalho Velozo Rodrigues (IQ/USP / UTU), Roberval Stefani (IQ/USP-

Tanaka Portela (UFPA)

BB559 - Nonlinear Optical Properties of TeO₂ Crystals from First Principles
Nabil Berkaine (Université de Limoges), mouna ben yahia (Université de Montpellier), emmanuelle orhan (Université de Limoges), javier Junquera (Université de Cantabria), olivier masson (Université de Limoges) and philippe thomas (Université de Limoges)

BB561 - Synthesis of SrSnO₃: Cu by the polymeric precursor method
Donniel Melo Ribeira (UFPB), Rosa Medeiros Marinho (UFPB), Manoel Silva Jr (UFPB), Severino Jackson Gomes Lima (UFPB), Elson Longo (Unesp-Araquara), Antonio Gouveia Souza (UFPB) and Ieda Maria Garcia dos Santos (UFPB)

BB562 - Growth mechanism of BaMoO₄ microcrystals processed in microwave-hydrothermal: Experimental observations and computational modeling
Ricardo Luís Trangualí (Unesp), Laécio Santos Cavalcante (UFSCar), Júlio César Sczancoski (UFSCar), José Arana Varela (Unesp), Elson Longo (Unesp) and Marcelo Ornaghi Orlandi (Unesp)

Thursday, September 24
11:30 to 13:00
BB622 - Acid leaching resistance of composite Portland-polymeric oilwell slurries
Maria Rosane Pontes Fernandes (UFRRN), Petroniá Duarte Silva (UFRRN), Antonio Eduardo Martinieli (UFRRN), Dulce Maria Araujo Melo (UFRRN), Marcos Antônio Freitas Melo (UFRRN) and Júlio Cesar Oliveira Freitas (UFRRN)
BB624 - Lithium lanthanum titanate thin films prepared through polymeric precursor method
Alejandra Hortencia Miranda González (UNESP/Bauru), Silvia Letícia Fernandes (UNESP/Bauru), Beatriz Antoniassi (UNESP/Bauru), Carlos Frederico de Oliveira Graeff (FC-UNESP), José Arana Varela (UNESP-Araquara) and Elson Longo (UNESP-Araquara)

BB625 - Theoretical Study of Germanium Alkoxides
Nelson H Morgon (UNICAMP)

BB626 - SrTiO3 with cubic and tetragonal phases at room temperature
Marcia Rejane Santos do Silva (UFPB), Elaine Cristina Paris (LIEC - USFCar), Máximo Sui Li (IFSC-USP), Carlos Alberto Paskocimas (UFRN), Elson Longo (Unesp-Araquara), Antonio Gouveia Souza (UFPB) and Ieda Maria Garcia dos Santos (UFPB)

BB628 - An Assessment of the Permporosity of Composite Cement-Silica-Polymer Oilwell Slurries
Bárbara Táciana Vasconcelos Cavalettani (UFRRN), Petrócia Duarte Silva (UFRN), Maria Roseane Pontes Fernandes (UFRN), Antonio Eduardo Martinelli (UFRN), Dulce Maria Araujo Melo (UFRN), Marcos Antônio Freitas Melo (UFRN) and Maria Luiza Lopes (UFRN)

BB629 - Ceramic catalysts based on SnO2: Ni2+ for biodiesel synthesis
Vitor Rodrigo Melo Melo (UFPB), Natán Pires Sa (UFPB), Luiz Edmundo Bastos Soledade (UFPB), Raúl Rosenhain (UFPB), Adriana Almeida Silva (BENTONISA), Antonio Gouveia Souza (UFPB) and Ieda Maria Garcia dos Santos (UFPB)

BB630 - The use of photoluminescence as a tool to investigate the nature of disorder degree at CaTiO3 compounds.
Tatiana Martelli Mazzo (Unesp-Araquara), Leilane Roberta Macário (Unesp-Araquara), Gabriela Santilli dos Santos (USFCar), Leinig Antonio Perazzoli (Unesp-Araquara) and Elson Longo (Unesp-Araquara)

BB631 - An Efficient Synthetic Route towards Sea Urchin-like CuO Mesocrystals
Diogo Paschoaline Volanti (UNESP-Araquara), Marcelo Ornaghi Orlandi (UNESP-Araquara), Juan Andréz (Universitat Jaume I), José Arana Varela and Elson Longo (UNESP-Araquara)

BB632 - Thermal characterization of two-layer systems by means of periodic and pulsed laser heating
Gerardo Gonzalez de la Cruz (Cinvestav) and Yuri Gurevich (Cinvestav)

BB633 - Electronic, Magnetic Structure and Orbital Ordering in CdV2O4 from First Principles
zhong xue qing, Yuhua Zhang (CBPF) and Carlton Anthony Taft

BB634 - Influence of Fe3+ doping in the crystallization behavior of SrSnO3 perovskite
Fagner T Gomes Vieira (UFPB), Soraio Carvalho de Souza (UFPB), Elson Longo (Unesp-Araquara), Severino Jackson Gomes Lima (UFPB), Tiberio Andrade Passos (UFPB), Antonio Gouveia Souza (UFPB) and Ieda Garcia dos Santos (UFPB)

BB635 - Growth and investigations of BaZrO3, mesocrystals under different reaction conditions
Leilane Roberta Macário (Unesp-Araquara), Maria Lucía Moreira (USFCar) and Elson Longo (Unesp-Araquara)

BB636 - Synthesis and photoluminescent properties of barium zirconate doped with Eu3+
Leilane Roberta Macário (Unesp-Araquara), Tatiana Martelli Mazzo (Unesp-Araquara) and Elson Longo (Unesp-Araquara)

BB637 - Metal-insulator transition induced by a spin-state transition in TbBaCo2O5+x from first-principles
zhong xue qing, Yuhua Zhang (CBPF) and Carlton Anthony Taft

BB639 - Nanoparticles remotion using fibrous filters
Juliana Steffens (USFCar), José Renato Coury (USFCar) and Clarice Steffens (Cnpdia-Embrapa)

BB641 - Influence of the amorphous-crystalline interface on the dielectric and ferroelectric polarization of i-PVDF
Aline Bruna da Silva (USFCar), Rinaldo Gregório Jr (USFCar), João Vitor Esteves (USFCar) and Célio Wisniewski (UNIFAI)

BB642 - Hydrothermal Microwave synthesis of PZT 52/48 powders with addition of PVA
Guilhermina Ferreira Teixeira (UNESP IQ Araquara), Nathalia Abe Santos (UNESP IQ Araquara), Giselle Gasparotto (UNESP IQ Araquara) and José Arana Varela (UNESP IQ Araquara)

BB643 - Synthesis and characterization of NiO plates through thermal decomposition of Ni(OH)2 precursors by microwave heating
Ara Paula de Moura (USFCar), Renata Cristina Lima (UFU), Edelise Deane da Silva (USFCar), Cristiane Alves Sierra Pereira (USFCar), Ernesto Antonio Urquieta-Gonzalez (USFCar), José Arana Varela (Unesp-araraquara) and Elson Longo (Unesp-Araquara)

BB644 - Theoretical Studies on the Electronic Structures and Spectroscopic Properties of a Series of Dioxygenosim (VI) Complexes
Liyang Liu, Yuhua Zhang (CBPF), Jianzhong Qiao and Carlton Anthony Taft

BB645 - Theoretical investigation on the structural and optical properties of a series of pyridyl-substitutes Os (II) complexes
Liyang Liu, Yuhua Zhang (CBPF), Jianzhong Qiao and Carlton Anthony Taft

BB647 - Ionic conductivity relaxation studies in RbAg4I5 crystal with nano-sized AgI particles
Diego Peña (Universidad del Valle), Ruben Antonio Vargas (Universidad del Valle) and Hernando Correa (Universidad del Quindío)

BB649 - Fractal analysis of stretch zone behavior for AA 7475 aluminium alloy
Pietro Carelli Reis de Oliveira Calte-briano (UNESP - Guaratinguetá), Kamila Amato Campos (UNESP - Guaratinguetá), Paulo Henrique Santos Rosa (UNESP - Guaratinguetá), Maria da Graça Costa (UNESP), Carlos Paiva Santos (UNESP), Elson Longo (Unesp-Araquara) and José Arana Varela (UNESP)

BB650 - CuO Synthesized by Microwave Hydrothermal Method at different conditions
Jefferson Maul (UFPB), Severino Jackson Gomes Lima (UFPB), Manoel Silva Jr (UFPB), Antonio Gouveia Souza (UFPB), Ieda Maria Garcia dos Santos (UFPB), Maria Alice Meireles Almeida Maurera (UFPB) and Davy Keyson (UFPB)

BB652 - Photoluminescence Property of CuZn6(OH)16H2O Processed by Microwave-Hydrothermal Method
Camila Soares Xavier (UNESP), Sayonara Andrade Elizário (UNESP), Júlio César Szoncoski (USFCar), Laécio Santos Cavalcante (USFCar), Maximo Siu Li (USFCar), Josué Arana Varela (UNESP) and Elson Longo (Unesp-Araquara)

BB653 - An investigations of kinetics for 304 austenitic stainless steel
Eva Paganini Martins (mackenzie), Jan vatavuk (mackenzie) and Antonio Augusto Couto (mackenzie)

BB655 - Stability of MgO nanowires
Leonardo Sabino dos Santos (IF/USP), Lucy Vitoria Credidio Assoli (IF/USP) and Joao Francisco Justo (EP/USP)

BB656 - PET waste depolymerization with multifunctional alcohol: FT-IR characterization
Thathiane C. Rodrigues F. Lessa (IMIA-UFRJ), Luis Claudio Mendes (IMIA-UFRJ) and Marcos Lopes Dias (IMIA-UFRJ)

BB657 - Oxidative Cracking of Linear Hydrocarbons at Low Temperatures
Leónida Diógenes Trapos Cámpora (IFPRJ-UERJ), Rafael Souza Monteiro (UFU), Alex Miranda Constantino (UFU), Julio Carlos Afonso (UFRJ) and Donato Alexandre Gomes Aranda (UFRJ)

BB658 - Origin of Photoluminescence of Samarium_Doped Strontium Titanate Nanostructure Under UV Light
Valéria Moraes Longo (UNESP), Maria Graça Costa (UNESP), Carlos Paiva Santos (UNESP), Elson Longo (Unesp-Araquara) and José Arana Varela (UNESP)

BB659 - Radioluminescence and Photoluminescence Properties of BaZrO3, Decaoctahedrons obtained by Microwave-Assisted Hydrothermal Method
Maria Lucio Moreira (USFCar-São Carlos), Diogo Paschoaline Volanti (UNESP-Araquara), Maria Ernesta Gildo Valério (USFCar-Araquara), Paulo Montes (USFCar-Araquara), Juan Manuel Andrés (Universitat Jaume I), José Arana Varela (Unes-Araquara) and Elson Longo (Unesp-Araquara)

BB660 - Density-functional studies of PbZr0.65Ti0.35O3: Monoclinic,
BB661 – Synthesis of BaxSr1-xTiO3 nanoparticles obtained by Microwave-Assisted Hydrothermal Method
Gleyson Tadeu Almeida Santos (UNESP-Presidente Prudente), Agda Eunice Souza (UNESP-Presidente Prudente), Ronilson Angelo Silva (UNESP-Presidente Prudente), Marico Lucio Moreira (UFSCar), Diogo Paschoaline Volanti (UNESP-Araquara), Silvio Rainho Teixeira (UNESP-Presidente Prudente) and Elson Longo (UNESP-Araquara)

BB662 – Infl uence of the growth process on the photoluminescence behavior of BaWO4
Marcia Valéria Silva Lima (UFSCar), Ana Paula de Moura (UFSCar), Laécio Santos Cavalcante (UFSCar), Júlio César Scanzonci (UFSCar), José Arana Varela (Unesp–araquara) and Elson Longo (UNESP-Araquara)

BB663 – Synthesis of BaxCa1-xTiO3 Nanoparticles using Microwave-assisted Hydrothermal Method
Agda Eunice Souza (UNESP-Presidente Prudente), Ronilson Angelo Silva (UNESP-Presidente Prudente), Gleyson Tadeu Almeida Santos (UNESP-Presidente Prudente), Marico Lucio Moreira (UFSCar), Diogo Paschoaline Volanti (UNESP-Araquara), Silvio Rainho Teixeira (UNESP-Presidente Prudente) and Elson Longo (UNESP-Araquara)

BB664 – Glucose adsorption on gold surface
Priscila Castilho Palazzo (Universidade Federal ABC), Ronei Miotto (Universidade Federal ABC), Maurício Silva Baptista (Universidade de São Paulo) and Tathyma Tumolo (Universidade de São Paulo)

BB665 – Theoretical Framework for Modeling Soot Oxidation
Dmitry Y Zubarev (UCLB, LBNL), Xiaoying Y (UCLB), Michael Frenklach (UCLB, LBNL), Jozedt McClean (UCLB), Dominik Domin (UCLB), Brian Austin (UCLB) and William Lester (UCLB, LBNL)

BB666 – Molecular Dynamics simulations on stretching of amorphous PPV films
Melissa Fabiola Siqueira Pinto (IFSC/USP), Rodrigo Ramos (IF/USP), Roberto Mendonça Faria (IFSC/USP) and Marília Junqueira Calkas (IF/USP)

Thursday, September 24
18:30 to 20:30

BB667 – CaTiO3:Eu powders: synthesis and morphology approaches
Ivo Mateus Pinatti (UFSCar), Mario Lucio Moreira (UFSCar), Ieda Lucia Viana Rosa (UFSCar-UFRJ, Rio de Janeiro), Tatiana Martelli Mazzo (UNESP), José Arana Varela (UNESP) and Elson Longo (Unesp-Araquara)

BB668 – Crystalline SrTiO3 nanoparticles obtained by Hydrothermal Microwave synthesis
Guilhermina Ferreira Teixeira (IQ-UNESP ARARAQUARA), Maria Graça Costa (IQ-UNESP ARARAQUARA), Maria Areipedia Zagheie (IQ-UNESP ARARAQUARA), Elson Longo (IQ-UNESP ARARAQUARA) and José Arana Varela (IQ-UNESP ARARAQUARA)

BB669 – An optical setup for monitoring the gypsum hardening-time
ANDREA DE VASCONCELOS FERRAZ (UNIVASF), ISAIANO JOSE DE SOUZA COELHO (UNIVASF), RODRIGO PEREIRA RAMOS (UNIVASF), RICARDO MENEZES PRATES (UNIVASF) and GUILHERME MOREIRA FARIAS (UNIVASF)

BB670 – Heterogeneous Catalyst applied in esterifi cation reactions
Diego Brasil Ribeiro (UFRN), Marcus Antonio de Freitas Melo (UFRN), Antonio Eduardo Martinelli (UFPE), Raimundo Rômulo Martins Junior (UFPE) and Celso Pinto de Melo (UFPE)

BB671 – phase transition study in the AgI - Al2O3 system
Maria Elena Fernández (Universidad del Valle), Diego Peña (Universidad del Valle), Ruben Antonio Vargas (Universidad del Valle), Carlos Alberto Luzano (Universidad Javeriana) and Julian Andres Angel (Universidad del Valle)

BB672 – Theoretical study of the composites CNTs/polyaniline
Marcos dos Reis vargass (UEG), Eduardo Moraes (UEG), José Dinavino dos Santos (UEG), Taciano Peres Ferreira (UEG), Olacir Alves Araújo (UEG), Elson Longo (Unesp-Araquara) and Carlton Anthony Taft (CBPF)

BB673 – Phase transition study in the Agl - Al2O3 system
Maria Elena Fernández (Universidad del Valle), Diego Peña (Universidad del Valle), Ruben Antonio Vargas (Universidad del Valle), Carlos Alberto Luzano (Universidad Javeriana) and Julian Andres Angel (Universidad del Valle)

BB674 – Electronic and optical properties and hyperfi ne fields of nickel-related complexes in diamond
Rolando Lario Mamani (UFABC), Joao Francisco Justo (EP/USP), Wanda Valle Marcondes Machado (IF/USP) and Lucy Vitoria Credidio Assali (IF/USP)

BB675 – Deposition of controlled ultrathin SnO2:Sb fi lms by self-assembly of Nanocrystals in Organic Solvents
Cauê Faverro Ferreira (UFSCar), Rafael Nicolosi Libanori (UFSCar), Tiago de Góes Conti (UFSCar), Marcelo Assumpção Pereira-da-Silva (IFSC/UFSJ-UNICEP) and Edison Roberto Leite (UFSCar)

BB676 – Reaction Pathways of Soot Oxidation: Simple Models
Sinisa Vukovic (UCB, LBNL), Russell Whitesides (UCB), Neil Neil Robertson (UCB), Michael Frenklach (UCB), Jinhua Wang (UCB), Brian Austin (UCB) and William A Lester Jr (UCB, LBNL)

BB677 – Critical Micellar Surfactants Concentration by Electrical Impedance Spectroscopy
Maelyson Roimin Fonseca dos Santos (UFPE), Raimundo Rômulo Martins Junior (UFPE) and Celso Pinto de Melo (UFPE)

BB678 – INTERLAMINAR SHEAR STRENGTH OF COMPOSITE MANUFACTURED BY RESIN TRANSFER MOLDING
Wanderley Amorim Junior (UFRJ), Gustavo Queiroz Chaves (CTEx), Veronica Araujo Calado (UFRJ) and Fernando Luiz Bastian (UFRJ)

BB680 – Quantum chemistry calculations of activation energies for oxidative cracking and reutilization of heavy organic materials
Nelson C Furtado (CBPF), Donato Alexandre Gomes Aranda (UFRJ) and Carlton Anthony Taft (CBPF)

BB681 – Deposition of controlled ultrathin SnO2:Sb fi lms by self-assembly of Nanocrystals in Organic Solvents
Cauê Faverro Ferreira (UFSCar), Rafael Nicolosi Libanori (UFSCar), Tiago de Góes Conti (UFSCar), Marcelo Assumpção Pereira-da-Silva (IFSC/UFSJ-UNICEP) and Edison Roberto Leite (UFSCar)

BB682 – LIGHT SLURRIES FOR MOLDING
Andre Gomes Aranda (UFRJ), Leoncia Pereira-da-Silva (IFSCar), Marcelo Assumpção Pereira-da-Silva (IFSCar), Artur Gomes Aranda (UFRJ) and Santos Cavalcante (UCB, LBNL), Josué Araujo Varela (Unesp–araquara) and José Arana Varela (Unesp–araquara)

BB683 – The infl uence of cation polymerization NaK in the properties of a geopolymer
Erica Natasch de Medeiro Gurgê Pinto (UFRN), Diego Brasile Ribeiro (UFRN), Dulce Maria Araujo Melo (UFRN), Antonio Eduardo Martinelli (UFRN), Marcus Antonio de Freitas Melo (UFRN) and Júlio Cesar Oliveira Freitas (UFRN)

BB684 – Deposition of controlled ultrathin SnO2:Sb fi lms by self-assembly of Nanocrystals in Organic Solvents
Cauê Faverro Ferreira (UFSCar), Rafael Nicolosi Libanori (UFSCar), Tiago de Góes Conti (UFSCar), Marcelo Assumpção Pereira-da-Silva (IFSC/UFSJ-UNICEP) and Edison Roberto Leite (UFSCar)

BB685 – Eu-doped hydroxyapatite obtained by hydrothermal-microwave method
Rafaela do Silveira André (LIEC - UFSCar), Elaine Cristina Paris (LIEC - UFSCar), Ieda Viana Rosa (LIEC - UFSCar), Fernanda Gurgel (LIEC - UFSCar), Maximo Siu Li (USP-São Carlos), José Arana Varela (Unesp–araquara) and Elson Longo (Unesp–araquara)

Paula Fabiana Santos Pereira (UFSCar–São Carlos), Ana Paula de Moura (UFSCar–São Carlos), Eden Roberto Leite (UFSCar–São Carlos), Ieda Lucia Viana Rosa (UFSCar–São Carlos), José Arana Varela (Unesp–araquara) and Elson Longo (Unesp–araquara)

BB687 – Structural and optical properties of SrW04 powders prepared by the microwave–hydrothermal and polymeric precursor methods
Franciini Cristiani Pican (UFSCar), Júlio César Scanzonci (UFSCar), Laécio Santos Cavalcante (UFSCar), Elson Longo (Unesp) and José Arana Varela (Unesp)

BB688 – Quantum Inspired Evolutionary Algorithm applied to the optimization of Basis Functions
Iury Steiner Bezerra (PUC-Rio), Omar Paranoiba Vilela Neto (PUC-Rio) and Marco Aurélio Cavalcanti Pacheco (PUC-Rio)

BB689 – The infl uence of metakaolinite crystallinity on the properties of a geopolymer
Erica Natasch de Medeiro Gurgê Pinto (UFRN), Diego Brasile Ribeiro (UFRN), Dulce Maria Araujo Melo (UFRN), Antonio Eduardo Martinelli (UFRN), Marcus Antonio de Freitas Melo (UFRN) and Júlio Cesar Oliveira Freitas (UFRN)

BB690 – The infl uence of cation polymerization NaK in the properties of a geopolymer
Erica Natasch de Medeiro Gurgê Pinto (UFRN), Diego Brasile Ribeiro (UFRN), Dulce Maria Araujo Melo (UFRN), Antonio Eduardo Martinelli (UFRN), Marcus Antonio de Freitas Melo (UFRN) and Júlio Cesar Oliveira Freitas (UFRN)

BB691 – Geopolymerics pastes with sodium tetraborate: study of the thickness for cementation of oilwells
Diego Brasile Ribeiro (UFRN), Erica Natasch de Medeiro Gurgê Pinto (UFRN), Dulce Maria Araujo Melo (UFRN), Antonio Eduardo Martinelli (UFRN), Marcus Antonio de Freitas Melo (UFRN) and Júlio Cesar Oliveira Freitas (UFRN)

BB692 – A study of compressive
strength of the geopolymers pastes additivated with non-ionic latex

Diego Brasil Ribeiro (UFRRN), Erica Na-tasche de Medeiros Gurgel Pinto (UFRRN), Dulce Maria Araujo Melo (UFRRN), Marcus Antonio de Freitas Melo (UFRRN), Antonio Eduardo Martinelli (UFRRN) and Romero Gomes (Petrobras)

BB695 - SnO$_2$-Ni supported on bentonite for biodiesel synthesis
Notan Pires So (UFPR), Luiz Edmundo Bastos Soledade (UFPR), Jailson Alexandre Carvalho (UFPR), Herbert Bezerra Sales (UFPR), Adriana Almeida Silva (BENTONISA), Antonio Gouveia Souza (UFPR) and Ieda Maria Garcia dos Santos (UFPR)

BB696 - Photoluminescent behavior of PbTi$_{0.8}$O$_{2.6}$ system obtained by microwave assisted hydrothermal method
Elaine Cristina Paris (UNESP), Rafaela Silveira André (UFSCar), Miymy Ricon Jaya (USP), Maximo Siu Li (USPJSU-SaoCarlos), José Arana Varela (UNESP) and Elson Longo (Unesp-Araraquara)

BB697 - Influence of solution concentration on the structural and electronic properties of PbI$_2$ films
José Fernando Condeles (UFTM) and Marcelo Mulato (FFCLRP-USP)

BB698 - Effect of microwave–hydrothermal rapid treatment in the ZnO nanostructures
Renata Cristina Lima (UFU), Leilaine Roberta Macario (UNESP), José Waldon Martínez Espinosa (UFU), Elson Longo (UNESP) and José Arana Varela (UNESP)

BB700 - Influence of particle size on electrical properties of Nanofluid oxide niobates
Fábio Silva Bellucci (FCT - UNESP),把自己的名字加上

BB701 - The effect of Pb on the growth mechanism of CaTiO$_3$ mesocrystals by template-free
Savanara Andrade Elizário (Unesp-Araquara), Camila Soares Xavier (Unesp-Araquara), Thiago Sequinil (Unesp-Araquara), Elson Longo (Unesp-Araquara) and José Arana Varela (Unesp-Araquara)

BB702 - Microwave Hydrothermal Synthesis and Optical Properties of HfO$_2$ rice-like.
Savanara Andrade Elizário (Unesp-Araquara), Camila Soares Xavier (Unesp-Araquara), Elson Longo (Unesp-Araquara) and José Arana Varela (Unesp-Araquara)

BB705 - CaSnO$_3$-Ni$^{2+}$ synthesized by the polymeric precursor method
Gibran Bolder Menezes (UFPR), S J G Lima (UFPR), M Q Silva Junior (UFPR), L E B Soledade (UFPR), A G Souza (UFPR), Ieda Maria Garcia dos Santos (UFPR) and M R Nascimento (IFET)

BB707 - Dielectric Permittivity Analysis of Mixtures of Polar Liquids by Impedance Spectroscopy
Leandra Oliveira Salmazo (FCT-UNESP), Felipe Silva Bellucci (FCT - UNESP), Aldo Eloizo Job (FCT - UNESP) and Marcos Augusto Lima Nobre (FCT - UNESP)

BB709 - SYNTHESIS AND CHARACTERIZATION OF SnO$_2$ THIN FILMS DEPOSITED ON STAINLESS STEEL AISI 304 SUBSTRATE
Paulo Gonçalves Junior (IFMA), Maria Lucia Moreira (UFSCar), Marcelo Moaizinho Oliveira (IFMA), Presley Sergio Santos (IFMA), Hilton Gomes Rangel (IFMA) and Elson Longo (UNESP)

BB710 - Ethylene and isoprene copolymerization by homogeneous metallocene catalysts
Luanda Silva de Moraes (UFRRJ - IMA) and Maria de Fátima Vieira Marques (UFRRJ - IMA)

BB711 - Effect of the addition of biopolymer on the rheological behavior of Portland oilwell cement slurries
Andrea Kelly Costa Nóbrega (UFRRN), Antonio Eduardo Martinelli (UFRRN), Dulce Maria Araujo Melo (UFRRN), Marcus Antonio de Freitas Melo (UFRRN), Elisângela Barros Dantas (UFRN) and Ulisses Bezerra (CEFETPB)

BB712 - Photoluminescence of CaMoO$_4$ powder processed in a microwave–hydrothermal
Vicente Sousa Marques (UFPR), Arthur Francisco de Paiva Alcântara (UFPR), Júlio César Szczancoski (UFSCar), Elcio Santos Cavalcante (UFSCar), Elson Longo (UFSCar), Luiz de Sousa Santos Junior (UFPR) and Maria Rita de Morais Chaves Santos (UFPR)

BB714 - Comparison between the properties of husk green coconut and curaua cellulose fibers chemically treated for compatibility with polypropylene matrix
Maria de Fátima Vieira Marques

BB715 - Investigation of ethylene glycolon the photoluminescence behavior of PbWO$_4$ powders processed in microwave–hydrothermal
Arthur Francisco de Paiva Alcântara (UFPR), Vicente Sousa Marques (UFPR), Júlio César Szczancoski (UFSCar), Elson Longo (UNESP), Luís de Souza Santos Junior (UFPR) and Maria Rita de Morais Chaves Santos (UFPR)

BB716 - Influence of temperature in the mechanical properties of high performance PA 6.6 synthetic fiber after dipping process
Sergio Gomes Cardoso (IPEN_CCTM) and Arnaldo Homobono Paez de Andrade (IPEN_CCTM)

BB717 - Study of Fracture Mechanisms of High Performance Polyester Synthetic Fibers
Sergio Gomes Cardoso (IPEN_CCTM) and Arnaldo Homobono Paez de Andrade (IPEN_CCTM)

BB718 - Annealing temperature effect on the optical and photoluminescent properties of Sr$_{0.9}$Eu$_{0.1}$Mo$_3$O$_8$ powders
Marcos Takashi Santos Tanaka (UFSCar), Ana Paula de Azevedo Marques (UFSCar), Ieda Lucia Viana Rosa (UFSCar) and Elson Longo (Unesp)

BB719 - DFT study of magnetic coupling in Cu(II) and Ni(II) complexes with nitronyl nitroxide radical
Avaldo Santos Alves (IF-UFF) and Pedro Vélez (UFPR)

BB720 - The Influence of the Air Flow Injected on the Process of Flotation Using a Demulsifier Based on Castor Oil
Elida Natasche de Medeiros Gurgel Pinto (UFRRN), Aureliete Carla de Miranda (UFRRN), Elóa Maria Fernandes Silva (UFRRN), Dulce Maria Araujo Melo (UFRRN), Marcus Antonio de Freitas Melo (UFRRN), Antonio Eduardo Martinelli (UFRRN) and João Marconi de Andrade (UFRRN)

BB722 - Synthesis and Characterization of BaZrO$_3$ Pr-doped by Pechini Method
Égide de Brito Sá (UFPR), Vicente Sousa Marques (UFPR), Maria Fernanda do Carmo Gurgel (UFPR), Elson Longo (UFSCar), José Milton Elias de Matos (UFPR), Maria Rita de Morais Chaves Santos (UFPR) and Luiz de Souza Santos Junior (UFPR)

BB723 - Effects of the Chemical Composition of Ethanol Fuel on Carbon Steel Pipelines
Lindsey R Goodman (Georgia Tech) and Preet M Singh (Georgia Tech)

BB724 - Concrete electrical resistivity as a simple and rapid method to assess concrete resis-tance to chloride penetration
Adriana Santos Ribeiro (UFAL), Silvia Beatriz Beger Uchoa (UFAL), Jolesao Tonholo (UFAL), T F de Amorim (UFAL) and I Ray (West Virginia University)

Tuesday, September 22
18:30 to 20:30
BB565 - Structural, electronic properties and elastic constants of ZnO
Naoara Leticia Manara (Unesp), Aguinaldo Robinson de Souza (Unesp) and Julio Ricardo Sambrana (Unesp)

BB566 - A density functional pseudopotential and Monte Carlo investigation of the thermody-namics of the adsorption of Pt on ZrO$_2$
Aries Gil Rebaza (UNIV Plata), Jose Gabriel Solano (Univ Ros) and Carlton Anthony Taft (CBP)

BB568 - Photoluminescence in the ZnO synthesized by the Domestic Microwave Hydrothermal Method
Andre Luiz Menezes de Oliveira (UFPRB), Maximo Siu Li (USP–Sao Carlos), Elson Longo (Unesp–Araquara), Elaine Cristina Paris (UFSCar), Antonio Gouveia Souza (UFPRB), Ieda Maria Garcia dos Santos (UFPRB) and Davy Keyson (UFPRB)

BB569 - Influence of the solvent in the morphology of ZnO
Andre Luiz Menezes de Oliveira (UFPRB), Jefferson Mau (UFPRB), Elaine Cristina Paris (UFSCar), Elson Longo (Unesp–Araquara), Antonio Gouveia Souza (UFPRB), Ieda Maria Garcia dos Santos (UFPRB) and Davy Keyson (UFPRB)

BB570 - Catalysts for biodiesel based on Zn$_2$-xCo$_x$TiO$_4$
Carlos Cristino Lima (UFPRB), Jailson Alexandre Carvalho (UFPRB), Anderson Reis Albuquerque (UFPRB), Luis Fernando Godoy Falco (UNICAMP), Severino Jackson Gomes Lima (UFPRB), Antonio Gouveia Souza (UFPRB) and Ieda Maria Garcia dos Santos (UFPRB)
BB571 - Influence of the alkaline chemical precursor in the morphologies of the ZnO particles synthesized by the Direct Microwav Hydrothermal Method
André Luiz Menezes de Oliveira (UFPB), Jefferson Maul (UFPB), Elaine Cristina Paris (USFSCar), Elson Longo (Unesp-Araquara), Antonio Gouveia Souza (UFPB) and Ieda Maria Garcia dos Santos (UFPB) and Davy Keyson (UFPB)

BB574 - Application of the generalized linear elastic fracture mechanics to NiTi catheter
Luísflor Houloue (BUT), Jan Klusak (IPM ASCR), Tomas Profant (BUT), Michal Kotoul (BUT) and Zdenek Kneš (IPM ASCR)

BB575 - THERMAL GRADIENT IN SOLIDS IMMERSED IN PLASMA
Nierly Karinni de Almeida Maribondo Galvão (UFRN), Julio César Pereira Barbosa (UFRN), Marcio Williams Duarte Mendes (UFRN), Bruno Leonardo de Sena Costa (UFABC), Caubi Ferreira de Souza Jr (IFRN) and Clodomiro Alves (UFRN)

BB577 - Structural and photoluminescent properties of lead zirconate powders
Sérgio Henrique Bezerra de Sousa Leal (UFPI), Joelma Abreu Nunes (UFPI), Maria Fernanda do Carmo Gurgel (UFPI), Viviane Cristina Albarici (USFSCar), José Milton Elias de Matos (UFPI), Elson Longo (Unesp-Araquara) and Maria Rita de Morais Chaves Santos (UFPI)

BB578 - Theoretical Study on the Electronic Properties Responsible for the Interaction between Some Substances and PPAR receptor
Kathia Maria Honório (USP), Paulo Homem-de-Mello (UFABC) and Vinicius Maltarollo (UFABC)

BB580 - STRUCTURAL CHANGES ON CITRONELLOL INDUCED BY GAMMA RADIATION
Rodríguez - Linares Diana (InSTEC), Codomíu-Hernández Edelles (InSTEC), Aquirina-Coraides Yari (InSTEC), Quetz-Alvarez Rolando (InSTEC) and Ferro Noel (Institute Plant Genetic)

BB581 - Porous ceramic applied as catalytic support for SrSnO3 for NO reduction
Rosa Medeiros Marinho (UFPB), Andre Luiz Menezes de Oliveira (UFPB), Jefferson Maul (UFPB), Danmilley Melo Ribeiro (UFPB), Severino Jackson Gomes Lima (UFBB), Antonio Gouveia Souza (UFBB) and Ieda Maria Garcia dos Santos (UFBB)

BB582 - Evaluation of the behavior of self-compacting concrete beams reinforced with steel fibers
Paulo César Correia Gomes (UFAL), Paulo César Correia Gomes (UFAL) and Aline Ramos Barbosa (UFAL)

BB584 - Stiffness evaluation of the oligofluorene chains
Melissa Fabiola Siqueira Pinto (IFSC/USP) and Roberto Mendoza Faria (IFSC/USP)

BB585 - Catalytic activity of commercial oxides for the synthesis of corn biodiesel
Jailson Alexandre Carvalho (UFBB), Herbet Bezerra Sales (UFBB), Natán Pires Sa (UFBB), Severino Jackson Gomes Lima (UFBB), Francisco Savio Mendes Sinfoniro (UFBB), Antonio Gouveia Souza (UFBB) and Leda Maria Garcia dos Santos (UFBB)

BB587 - Electronic structure of Mn-doped GaN
Melânia Cristina Mazini (UNESP), Douglas Marcel Gonçalves Leite (UNESP), José Humberto Dias da Silva (UNESP) and Julio Ricardo Sambrano (Unesp)

BB588 - Effect of curing temperature on the mechanical behavior of oilwell cementing composites
Maria Roseane Pontes Fernandes (UFRN), Petrucia Duarte Silva (UFRN), Antonio Eduardo Martinelli (UFRN), Dulce Maria Araojo Melo (UFRN), Marcus Antonio de Freitas Melo (UFRN), Diego Brasil Ribeiro (UFRN) and Elisângela Borros Damants (UFRN)

BB589 - Thermomechanical Behavior of Cement Slurries for HPHT Oilwells
Petrúcia Duarte Silva (UFRN), Maria Roseane Pontes Fernandes (UFRN), Antonio Eduardo Martinelli (UFRN), Dulce Maria Araojo Melo (UFRN), Marcus Antonio de Freitas Melo (UFRN) and Daniel Victor Amaral Silva (UFRN)

BB590 - Experimental variables in the synthesis of anatase phase TiO2 nanoparticles
José Milton Elias de Matos (UFPI), Juliana Sousa Gonçalves (UFPI), Valdemir Santos (USFSCar), Sérgio Henrique Bezerra de Sousa Leal (UFPI), Luiz de Sousa Santos Junior (UFPI), Maria Rita de Morais Chaves Santos (UFPI) and Elson Longo (USFSCar)

BB591 - Influence of the interface STO in the Rodamine B photodegradation process
Sergio Ricardo de Lazaro (UFEPG), Danielle Berger (UFEPG), Luiz Angelo Moraes Curv (UFEPG), Sergio Mazurek Teberchini (UFEPG), Caue Ribeiro de Oliveira (Embrapa), Karine Cristina Carinho Weter dos Santos Kider (UFEPG) and Elson Longo (UNESP)

BB592 - Reflux synthesis and hydrothermal processing of ZrO2 nanopowders at low temperature
José Milton Elias de Matos (UFPI), Laécio Santos Cavalcante (USFSCar), Valdemir Santos (USFSCar), Sérgio Henrique Bezerra de Sousa Leal (UFPI), Luiz de Sousa Santos Junior (UFPI), Maria Rita de Morais Chaves Santos (UFPI) and Elson Longo (USFSCar)

BB593 - Microwave synthesis of single-crystalline perovskite BiFeO3
Glenda Riosotto (Unesp), Alexandre Zirpoli Simoes (Unifei), Maria Aparecida Zagheti (Unesp), Elson Longo (Unesp) and José Arana Varela (IQ-Araquara, UNESP)

BB594 - Electroactive nanocomposites containing calcium titanate immobilized with cashew gum and polyaniline: synthesis and electrochemical characterization
Sérgio Henrique Bezerra de Sousa Leal (UFPI), Cícero Barros Bittencourt (UFPI), Arthur Francisco de Paiva Alcântara (UFPI), Maria Rita de Morais Chaves Santos (UFPI), José Roberto de Sousa Almeida Leite (UFPI), Valencir Zucolotto (USP) and Carla Eiras (UFPI)

BB595 - Atomic-scale structure of zirconia-supported on alumina
Cleccir Jose Dalmaschio (USFSCar), Edison Roberto Leite (USFSCar) and Elson Longo (USFSCar)

BB598 - Analysis of nanotube p-n doping of [CCn]m, [GeSn]m, and [SISn]m using semiempirical, HF, and DFT methods
João Batista Lopes Martins (UnB), Carlon Anthony Taft (CBP), José Divino dos Santos (UEG), Marcos dos Reis Vargas (UEG), Elson Longo (Unesp-Araquara) and Eduardo Moraes (UEG)

BB601 - Study of the new structures of nanotubes (XYn) with the armchair and CHIRAL forms, according to the folding of planes, using the quantum theoretical methods of AM1, MNDO, HF and DFT with the 3-21G, 6-31G and Huzinaga basis sets
Rodrigo da Silva (UFG), Marcos dos Reis Vargas (UFG), José Divino dos Santos (UFG), João Batista Lopes Martins (UnB), Elson Longo (Unesp-Araquara) and Carlson Anthony Taft (CBP)

BB602 - Interaction between the Li and planes (100) of FULLER-ITES of the form [C60]5, [C70]5, [C80]5 e [C96]5, with analysis of the HOMO-LUMO, charges, distances, dipoles, using MNDO, HF and DFT methods
Rodrigo da Silva (UFG), Marcos dos Reis Vargas (UFG), José Divino dos Santos (UFG), João Batista Lopes Martins (UnB), Elson Longo (Unesp-Araquara) and Carlson Anthony Taft (CBP)

BB603 - GridUNESP: The Emergence of a Virtual Organization.
Julio Ricardo Sambrano (Unesp-Bauru), Aguilardo Robinson de Souza (Unesp-Bauru) and Daniel Buzo de Lima (Unesp-Bauru)

BB604 - Molecular modeling of organically modified layered silicates
Itammara Farias Leite (UFPE), Marcus Vinícius Pereira dos Santos (UFPE), Ricardo Longo (UFPE), Sueliana Maria Lima da Silva (UFPE) and Oscar Manoel Loureiro Matta (UFPE)

BB605 - Structural and optical properties of MgTiO3 powders based on the vacancy/distorted clusters and octahedral tilting
Elsia Vetter Ferri (LIEM - USFSCar), Elaine Cristina Paris (LIEC - USFSCar), José Waldo Martinez Espinoza (LIEC - Unesp), Paulo Sérgio Pizani (DF - UFSCar), Vâlimar Roberto Mastelaro (DF - USP), José Arana Varela (LIEC - Unesp) and Elson Longo (LIEC - Unesp)

BB606 - Preparation of In(OH)3 and In2O3 by the Microwave-Hydrothermal Method
Fabiana Vililela Motta (UNESP), Ana Paula de Azevedo marques (USFSCar), Renata Cristina Lima (UFU-LUberlandia), Edison Roberto Leite (USFSCar), José Arana Varela (UNESP) and Elson Longo (UNESP)
BB607 – Synthesis, characterization and photoluminescent property of In2O3:Eu  
Fabiana Villela Motta (UNESP), Ana Paula de Azevedo marques (UFSCar), Máximo Siu Li (USP), Edson Roberto Leite (UFSCar), José Araña Varela (UNESP) and Elson Longo (UNESP)

BB610 – Synthesis of CaSnO3–SrSnO3 thin films by Chemical Solution Deposition  
Mary Cristina Ferreira Alves (Université Rennes1/UFPB), Stephanie Boursicot (Université Rennes1), Valérie Bouquet (Université Rennes1), Maryline Guillox-Viry (Université Rennes1), Ieda Maria Garcia dos Santos (UFPB), Antonio Gouveia Souza (UFPB) and Luiz Edmundo Bastos Soledade (UFPB)

BB611 – Investigation of Thermal Properties for Nylon-6 Obtained in a Polymerization Experimental Unit of a Batch Reactor  
Maria Carolina Burgos Costa (UNICAMP), Maria Ingrid Rocha Barbosa (UNICAMP), Andre Luiz Jardini (UNICAMP) and Rubens Maciel Filho (Unicamp)

BB612 – Electronic properties of ABO3: Periodic Density Functional Study  
Amanda Fernandes Gouveia (Unesp) and Julio Ricardo Sambrano (Unesp)

Amanda Fernandes Gouveia (Unesp) and Julio Ricardo Sambrano (Unesp)

BB614 – Thermal stability of undercooled amorphous silver nanoparticles  
Justo Rojas Tapia (UNMSM), Carlos Vladimir Landau Saenz (UNMSM), Ivan Pedro Lobato Hoyos (IPEN) and Chiachi Rojas Ayala (UNMSM)

BB615 – Simulation of Protein Folding in the square lattice: number of monomer–monomer contacts.  
Aquivaldo Robinson de Souza (UNESP), Paula Martins da Silva (UNESP), Julio Ricardo Sambrano (UNESP) and Antonio Caliri (USP)

BB616 – Effect of vermiculite hydrophobization and mixing order on the mechanical properties of cement slurries  
Priscila Siqueira de Gouveia (UFRRN), Erica Natasche de Medeiros Gurgel Pinto (UFRRN), Dulce Maria Araujo Melo (UFRRN), Antonio Eduardo Martinelli (UFRRN), Marcus Antonio de Freitas Melo (UFRRN) and Eduardo Raimundo Dias Nunes (UFRRN)

BB617 – Microwave hydrothermal synthesis of \( i^-\text{Fe}_2\text{O}_3 \)  
Arnayra Sonayra Brito (UFPB), Jefferson Maul (UFPB), Andre Luiz Menezes de Oliveira (UFPB), Severino Jackson Gomes Lima (UFPB), Antonio Gouveia Souza (UFPB), Ieda Maria Garcia dos Santos (UFPB) and Davy Keyson (UFPB)

GLOBAL NANOTECHNOLOGY NETWORK

International Conference of Advanced Materials  
Rio de Janeiro, 20-25 September 2009

GLOBAL NANOTECHNOLOGY NETWORK

9:30-13:00h  
Envisioning a Pan-American Nanotechnology Network of the GNN  
Session Co-Chairs: Jesus Gonzalez Hernandez, Director, CIMAV, Mexico and R.P.H. Chang, Director, Materials Research Institute, Northwestern University, US

9:30h  
Introduction to the GNN and overview of workshop goals (Chang)

10:00  
Reports on Nanotechnology Capacities and Programs from: Argentina (Ernesto Calvo), Brazil (Mario Baibich), Chile (Victor Fuenzalida),

11:00  
Coffee Break

11:30  
Reports on Nanotechnology Capacities and Programs from: Mexico (Jesus Gonzalez), Venezuela (Gema Gonzalez), US (R.P.H. Chang), Uruguay (Helena Pardo)

13:00h  
Lunch

After lunch the GNN workshop will be by invitation only
National Laboratories
Albuquerque, NM 87185-1427

1 Julia M. Phillips, Director, Physical, Chemical, and Nano Sciences Center
Sandia

be keeping balance towards objective facts for a sustainable development.

hydrogen as a fuel. As a matter of fact, sadly, energy policies in the world are
penalized fuel cells by considering their development bound to using only
and their development should be independent from the advent of hydrogen
fuel cells. Therefore, fuel cells are not tightly connected with hydrogen as a fuel

technologies, fuel cells show the advantage of possible use both for stationary
and mobile energy productions. Fuel versatility is another advantage of fuel
production systems, alternative to fossil fuel combustion. Among the various types of alternative energy production
technologies, fuel cells show the advantage of possible use both for stationary
and mobile energy productions. Fuel versatility is another advantage of fuel
cells, especially for those operating at higher temperatures, such as solid oxide
fuel cells. Therefore, fuel cells are not tightly connected with hydrogen as a fuel
and their development should be independent from the advent of hydrogen
economy. Nonetheless, the latest development of US energy policies somewhat
penalized fuel cells by considering their development bound to using only
hydrogen as a fuel. As a matter of fact, sadly, energy policies in the world are
strongly affected by politics and economical factors. Role of researchers should
be keeping balance towards objective facts for a sustainable development.

1 Julia M. Phillips, Director, Physical, Chemical, and Nano Sciences Center
Sandia National Laboratories Albuquerque, NM 87185-1427

Materials Needs for Alternative Energy Sources.

Securing a viable energy future for humankind will require an effort of
gargantuan proportions. One aspect of meeting the energy challenge that is
particularly important is the development of carbon-neutral energy sources,
including renewable sources. Fundamental advances in scientific understand-
ing are needed to broadly implement many of the technologies that are held
out as promising options to meet future energy needs. Materials challenges
abound, ranging from the need for specific combinations of properties to
reliability and cost effectiveness. I will discuss some recent results and new
directions in the search for viable alternative energy sources from around the
world, emphasizing the multidisciplinary, team nature of the endeavor. I will
also offer some thoughts about how to encourage translation of science into
pervasive technologies.

1 Fernando Galemebeck, and Márcia M. Rippel, University of Campinas, Brazil

Biofuel, food and materials production: synergy rather than conflict

Materials production became largely dependent on oil during the past century
but the importance of biomass raw materials increased recently, parallel to
biofuels. Debate on conflicts between energy, materials and food production
has increased but there is also much opportunity for synergy. Ethanol output in
Brazilian southeast is now concurrent with the production of kraft and white
office paper, sucrose and cellulose from bagasse, lysine, vitamin B–12, protein-
rich yeast for human and animal food, polyester and more than 7 GW power
capacity are other by-products. Soybeans and eucalyptus product chains offer
other impressive examples, creating opportunities for cooperation between
researchers and professionals from many different areas.

1 John Sarrao

2 Los Alamos National Laboratory

3 Los Alamos, NM 87545

Facing our energy challenges in a new era of science: examples from
superconductivity and materials in extremes

Meeting the demand for double the current global energy use in the next
50 years without damaging our economy, security, environment or climate
requires finding alternative sources of energy that are clean, abundant, acces-
sible and sustainable. The transition to greater sustainability involves tapping
unused energy flows such as sunlight and wind, producing electricity without
carbon emissions from clean coal and high efficiency nuclear power plants, and
using energy more efficiently in solid-state lighting, fuel cells and transporta-
tion based on plug-in hybrid and electric cars. Achieving these goals requires
control at the nanoscale, creating materials of increasing complexity and
functionality to direct the transformation of energy between light, electrons
and chemical bonds. Fortunately, materials research is on the brink of a new
era – a transition from observation and validation of materials performance to
prediction and control of materials properties – that holds great promise for
meeting these challenges [1].

In this talk, I describe the nature of the current challenge and the prospects for
success with a particular focus on superconductivity and advanced materials
in extreme environments. Superconductors provide dramatically higher current
carrying capacity, greater reliability through unique power control devices that
are fast, smart and self-healing, and significant increases in efficiency in urban
areas where most electricity is used. Finally, I discuss a specific facility concept,
MaRIE, that will provide needed capabilities to meet these challenges, especially
for materials in extreme environments. MaRIE, for Matter-Radiation Interactions in Extremes, is Los Alamos' concept to realize this vision of 21st

[i] "New Science for a Secure and Sustainable Energy Future" http://www.sc.doe.gov/bes/reports/list.html

Materials Science for High Penetration Renewables and Large Scale Energy Storage

1 David Ginley, NREL, 1617 Cole Blvd, Golden, CO 80401

For renewable energy to make an impact on the terrawatt scale will require production of energy generation technologies on an unprecedented scale and rate. We will look at the prospects for the direct generation of electricity from solar resources. What technologies can contribute to achieving power generation on this scale and what new materials science is needed to achieve this will be the primary topic of the talk. In addition, more broadly as intermittent renewables (solar and wind for example) reach large scale power production then energy storage will be required. This can take the form of virtual storage on a smart grid, large scale technologies like CAES and Pumped-hydro and of batteries and ultracapacitors in the form of plug in hybrid fleets. We will discuss the materials challenges to integrating large scale energy storage with renewables and the potential impact on.

INNOVATION WORKSHOP ON ADVANCED MATERIALS AND DEVICES

This workshop will take place in the Plenary Room (Alhambra I & II) on Thursday from 9:30 to 17:45

Workshop Chair: Fernando Galembeck, Unicamp, Brazil
Round Table Chair: Fernando Ponce, Arizona State University, USA

This workshop will have in the morning invited lectures and in the afternoon a round table followed by Stuart Parkin plenary lecture at 17:00 h.

Speakers in this symposium are invited to share their experience concerning various aspects of the innovation process, through its various steps. Presentations and discussion in this symposium are expected to attract a large audience eager to learn from accomplished researchers.

This workshop is sponsored by FINEP/MCT
Author Index

Rio de Janeiro – RJ
September 20 - 25, 2009

A

A Alabdulaaaly A502
A C Pavao BB509 BB551
A C Tavares PK6
A G Souza BB705
A Gabriela Leyva S509
A J Ramirez PH7
A Serquis PK5
A Van Der Heyden IS98
Aaron Morelos-Gomez F528
Aarti Mehta H613
Abdalla Elsamadicy N504
Abdelatif Imad X512
Abdelhafid Aqil H514
Abdelmo Ttaleb Ouederni C503
Abdul Rahman Abdullah Al Warthan P506
Abdulaziz Ahmed Bagabas D531 G543
Abdulaziz Fahad AL-Ghashem D531
Abdullah Mohammad Abdulrahman A501
Abdur Rahim S507 IS23
Abel Arrieta D546
Abel Hurtado-Macias B530 Q541
Acrisio Lins Aguiar PC7
Ada López Giménez S583
Adaine Spinelli D526
Adair Rangel Oliveira Junior A572 A598
Adalberto Fazzio Y537 C556
Adalberto Picinin Y511
Adalberto Rosales D630
Adam Hitchcock PF3
Adam J Stevenson U574
Adam S Zeiger B517
Adão Aparecido Sabino A569
Adela Bonoiu G510
Adelaide de Almeida PAA14
Adelci Menezes De Oliveira F522
Adelina Pinheiro Santos C524 C560 T568 C528 C529
Alberto Quaranta
Alberto Salleo
Albina A Nikolaeva
Albino Martins
Alda de Paiva Castro
Aldilene Saraiva-Souza
Aldo Eloizo Job
Aldo Felix Craievich
Aldo Gúzman
Aldo José Gorgatti Zarbin
Aldo Luna
Aldo Roberto Ometto
Alejandra Hortencia Miranda González
Alejandro Alija
Alejandro Butera
Alejandro Jara
Alejandro Luis Miccio
Alejandro Zúñiga
Aleksandar Miletic
Aleksei Yaremchenko
Além-Mar Bernardes Gonçalves
Alex MRZEL
Alessandra Arcoverde C. Zonari
Alessandra Cremasco
Alessandra D Epifanio
Alessandra Firmino
Alessandra Nogueira Santos
Alessandra Pereira
Alessandra Rodrigues
Alessandra Zenatti
Alessandro Chiasera
Alessandro Girella
Alessandro Granato
Alex Ander Oliveira
Alex Boiarski Cezar
Alex Fabiano Cortez Campos
Alex Maia do Nascimento
Alex Matos Costa
Alex Miranda Constantino
Alex Penlidis
Alex Zettl
Alexander Carreño
Alexander Cortes
Alexander Evans
Alexander Nikolaevich Guz
Alexander Polasek
Alexander Ruden
Alexander Vasilievich Zorin
Alexander Victorovich Pisyakov
Alexander Vladimirovich Serbin
Alexandra A P Mansur
Alexandra de Oliveira França Hayama
Alexandra Manzoli
Alexandre Alberto Chaves Cotta
Alexandre Antunes Ribeiro
Alexandre Augusto Asselli
Alexandre Barbosa de Oliveira
Alexandre Bellegard Farina
Alexandre Castro Lanfredi
Alexandre Cestari
Alexandre Da Cas Viegas
Alexandre Fassini Michels
Alexandre Félix Fraga
Alexandre Felten
Alexandre Fontes Carvalho
Alexandre Luis Gasparin
Alexandre Malta Rossi
Alexandre Marletta
Alexandre Mello
Alexandre Mikowski
Alexandre Nakao Odashiro
Alexandre Perez Umpierre
Alexandre Pinheiro da Silva
Alexandre R Soares
Alexandre Reily Rocha
Alexandre Rossi
Alexandre Sandri Câmara
Alexandre Taschetto de Castro
Alexandre Vargas Grillo
Alexandre Zirpoli Simoes
Alexandros Lamprou
Alexei Yu Kuznetsov
Alexey Valentinovich Trukhanov
Alexis Adolfo Amézaga
Alexis Deschamps
Alexsandro Oliveira
Alexsandro Silvestre da Rocha
Alfonso Oscar Viñas
Alfonso San-Miguel
Alfredo Artigas
Alfredo Artigas
Alfredo Carlos Peterlevitz  D548 D643 I606
Alfredo Cruz-Orea    H619
Alfredo de Miranda Goes A667
Alfredo Duarte      PBB14
Alfredo Mayall Simas H644 H645
Alfredo Miranda Góes BB510
Alfredo Tolley   D603
Ali Abdullah     G503
Ali Dehshahri   G546 PH5
Ali Khademhosseini
Ali Mohammad Tamaddon G521 G522 G529
Ali R Koymen        E559
Ali Sayir            O527 PO4
Alice Gonçalves Osório Y507 H584 H609 X571 Z549
Alicia Esther Ares  F528
Alicia Rodríguez-Pulido Y557 Y558
Alicia Vera Marquina  L528 X517
Alida Bellosi       M529
Aline Alves Corrêa  BB641
Aline Bruna da Silva  X585
Aline da Silva Santos
Aline Fernandes    US55
Aline L Schoenhalz  Y537
Aline Manteiga Barreiro H638
Aline Ramos Barboza BB582
Aline Silva Magalhães H617 H618
Aline Turini Bolsoni S535
Aline Abbaspourrad  C540
Alison Abreu da Silva A610
Alla Evgenievna Tarasova A513
Alla Iljinична Sherle	I504
Alluska Nascimento Simões D513
Amantas Pivrikas     M518
Almir Oliveira Neto   K529
Alois Lugstein       E530 Q508
Aloísio Nelmo Klein  R515
Alok Kumar Ravi     G504
Alp Sehirlioglu  O527 PO4
Alpídio Boada Sucre H647
Altaír Soria Pereira R517 V531 U532 V549
Aluizio G Brasil Junior G542
Alvaro Antonio Alencar de Queiroz I511 H597 I581 A625 G547
Alvaro E Aliaga Ceron PI2
Alvaro Luis Morales  E594
Álvaro Mariño Camargo E584 E599
Alvaro Mombru      E571
Alvaro Pulzara Mora E647
Alvaro Rafael Muñoz-Castro BB699 M554
Álvaro Santos Alves BB719
Álvaro Sebastián Nuñez Vásquez E573 E610
Álvaro Sebastian Núñez Vásquez E617
Amado Cruz Crespo U509
Amanda Camerini Lima L547
Amanda Fernandes Gouveia BB613 BB612
Amanda Generosi M505
Amanda M. D. Leite A531
Amanda Tosi H535
Amar Nath Maitra G504
Amauri Garcia V520
Amedeo Marini V524
Américo Tristão Bernardes Y518 T546 Y550
Ailton Martins Santos A523 A568 A632
Aminta Mendoza D547
Amit Keren E512
Amitava Patra A509
Amos Sharoni PE16
Ana X556
Ana A Winkler Hechenleitner A512
Ana Augusta Mendonca Oliveira S563 S564 I577
Ana Carolina Campos Santana D587
Ana Carolina Correa L522
Ana Carolina Fontínele Silva U576
Ana Carolina Santana de Mello M551
Ana Clara Raposo Salazar I593
Ana Cláudia Araújo D576
Ana Claudia Arias PT3
Ana Cláudia Bernardes-Silva L546
Ana Claudina Oliveira Hirschmann X555
Ana Cláudia Vaz da Araújo D566 A663
Ana Consuelo Felipe T552
Ana Correira Tavares I532
Ana Cristina F Melo Costa D515 D513
Ana Cristina Moreira G507
Ana Cristina Nunes Vidal W508
Ana Cláudia Silva A617
Ana Elizabeth Silva M518 M520 M531 M532
Ana Flávia Nogueira M529 T547 O522
Ana Gabriela Leyva G534 I553 K561
Ana Graci Brito-Maduro T552 I585
Ana Helena de Almeida Bressiani H544 H611 H626
Ana Hilda Marquez H647
Ana Laura Elias-Arriaga F525 C568
Ana Lívia Senedese H530 H581
Arshak Poghossian  I508
Artemis Marti Ceschin  T524 T575 Q523 Q525
Arthur Francisco de Paiva Alcântara  BB715 BB712 BB596 H642
Arthur J Epstein  E554
Arthur M B Braga  I570
Arthur T. Motta  PN3
Artur de Jesus Motheo  X570
Artur Domingues  D574 E601
Artur José dos Santos Mascarenhas  D515
Artur Mariano de Sousa Malafaia  X553
Artur Silva Carriço  E644 E636
Arturo Mendez Sanchez  U548
Arumugam Manthiram  PD9 PJ4
Arun Devaraj  Z530
Ary Leonidio do Carmo Assunção  C557
Ashish Bhupatprasad Chourasia  X508
Ashok K Shukla  K552
Ashok Manikrao Biradar  U540
Asif Khan  PM16
Assis Vicente Benedetti  R545
Astrid Bengtsson  PAA7
Athanasios Mamalis  B531
Atsuko Kosuga  PO2
Atsushi Yamamoto  O516
Atul Srivastava  S506
Augusto Celso Antunes  H625
Aureomar Ferreira Martins  U504
Auristela Carla de Miranda  BB720
Auro Atsuchi Tanaka  I569
Aurora Molina  D630
Ausenda Mendes  H636
Axel Enders  E649
Axel Hoffmann  E540 E578
Azadeh Ashrafizadeh  E609
Azucena Mudarra Navarro  S576 E626 E627

B

B H Koo  S580
B R Mehta  PM12
Babu Kothandapani  A517
Bal Mukund Dhar  Q503
Baldomero Kato da Silva  H577
Bangke Zheng  PA8
Barbara Mano  L508
Bárbara Maraston Fraygola  S539 S540 S592
Bárbara Moreira da Conceição  H541
Barbara Paci  M505
Bárbara Taciana Vasconcelos Cavalcanti  BB628
Barry Carter  S581 PAA4 PS4
Bart Laenens  PE9
Bartek Kardasz  E525
Bartel Van Waeyenberge  E604
Bartolomeu Cruz Viana  D586 A596
Basit Hajra Hajra  PI1
Beate Saegesser Santos  D563 D578 G541 H631 G542
Beatriz Antoniassi  BB624 BB651
Beatriz Cela  K553
Beatriz Cruz Muñoz  X577
Beatriz Rivas-Murias  O508
Belinazir do Espírito Santo  D502
Belita Koiller  PE13
Belkaid Med Said  M509 P512
Bénédicte Vertruyen  O508
Benedito Antonio Lopes Fonseca  G507
Benicio de Barros Neto  Y514
Benito Santos  U536
Benjamin Chu  PL1
Benjamin Fragneaud  B510 A559 PB2
Benjamin Glettner  PT12
Benjamin Hsiao  PL1
Benji Maruyama  F525
Benoit Gosselin  Q537
Beranardo Almeida Neves  C566
<table>
<thead>
<tr>
<th>Name</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berenice Mendonça Gonzalez</td>
<td>Z519</td>
</tr>
<tr>
<td>Bermudez Rafael Pujada</td>
<td>H624 H632</td>
</tr>
<tr>
<td>Bernabe Rebollo Plata</td>
<td>L571</td>
</tr>
<tr>
<td>Bernadette A Hernandez-Sanchez</td>
<td>AA529</td>
</tr>
<tr>
<td>Bernard Cretin</td>
<td>B506</td>
</tr>
<tr>
<td>Bernardo Eltz</td>
<td>R561</td>
</tr>
<tr>
<td>Bernardo Ruegger Almeida Neves</td>
<td>C514 D575 C558</td>
</tr>
<tr>
<td>Bernd Schulz</td>
<td>Z501 V510</td>
</tr>
<tr>
<td>Bertrand Tumbain Sone</td>
<td>J521</td>
</tr>
<tr>
<td>Betina Ghiel Zanetti-Ramos</td>
<td>I587</td>
</tr>
<tr>
<td>Bhagwati S Bishnoi</td>
<td>S529</td>
</tr>
<tr>
<td>Bharati Panigrahy</td>
<td>E605</td>
</tr>
<tr>
<td>Bianca de Sousa Pizzorno</td>
<td>B507</td>
</tr>
<tr>
<td>Bianca Ferreira</td>
<td>G519</td>
</tr>
<tr>
<td>Bianca Oliveira</td>
<td>L555</td>
</tr>
<tr>
<td>Biao Yan</td>
<td>E566 Z515 E591</td>
</tr>
<tr>
<td>Bizhan Malaekeh-Nikouei</td>
<td>G501</td>
</tr>
<tr>
<td>Björn C Hauback</td>
<td>PV11</td>
</tr>
<tr>
<td>Blake LeRoy Stevens</td>
<td>S614</td>
</tr>
<tr>
<td>Bianca Hernando</td>
<td>E549</td>
</tr>
<tr>
<td>Bluma Guenther Soares</td>
<td>A546 P528 B539 PAA12</td>
</tr>
<tr>
<td>Bo Sundman</td>
<td>PN4</td>
</tr>
<tr>
<td>Bobby Sumpter</td>
<td>C570</td>
</tr>
<tr>
<td>Bogdan Dabrowski</td>
<td>E532</td>
</tr>
<tr>
<td>Bohuslav Masek</td>
<td>X522</td>
</tr>
<tr>
<td>Bojan A Marinkovic</td>
<td>S504 D554 D594</td>
</tr>
<tr>
<td>Bor-Sen Chiou</td>
<td>L530</td>
</tr>
<tr>
<td>Boris Alekseivich Potekhin</td>
<td>V550</td>
</tr>
<tr>
<td>Boris Leighton</td>
<td>E544</td>
</tr>
<tr>
<td>Boris P Toperverg</td>
<td>PE4</td>
</tr>
<tr>
<td>Bradley D Olsen</td>
<td>PP5</td>
</tr>
<tr>
<td>Bradley J Nelson</td>
<td>R513</td>
</tr>
<tr>
<td>Branka Babic</td>
<td>A548</td>
</tr>
<tr>
<td>Branko Kolaric</td>
<td>M517</td>
</tr>
<tr>
<td>Branko Matovic</td>
<td>A548 E553</td>
</tr>
<tr>
<td>Branko Skoric</td>
<td>R533</td>
</tr>
<tr>
<td>Brenda Acosta</td>
<td>F527</td>
</tr>
<tr>
<td>Breno Rodrigues Segatto</td>
<td>E620</td>
</tr>
<tr>
<td>Bret Viktor Heinrich</td>
<td>E525</td>
</tr>
<tr>
<td>Brian Austin</td>
<td>BB665 BB676</td>
</tr>
<tr>
<td>Brian Charles Peoples</td>
<td>A562</td>
</tr>
<tr>
<td>Brian Kingston Morfitt</td>
<td>PG1</td>
</tr>
<tr>
<td>Bronislava Gorr</td>
<td>X534</td>
</tr>
<tr>
<td>Bruna Clarissa Guimarães</td>
<td>X548</td>
</tr>
<tr>
<td>Bruna Freitas Guedes</td>
<td>X559</td>
</tr>
<tr>
<td>Bruna Silveira Lira</td>
<td>L558</td>
</tr>
<tr>
<td>Bruno Bassi</td>
<td>T516</td>
</tr>
<tr>
<td>Bruno Bellini Medeiros</td>
<td>V565</td>
</tr>
<tr>
<td>Bruno Caleffi</td>
<td>BB595</td>
</tr>
<tr>
<td>Bruno Cecarelli</td>
<td>Y527 C564</td>
</tr>
<tr>
<td>Bruno de Jesus Oliveira</td>
<td>T563 T570</td>
</tr>
<tr>
<td>Bruno Di Lello</td>
<td>D573</td>
</tr>
<tr>
<td>Bruno Fernando Nowacki</td>
<td>Q531</td>
</tr>
<tr>
<td>Bruno Henrique Ramos Lima</td>
<td>M522 M523</td>
</tr>
<tr>
<td>Bruno Leonardo de Sena Costa</td>
<td>BB575</td>
</tr>
<tr>
<td>Bruno Lopes</td>
<td>I501</td>
</tr>
<tr>
<td>Bruno Mattos Souza de Souza Melo</td>
<td>Y549</td>
</tr>
<tr>
<td>Bruno Nowacki</td>
<td>M518</td>
</tr>
<tr>
<td>Bruno Reis Cardoso</td>
<td>Z535</td>
</tr>
<tr>
<td>Bruno Ribeiro de Matos</td>
<td>K508 K539 K563</td>
</tr>
<tr>
<td>Bruno Rocha Santos Lemos</td>
<td>C528</td>
</tr>
<tr>
<td>Bruno Vieira da Cunha Martins</td>
<td>B529 F519</td>
</tr>
<tr>
<td>Bryan McCulloch</td>
<td>PP5</td>
</tr>
<tr>
<td>Burcu Tunc</td>
<td>H516</td>
</tr>
<tr>
<td>Byron John Villis</td>
<td>M516</td>
</tr>
<tr>
<td>Byung Jun Jung</td>
<td>Q503</td>
</tr>
</tbody>
</table>
Cristiane da Silva Melo G523 G524
Cristiane Kelly de Oliveira M511
Cristiane M Silva L533
Cristiane Marin R531
Cristiane Xavier Resende H538 H569
Cristiane Zuconelli I540
Cristiano Bronzoni Z550
Cristiano Brunetti Z527
Cristiano Fantini C524 T568
Cristiano Giacomelli R524 R528 R567
Cristiano Krug R527
Cristiano Legnani C519 T537 T559
Cristiano M S da Costa D600
Cristina de Garcia Venturini G520 D608
Cristina Honorato Castro I585
Cristina Jardelino Lima H623 H643
Cristina Pacheco Soares H513 I528
Cristina Russo Guimarães Furtado H541
Cristina Tristão Andrade C508 H589 PL3
Cristopher Morales E543
Curtis Frank H639
Cyndia Lancelotti H596
Cynthia Ferreira Alves A631
Cyril Véchambre L503

D

D Fuchs S548
D S Misra E605
D Stoever PK3
D Thomazini L590
D Wexler PV8
D. Perez de Lara PE16
Dachamir Hotza U517 U519 K517 U523
K522 U535 BB646 U550
U511 U510
Dácio Moreira Souza R558 R565
Dae Ho Yoon Q519
Dagmar Ruth Stach-Machado I549
Dagoberto de Oliveira Silva D608
Dairo Hernán Mesa X550
Daisuke Iida PM5
Dalber Ruben Sanchez Candela S505 X566 X564
X565 X567
Dale Waters H639
Daliana Gomes Borges D612
Daliana Müller H606
Damir Kakas R533
Dan Dahlberg PE10
Danay Rosa Dupeyron Martell G539
Daniel Augusto de Andrade Santos D598 E635 D645
Daniel Brito Niedu S552
Daniel Buzo de Lima BB603
Daniel Cabello Z501
Daniel Campana Rascio K529
Daniel Cunha Elias C566
Daniel de Araujo Macedo K567 K553 K568
Daniel Eiras A505
Daniel Fonseca Segura P518
Daniel Fruchart V517 V535 PV17
Daniel G Nocera I505
Daniel Gomes Vercosa C559
Daniel Grando Stroppa F505
Daniel Guillermo Gálvez D522
Daniel Llamosa E516
Daniel Luiz Silva M515
Daniel M Andrade C524 C560
Daniel Mario Ugarte B529 F515 F516 PF4
Daniel Pereira Goulart X579
Daniel Ramírez González C568
Daniel Reinaldo Cornejo E619 E629
Daniel Rodrigo Leiva V517 V568
Daniel Sierra Yoshikawa R550
Daniel Soares de Almeida U567 U566
Daniel Soares Velasco A526
Daniel Souza Correa P514 M527
Daniel Ugarte F514 B523 F519
Daniel Veras Ribeiro U506
Daniel Víctor Amaral Silva BB589
Daniel Zanetti de Florio K549 T558 K558 K563
Daniela Lopes Mafra C518 PC4
Daniela M. Fernandes A512
Daniela Wollmann RS68
Daniel Aparecida Pereira Reis X531 X532 X555
        U567 U566
       
Daniel Henrique de Macedo Matinelli U564
Daniele Pereira da Silva Dalto A579
Daniele Pergolesi K512 K514
Daniele Stradi BB543
Daniela Gomes Lima Cavalcante BB555
        BB591
Danielle Berger D570
Danielle Fernanda de Melo Oliveira PAA11
        D590 C557 C565
Danilo Augusto Peres A590 C557 C565
        RS56
Danilo Brasil Ribeiro V542 V544 V545 V555
        A560 I589
Danilo Maciel Barquete S524
        V542 V544 V545 V555
Danilo Manzani L588
        X522
Danilo Roque Huanca X522
        L572
Danilo Santos Cruz L572
        HS86
Danilo Suworov BB581 BB654 BB561
        W501
Daniely Melo Ribeiro BB581 BB654 BB561
        RS39
Danny Guzman R558 R560 R565
        RS59
Danny Pilar Araucano Holgado R558 R560 R565
        RS59
    
Dante Ferreira Franceschini L588
Dante Ribeiro X522
Danuse Klauberova L572
Danut Palubinskaik H586
Danyel Scheidegger Soboll P536
Darcy Hiroe Fuji Kanda V532 V533
Dariusz Zasada N504 PAA2
Daryush ILA
Douglas Galvão  F514 B523
Douglas Gouvêa  E580 D612
Douglas L Mills  E542
Douglas Langie da Silva  E612 A629
Douglas Marcel Gonçalves Leite  BB587
Douglas Rodrigues Miquita  F511
Douglas Soares Galvão  T544 Y547 Y548
Driely Rodrigues Gomes  H623 H643
Ducinei Garcia  S519 S521 S533 S590 U557
       S592 S594 D619 S520 S540
Dulce Maria Araujo Melo  D526 BB588 BB589 K567
       L523 BB616 BB622 BB720
       BB628 BB638 X559 U551
       D584 C557 BB684 D602
       X574 BB691 BB692 BB693
       BB694 C565 U564 BB711
       K568 D593 A590
       K516 K518 K526
Dulcina Maria Pinatti Ferreira de Souza  C513
Duniesks Roberto Gonzalez Larrude  L579
Durciene Alves Silva  X575 X576
Durval Rodrigues Jr.  PV14
Dusan Janickovic  I588
Dyovani Coelho  E de Biasi  E524
                  E Djurado  PK2
                  E Morgado Jr  D600
                  E Ruiz-Trejo  PK7
                  Ebrahim Najafi  U512
                  Eckhart Mueller  O515
                  Edcleide Maria Araujo  A531
                  Edelma Eleto Silva  H531
                  Edeltraud Materna Morris  Z513
                  Eden Santos Silva  X547 X573
                  Eder Najar Lopes  Z539
                  Edesia Martins Barros Sousa  A552 G525 D540 D611
                  Edgar Alfonso  R564
                  Edgar Alves Araujo Junior  T563
                  Edgar Sanches  Q546
                  Edgardo Pineda A. Pineda  A512
                  Edilene Deise da Silva  BB643
                  Edilson Moura Pinto  I525
                  Edina Lurdes Bloot  U523
                  Edinilton Morais Cavalcante  X537
                  Edison Roberto Leite  D529 M522 M523 BB597
                 Y532 Y538 BB675
                  Edisson Morgado Jr  D554
                  Edivaldo Luiz Queiroz  T574
                  Edjarmy Almeida  W503
                  Edjane Buriti Silva  D620
                  Edla Moraes de Abreu Pereira  G507
                  Edmar Avellar Soares  S524
                  Edmar de Deus Vaz da Silva  K538
                  Edna Regina Spada  E602
                  Ednan Joanni  J506 S612 J510
                  Edoardo Magnone  K505
                  Edoardo Mazza  X517
                  Edson Cocchieri Botelho  C571 R571

254 255
Edson Giuliani Ramos Fernandes  
Edson Hernández Cortina  
Edson José de Carvalho  
Edson Laureto  
Edson Leite  
Edson Moschim  
Edson Nossol  
Edson Passamani Caetano  
Edson Roberto Leite  
Eduard Federovich Oleinik  
Eduard Malenovsky  
Eduardo Albuquerque Brocchi  
Eduardo Antonelli  
Eduardo Bedê Barros  
Eduardo Bellini Ferreira  
Eduardo Bertoni Fonseca  
Eduardo Blando  
Eduardo Caetano Souza  
Eduardo Carasek  
Eduardo Ceretta Moreira  
Eduardo Costa da Silva  
Eduardo Cruz-Silva  
Eduardo de Faria Franca  
Eduardo de Oliveira da Silva  
Eduardo Donoso  
Eduardo dos Santos Ferreira  
Eduardo Etzberger Feistauer  
Eduardo Ferreira Molina  
Eduardo Franco de Monlevade  
Eduardo Galhardo  
Eduardo Jorge da Silva Fonseca  
Eduardo Jose Nassar  
Eduardo Jose Zuniga-Marquez  
Eduardo Kirinus Tentardini  
Eduardo Martins Lopes  
Eduardo Mauro Nascimento  
Eduardo Menendez  
Eduardo Menéndez-Prupin  
Eduardo Mioduski Szesz  
Eduardo Moraes  
Eduardo Noberto Codaro  
Eduardo Ono  
Eduardo Pabon Vanegas  
Eduardo Padrón Hernández  
Eduardo Perini Muniz  
Eduardo Raimundo Dias Nunes

I581 I556 G549 G553  
L571  
E538  
P519 P520  
F505  
E579  
I515 A537  
BB536 BB535 E620  
BB606 BB607 D572 BB686  
I504  
H518  
US33 F517 W508  
D505 D520 Q516 Q551 A635  
C559 PC7  
V531  
Y528  
R517  
D610  
I572  
M553  
I526  
C570  
I548 G550  
A668  
W510  
A503 A506  
K538 T572  
V546  
Z526  
P503  
A621  
H550  
O539  
R522  
I548 G550  
R523  
Y568  
Y521  
H588 H627  
BB527 BB528 BB533  
BB672 BB526 BB598  
H529 X539 Y535  
M519 I536  
C530  
E535  
X505  
BB616  
S534  
T544 T562 T576 A578  
V559 V560  
T572  
A584  
R502  
BB515  
P529  
L575  
L568  
PA1  
E528  
T554  
BB722  
H614  
R523 H586 B528  
J506 J510  
BB568 BB569 BB571  
BB605 BB620 BB626  
BB627 BB685 BB696  
V528 X527  
BB550  
B533 J509  
BB720  
T556  
C531  
A573  
PG6  
F503 H535  
H511  
A623  
PH3  
K558  
I524 H544 I528 H545  
Q530  
Y507  
K534 K542 K544 K548  
BB682 D610  
E5ian Ayres  
H634  
Eliângela de Morais Teixeira  
L522 L552  
Elías Barros Santos  
D524  
Elías Berni  
I546  
Elías da Costa  
A536  
Elías Ramos Souza  
BB599  
Elías Silva Santos  
BB599  
Elida Natasche de Medeiros Gurgel Pinto  
BB720 C565  
Elidia Vetter Ferri  
BB605
Fabio Ricardo Bento A649
Fábio Ruiz Simões A602
Fábio Santana dos Santos M548
Fábio Simões de Vicente D544
Fabio Vieira Junges D601
Fabiola Azucena Gutiérrez S607
Fabiola Danielli Bastos de Sousa A520
Fabrice Leroux A530
Fabricia Roberta Lunas D626
Fabricio Dingee H592
Fabricio Macedo Souza T518
Fabricio Moraes de Almeida H593
Fabricio Simão dos Santos V566
Fabrizio Marani U507
Fagner T Gomes Vieira BB620 BB634
Fahad S Al-Mubaddel P537
Fanny Béron E539 E549
Farshad Hoseini Shirazi G522
Faruk Fonthal Rico C530 Q522 M534
M538 M543
Fateh Fazeli PX4
Fausto Lopes Catto V561
Fauza Ahmad Aouada L530 L531
Fauza Anaissi A664
Fauze Jaco Anaissi A591 A613
Favio Oliveira de Paula A627
FCL Alvarenga H596
Federica – Bondioli U547
Federico Cebollada E654
Federico Golmar S576
Federico Guilherme de Carvalho Cunha A652
Federico Rosei PT2 PAA1
Federico Sequeda R572 R573
Feliciano José Ricardo Cangue R555
Feliciano Sanchez–Sinencio D643 I606
Felipe Augusto Moro Loureiro K554 K555
Felipe Azevedo Rios Silva Q525
Felipe Barra BB707 BB708
Felipe Bertelli Y544
Felipe Bohn E545
Felipe Cemin R524 X569 R561 S567
Felipe Fortes Lima H589
Felipe Kremer D599 D615
Felipe Legorreta Garcia E603
Felipe Lipp Bregolin M553
Felipe Manuel Castro Cerda Z501
Felipe Perisse Duarte Lopes L548
Guilhermo León Miranda Pedraza  
Guillermo Gonzalez  
Guillermo Solorzano  
Guinéa Brasil Camargo Cardoso  
Gunar Vingre da Silva Mota  
Gustav Van Tendeloo  
Gustavo Adolfo Zambrano  
Gustavo Aristides Santana Martínez  
Gustavo Braga Alcântara  
Gustavo Brunetto  
Gustavo Campos Belmonte  
Gustavo Enrique Lascalea  
Gustavo Ferreira da Silva  
Gustavo Fóscolo de Moura Gomes  
Gustavo Frigi Perotti  
Gustavo Grinblat  
Gustavo Henrique Albuquerque  
Gustavo Martini Dalpian  
Gustavo Oliveira Rebouças  
Gustavo Paganini Canal  
Gustavo Queiroz Chaves  
Gustavo Roberto Ramos  
Gustavo Sanguino Dias  
M521 M561  
C544  
V510 F517 E595 F520  
K554 K555 G539  
H556  
T555  
A571 C523 PF3  
B502 D519  
W504  
E577  
Y547  
H547  
D551  
E653  
A599  
E560  
L519  
Y537 Y541 Y542  
E644  
H635  
BB678  
V549  
S549  
S519 S533  
H Basit  
H Li  
H Mercedes Villullas  
Hai-Guk Jeong  
Hadis Morkoc  
Hadma Sousa Ferreira  
Hafid Aourag  
Haidong Zhou  
Haiyan Chen  
Hakan Cinar  
Hamed Akhiani  
Hameed A Al Attar  
Hamid Reza Moghimi  
Hamide Kavak  
Hamilton de Felipe  
Hamilton Ferreira Gomes de Abreu  
Hamilton Magalhães Viana  
Hamish L Fraser  
hamzeh nakhaee Motlagh  
Han Htoon  
Hana Jirkova  
Hans-Ulrich Habermeier  
Hans Dieter Pfannes  
Hans Jorge Fecht  
Hans Juergen Christ  
Hans Micklitz  
Hans Peter Buchkremer  
Hansu Birol  
Hao Wu  
Hari Kishan  
Harirahan Srikanth  
Harisha Arikady  
Harold Ivan Lozano  
Harold Michels  
Haroldo Araujo Ponte  
Haroldo Cesar Beserra Paula  
I598  
BB503 BB504 BB505  
PK1  
X545 X568  
F533  
D562  
Y561  
E520  
O515  
E567 E590  
A504  
P14  
G522  
S609  
H529  
Z508  
D612  
Z530 X580  
E522  
C518  
X522  
PAA6 PS3  
S524 E623 E653  
PV6  
X534 X535  
E595 E596  
H527 J522 PK9  
K522 K517  
X512  
E579  
E585 S544  
P523  
S603  
PW2  
J516  
L517 L579
Inacio Regiani
Iñaki Mondragon
Iñaki Orue
Inaya Correa Barbosa Lima
Indhira Oliveira Maciel
Indong Shin
Inês Pereyra
Inês Rosane Oliveira
Inês Sabioni Resck
Inez Valéria Pagotto Yoshida
Ingrid M Graz
Ingrid Oriana Ponce
Ingrid Távora Weber
Iouri Poussep
Irajá Nascimento Filho
Irani Santos
Irantécio Mendonça Ferreira
Irantzu Llarena
Irene Izquierdo-Lorenzo
Irineu Hattenhauer
Iris Alvarez-Armas
Iruson Baskaran
Isabel C S Carvalho
Isabel Pastoriza-Santos
Isabel Romero Grova
Isabela Cerqueira Barreto
Isabele Bulhões Aranha
Isamu Akasaki
Isil Kutbay
Isis Nunes de Souza
Ismael Oscar Fábregas
Ismayil
Ismeli Alfonso López
Isnaldo Jose de Souza Coelho
Isolda Costa
Israel Jacob Rabin Baumvol
Italo Odone Mazali
Itamara Farias Leite
Iuri Pepe
Iuri Stefani Brandt
Iury Steiner Bezerra
Ivair Aparecido Santos
Ivaldo Torres Chavez
Ivan Cesar Pessoa Gaspar
Ivan Frederico Lupiano Dias
Ivan Gilberto Sandoval Falleiros
Ivan Guillermo Solorzano
Ivan Helmhut Bechtold
Ivan K Schuller
Ivan Kohn Schuller
Ivan Korin
Ivan Mikhailovich Afanasov
Ivan Napoleão Bastos
Ivan Pedro Lobato Hoyos
Ivan Skorvanek
Ivana Lourenço Mello
Ivani de Souza Bott
Ivani Malvestiti
Ivanise Gaubeur
Ive Silvestre Almeida
Ivet Gil Chavarria
Ivo de Castro Oliveira
Ivo Mateus Pinatti
Ivonne Chavez
Izabel Souza Azevedo
Izaque Alves Maia
Ivair Aparecido Santos
S519 S520 S521 S533
S594 S600 S597 S590
C530 M534
<table>
<thead>
<tr>
<th>Name</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juan Pablo Casas</td>
<td>BB666</td>
</tr>
<tr>
<td>Juan Pablo Lozano</td>
<td>W510</td>
</tr>
<tr>
<td>Juan Pedro Bretas Roa</td>
<td>I511</td>
</tr>
<tr>
<td>Juan Peña-Martínez</td>
<td>K561</td>
</tr>
<tr>
<td>Juan Radilla</td>
<td>Y543</td>
</tr>
<tr>
<td>Juan Ramon Collet Lacoste</td>
<td>X523</td>
</tr>
<tr>
<td>Judith Diaz</td>
<td>A570</td>
</tr>
<tr>
<td>Judith Pessoa de Andrade Feitosa</td>
<td>L579</td>
</tr>
<tr>
<td>Juergen Alois Schaefer</td>
<td>C515</td>
</tr>
<tr>
<td>Jürgen Eckert</td>
<td>PV1</td>
</tr>
<tr>
<td>Jürgen Lindner</td>
<td>E542</td>
</tr>
<tr>
<td>Julia Lyubina</td>
<td>PE14</td>
</tr>
<tr>
<td>Julia R Greer</td>
<td>PB1</td>
</tr>
<tr>
<td>Julian Andres Angel</td>
<td>BB673</td>
</tr>
<tr>
<td>Julian Andres Munevar Cagigas</td>
<td>SS05</td>
</tr>
<tr>
<td>Julian Arnaldo Avila</td>
<td>X528</td>
</tr>
<tr>
<td>Julian Mauricio Rendón</td>
<td>S566</td>
</tr>
<tr>
<td>Juliana Aparecido Lucindo</td>
<td>A573</td>
</tr>
<tr>
<td>Juliana Batista Silva</td>
<td>D536</td>
</tr>
<tr>
<td>Juliana Carlos Cancino</td>
<td>IS58</td>
</tr>
<tr>
<td>Juliana Castro Macêdo-Fonsêca</td>
<td>A595</td>
</tr>
<tr>
<td>Juliana Coatrini Soares</td>
<td>I602 I604</td>
</tr>
<tr>
<td>Juliana da Silva Bernardes</td>
<td>F510</td>
</tr>
<tr>
<td>Juliana de Jesus Rocha Pardaulil</td>
<td>D649 D639</td>
</tr>
<tr>
<td>Juliana de Oliveira Pimenta</td>
<td>F531</td>
</tr>
<tr>
<td>Juliana Fatima Souza</td>
<td>RS34</td>
</tr>
<tr>
<td>Juliana Feletto Silveira Costa Lopes</td>
<td>Z517 Z518</td>
</tr>
<tr>
<td>Juliana Flor</td>
<td>D641</td>
</tr>
<tr>
<td>Juliana Henrques Pereira</td>
<td>G509</td>
</tr>
<tr>
<td>Juliana Marchi</td>
<td>H544 H626</td>
</tr>
<tr>
<td>Juliana Mesquita de Andrade</td>
<td>D554</td>
</tr>
<tr>
<td>Juliana Miyoshi</td>
<td>IS74</td>
</tr>
<tr>
<td>Juliana Oyan Roque</td>
<td>Z552</td>
</tr>
<tr>
<td>Juliana Santiago dos Santos</td>
<td>M519 I536</td>
</tr>
<tr>
<td>Juliana Sousa Gaçalves</td>
<td>BB590</td>
</tr>
<tr>
<td>Juliana Souza Silva</td>
<td>D605</td>
</tr>
<tr>
<td>Juliana Steffens</td>
<td>BB639</td>
</tr>
<tr>
<td>Juliane Vicenzi</td>
<td>RS18 L528</td>
</tr>
<tr>
<td>Juliano Alexandre Chaker</td>
<td>G531</td>
</tr>
<tr>
<td>Juliano Alves Bonacin</td>
<td>S602</td>
</tr>
<tr>
<td>Juliano Alves Gomes</td>
<td>A627</td>
</tr>
<tr>
<td>Juliano de Andrade Gomes</td>
<td>E650 V557</td>
</tr>
<tr>
<td>Juliano Elvis Oliveira</td>
<td>IS50 I551</td>
</tr>
<tr>
<td>Juliano Marini</td>
<td>A600</td>
</tr>
<tr>
<td>Juliano Pedro Scandolara</td>
<td>U529</td>
</tr>
<tr>
<td>Julien Bachmann</td>
<td>E543</td>
</tr>
<tr>
<td>Julien Esteban</td>
<td>RS57</td>
</tr>
<tr>
<td>Julien Jourdan</td>
<td>N503</td>
</tr>
<tr>
<td>Julio Carlos Afonso</td>
<td>BB657</td>
</tr>
<tr>
<td>Julio Cesar Artur</td>
<td>SS34</td>
</tr>
<tr>
<td>Julio Cesar Caicedo</td>
<td>BS05 R509 R551</td>
</tr>
<tr>
<td>Julio Cesar de Souza Francisco</td>
<td>X520</td>
</tr>
<tr>
<td>Julio Cesar Freitas</td>
<td>US50</td>
</tr>
<tr>
<td>Julio Cesar Goes</td>
<td>US52</td>
</tr>
<tr>
<td>Julio Cesar Gonzalez</td>
<td>E628</td>
</tr>
<tr>
<td>Júlio César Martins Da Silva</td>
<td>K528 K529</td>
</tr>
<tr>
<td>Júlio Cesar Oliveira Freitas</td>
<td>BB622 BB691 BB692</td>
</tr>
<tr>
<td>Julio Cesar Passos</td>
<td>JS24</td>
</tr>
<tr>
<td>Julio César Pereira Barbosa</td>
<td>BB575</td>
</tr>
<tr>
<td>Julio Cesar Pinheiro de Santana</td>
<td>X515</td>
</tr>
<tr>
<td>Júlio César Szczancoski</td>
<td>BB715 BB562 BB712</td>
</tr>
<tr>
<td>Julio Cesar Ugucioni</td>
<td>IS43</td>
</tr>
<tr>
<td>Júlio Cezar Bellon</td>
<td>X530</td>
</tr>
<tr>
<td>Julio E. Rodriguez</td>
<td>O502 O503</td>
</tr>
<tr>
<td>Julio Guimpel</td>
<td>SS10 E560</td>
</tr>
<tr>
<td>Julio Klein Neves</td>
<td>RS68</td>
</tr>
<tr>
<td>Julio Martins Ximenes</td>
<td>AS38</td>
</tr>
<tr>
<td>Julio Miranda Pureza</td>
<td>RS63</td>
</tr>
<tr>
<td>Julio Ricardo Sambrano</td>
<td>BB565 AA506 BB587</td>
</tr>
<tr>
<td>Julio Ximenes</td>
<td>BU603 BB613 BB612</td>
</tr>
<tr>
<td>Juliano Alexandre Chaker</td>
<td>BU615 BB660</td>
</tr>
<tr>
<td>Julián César González</td>
<td>U543</td>
</tr>
<tr>
<td>Julius G Vancso</td>
<td>B504 P507 P510</td>
</tr>
<tr>
<td>Jung Chang Uk</td>
<td>S532</td>
</tr>
<tr>
<td>Júniu Nunes Paula Stief</td>
<td>L569</td>
</tr>
<tr>
<td>Junya Inoue</td>
<td>X518 V521 X519</td>
</tr>
<tr>
<td>Junyeon Hwang</td>
<td>X580</td>
</tr>
<tr>
<td>Jussara de Fatima Barbosa Fonseca</td>
<td>HS80</td>
</tr>
<tr>
<td>Justiniano Quispe Marcatoma</td>
<td>BB510 BB517 BB535</td>
</tr>
<tr>
<td>BB536 E638</td>
<td>BB511</td>
</tr>
<tr>
<td>Justo Rojas</td>
<td>BB614</td>
</tr>
<tr>
<td>Justo Rojas Tapia</td>
<td>A626</td>
</tr>
<tr>
<td>Juvêncio Bezerra Loiola Junior</td>
<td>A626</td>
</tr>
</tbody>
</table>
K

K Kawagishi O532 PO5
K Matsumura O536
Kadus Ogbara N504
Kai Fauth E649
Kajornsak Faungnawakij D557
Kalpak Shaha R535
Kalya di Pietro Roux I572
Kamakhya Prakash Misra S506
Kamila Amato Campos BB649
Kamuran Kara S609
Kana Takenaka PV10
Kanako Iwasaki PO2
Kang Wei Chou E604
Kanhaiya Lal Yadav U540 H613
Karalee Jarvis F502
Karem Noris-Suarez H647
Karen Tiemi Senoo A599
Karen Wohnrath M548 I588
Karim Dahmouche G509 G519 A546
Kari Straley H533
Karin Almeida Ranca V555
Karina Donadel L555
Karina Cristina C. W. dos Santos Klider BB591 M548
Karl Leo PT7
Karla Balzuweit A569 F511
Karla de Avellar Mota F530
Karla Roberta Freitas da Silva N511
Karynne Cristina Souza A552
Kassia dos Santos C516 A537
Kássila Regina Faria Silva A625
Katalin Hegedus Q528
Katharina Theis-Broehl PE4
Katharine M Flores O512 V530
Kathia Maria Honório BB578
Katia Alessandra Gonçalves A506
Kátia Franklin Albertin I574
Katia Jorge Ciuffi H550
Katja Willinger T502
Katsuhiko Sasaki D545
Katsumi Kishino PM1
Katsunori Matsumura O511 U575
Kawaljit Ahluwalia PN2
Kayo Oliveira Vieira C563
Kazufumi Ogawa Q504 A524 R516 R536
Kazuhide Kusakabe PM8
Kazutaka Fujita V502
Kele T G Carvalho BB550
Kelly Cristine Camargo A668
Kelly Cristine Vieira da Cruz R549
Kellyane Alves BB638
Kelson Mota Teixeira Oliveira Y533
Kelvin Beleño Saenz C530
Kely Lopes Caiado G536
Kenneth E. Gonsalves G516 P513
Kentaro Sato PC5
KÉsia Karina Souto E513
Kestur Gundappa Satyanarayana L547 L548
Kevin O’Grady E527
Kevin Winzenberg Q528
Khalid Ziani H514
Khosrow Ghavami L513 L570
Kilmara H G Carvalho G541
Kim Jaeyeong S532
Kim Mi-Young S532
Kirian Pimenta Lopes D526 D527
Kirill Dzus K510
Kirill Zhernenkov PE4
Kiyonobu Ida D545
Kiyoshi Kanie PD1
Kiyoshi Yamamoto O513
Klaus Jandt T542
Klaus Kern E649
Klaus Weishaupt C510
Klaus Wilhelm Krambroek S557 D600
Kleber Betini Vieira E579
Kleber Gonçalves Alves I573
Kleber Roberto Pirote E539 E549
Koichi Eguchi D557
Koiti Araki A591 S602 I594 S608 D635
Konstantin Nikolaevich Rozanov Q510
Konstantin Vladimirovich Khishchenko Z528
Konstantinos Georgarakis V553 V552
<table>
<thead>
<tr>
<th>Name</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kontan Tarigan</td>
<td>V519</td>
</tr>
<tr>
<td>Korneli Grigoriev Grigorov</td>
<td>A557</td>
</tr>
<tr>
<td>Kornelius Nielsch</td>
<td>E543</td>
</tr>
<tr>
<td>Koshiro Ueda</td>
<td>A539</td>
</tr>
<tr>
<td>Kotaro Kuroda</td>
<td>D545</td>
</tr>
<tr>
<td>Krishnan Chakravarthy</td>
<td>G510</td>
</tr>
<tr>
<td>Kristiaan Temst</td>
<td>PE9</td>
</tr>
<tr>
<td>Kristin Engberg</td>
<td>H639</td>
</tr>
<tr>
<td>Kristina Pitzschel</td>
<td>E543</td>
</tr>
<tr>
<td>Krystyn J Van Vliet</td>
<td>B517</td>
</tr>
<tr>
<td>Kumaresavanji Malaivelusamy</td>
<td>X565 S615</td>
</tr>
<tr>
<td>Kunio Yubuta</td>
<td>PV3</td>
</tr>
<tr>
<td>Kwang Ho Choi</td>
<td>Q519</td>
</tr>
<tr>
<td>Kwang Kwyun You</td>
<td>E547</td>
</tr>
<tr>
<td>Kyle C McKenna</td>
<td>G561</td>
</tr>
<tr>
<td>L E B Soledade</td>
<td>BB705</td>
</tr>
<tr>
<td>Labbe PierreAndre</td>
<td>PI1</td>
</tr>
<tr>
<td>Lichtig Santos Cavalcante</td>
<td>BB715 BB531 BB562</td>
</tr>
<tr>
<td>Lambert Wendelin Alff</td>
<td>BB712 BB592 BB652 BB662 BB687</td>
</tr>
<tr>
<td>Lan Sun</td>
<td>X506</td>
</tr>
<tr>
<td>Larisa Sergeevna Krutoverteva</td>
<td>A513</td>
</tr>
<tr>
<td>Larissa Helena Oliveira</td>
<td>BB554</td>
</tr>
<tr>
<td>Larissa Luz Araujo</td>
<td>D620</td>
</tr>
<tr>
<td>Larissa Rodrigues Damiani</td>
<td>S516 S560</td>
</tr>
<tr>
<td>Larry Allard</td>
<td>D577</td>
</tr>
<tr>
<td>Larry Kagemann</td>
<td>G561</td>
</tr>
<tr>
<td>Laudemir Carlos Varanda</td>
<td>E534 G511</td>
</tr>
<tr>
<td>Laura Alejandra Fasce</td>
<td>B527</td>
</tr>
<tr>
<td>Laura Beatriz Steren</td>
<td>S510</td>
</tr>
<tr>
<td>Laura Camila Diniz Santos</td>
<td>C527</td>
</tr>
<tr>
<td>Laura Cristina Damonte</td>
<td>M545 E607</td>
</tr>
<tr>
<td>Laura Madrigal Zúñiga Tito</td>
<td>L545</td>
</tr>
<tr>
<td>Laura Oliveira Péres</td>
<td>P508 M548</td>
</tr>
<tr>
<td>Laura Sandoval</td>
<td>U531</td>
</tr>
<tr>
<td>Laura Silvestroni</td>
<td>P03</td>
</tr>
<tr>
<td>Laura Teresa Corredor Bohórquez</td>
<td>S530 A581 S591 S604</td>
</tr>
<tr>
<td>Laurent Chaunier</td>
<td>L503</td>
</tr>
<tr>
<td>Lauro June Queiróz Maia</td>
<td>D505</td>
</tr>
<tr>
<td>Lauro Tatsuo Kubota</td>
<td>I569 I583 I584</td>
</tr>
<tr>
<td>Le Dao</td>
<td>I532</td>
</tr>
<tr>
<td>Lea Maria de Almeida Lopes</td>
<td>AA516</td>
</tr>
<tr>
<td>Leandra Oliveira Salmazo</td>
<td>D614 A642 BB700 A644 BB706</td>
</tr>
</tbody>
</table>
Leandro Assis Magalhães  C528  
Leandro Barretti Olivo  R574  
Leandro Conceição  K506  
Leandro Fontoura Cupertino  Y516 T537  
Leandro José Raniero  T577  
Leandro Lameirão Ferreira  R552 R553  
Leandro Lopes  V546  
Leandro Lopes Hermsdorff  Y550  
Leandro Marcelo Acuña  S509 K561  
Leandro Moreira de Campos Pinto  BB516  
Leandro Moreira Malard  C518 C566 PC4  
Leandro Romão Fernandes Lima  L547  
Leandro Samary Marques  IS65  
Ledjane Silva Barreto  K538 C567 T572  
Lee Bo Wha  S532  
Lee Jye  R501  
Lee Shyong  R501 X501  
Leila Aparecida Chiavacci  V546  
Leila Figueiredo de Miranda  A553 A555 L565  
Leila Leia Yuan Visconte  H541  
Leilane Roberta Macário  BB630 BB635 BB636 BB698  
Leiliane Alves Oliveira  A558  
Leiliane Cristina Cossolino  M513  
Leinig Antonio Perazolli  BB630  
Leliz Ticona Arenas  S507 IS23 IS33  
Leni Campos Akcelrud  M518 IS62 Q531 T566  
Leni Mathias Leite  T567 PQ8  
Leonard Guimarães Carvalho  B507  
Leonarda Francesca Liotta  L534 L532  
Leonardo Alonso  K505  
Leonardo Barbosa Gedefroid  E629  
Leonardo Bontempo  X530  
Leonardo Bresciani Canto  A503  
Leonardo Cristiano Campos  O510  
Leonardo De Boni  A583 C534 S550  
Leonardo Eidi Okamoto Iwaki  M527  
Leonardo Fonseca Valadares  I550 I551  
Leonardo Giordano Paterno  PP9  
Leonardo Gondim Andrade e Silva  E577 E618 O526  
Leonardo Kyo Kabayama  A555  
Leonardo Marques  R575  
Leonardo Martins Caetano  H599  
Leonardo Medrano  U549  
Leonardo Sabino dos Santos  BB511  
Leonardo Salazar  BB655  
Leonardo Sales Araujo  IS47  
Leonardo Torres Londoño  N510  
Leoncio Camara  J514  
Leôncio Diógenes Tavares Câmara  BB680  
Leonel Cichetto Júnior  Y506 BB657  
Leonid Dubronvinsky  S560 S573 S589  
Leonid Konopko  F512  
Leonor Perez Trejo  E608  
Leopoldo Suescun  U548  
Leslie Diaz  E532 E571  
Leticia de Oliveira Campos  D546  
Leticia E Hernandez Cruz  D602  
Leticia Ferrai  Y545  
Leton Chandra Saha  Y508  
Li Li  I519  
Llianiana Fraig  Q530  
Liane Marcia Rossi  A534 D542  
Liang Zhang  C523  
Lidia Agata Sena  P534  
Lidiane Hott de Fúcio Borges  A609  
Lidice Pereira Goncalves  I518  
Lidiya Mancic  D594  
Lidmila Burianova  G551  
Lidong Chen  P01  
Liesbet Lagae  E556 PE15  
Ligia Lopes Fernandes  H538 H569  
Lijie Ci  C568  
Lilian Lacerda Almeida  H574  
Lilian Maria Pessôa da Cruz Centurion  I554  
Lilian Marques Silva  P529  
Lilian Menezes de Jesus  U553  
Lilian Pantoja Sosman  M507  
Liliana Burakowski Nohara  R571 R574  
Liliana del Socorro Tirado-Mejia  M504 E621 J514  
Liliana Mabel Gassa  M538 E613 X577  
Liliane Ferrareso Lona  X571  
Liliane Guerlo-Dermougue  A507 BB515 P503 BB532  
Lina Gunawan  PJ5  
Lin Zhou  F533  
Linda Caldas  A575  
Lindsey R Goodman  BB723  
Lionel Vayssieres  PA4  
Lioudmila Aleksandrovna Matlashkova  V528 X527  
Liubov Del Risco Cabrera  AA515  
Lívia Cristina de Souza Viol  D636
Lívia Mesquita Loiola
Livio Amaral
Livio Jackes Bruno da Silva
Lifying Liu
Lizandra Belmonte Rodrigues Castro
Long The Phan
Lorena Baum
Lorena Marin
Luana Almeida Fiel
Luana Alves de Souza Liberato
Luanda Silva de Moraes
Luanna Lopes Lobato
Luanna Silveira Parreira
Lubomir Houfek
Lucas Barboza Sarno da Silva
Lucas Bruce Souza
Lucas Carvalho Velozo Rodrigues
Lucas Fugikawa Santos
Lucas Mira Buzone
Lucas Samuel Soares dos Santos
Luci Cristina de Oliveira Vercik
Lucia Helena Innocentini Mei
Lucia Helena Mascaro
Lucia Vieira Santos
Luciana Fernandez
Luciana Guimarães
Luciana Moreira Seara
Luciana Oliveira Melo
Luciana Prazeres Mazur
Luciana Reyes Pires Kassab
Luciana Schmidlin Sanches
Luciana Spinelli
Luciane Calabria
Luciane França Oliveira
Lucianna Gama Fernandes Vieira
Luciano Andrey Montoro
Luciano Caseli
Luciano Henrique Campestrini
Luciano Monteiro da Silva
Luciara Benedita Barbosa
Lucimara Stolz Roman
Lucineia Ferreira Ceridóiro
Lúcio Carlos Martins Pinto
Lúcio Flávio dos Santos Rosa
Lúcio Mendes Cabral
Lucy Vitoria Credidio Assali
Ludovica Fossa
Luis Adriano Santos do Nascimento
Luis Alberto Cáceres Diaz
Luis Alberto Montero
Luis Alfredo Rodriguez
Luís Antonio Menezes Torres
Luís Antônio Peroni
Luís Augusto Sousa Marques da Rocha
Luís Béjar Gómez
Luís Carlos Balbás
Luís Carlos Moreno-Aldana
Luís Carlos Sanchez
Luís César Passoni
Luís César Rodriguez Aliaga
Luís Claudio Mendes
Luís David Gómez Lerma
Luís de Souza Santos Júnior
Luís Demetrio López Carreño
Luís E. Fuentes-Cobas
Luís Edmundo Fuentes
Luís Emilio Forero
Luís Eugenio Fernandez-Outon
Luís Felipe Jumenez Garcia
Luís Fernando Alves de Almeida
Luís Fernando da Silva
Luís Fernando Godoy Falco
Luís Fernando Lemus Torres
Luís Fernando Pereira Quintino Marchesi
Luís Gerardo Trapaga Martinez
Luís Guilherme C Rego
Luís Henrique Leme Louro
Luís Henry Moreno
Luís Javier Cruz
Luís José Borroto
Luís Manuel Liz-Marzan
Luísa Maria Baraldo
Luís Mendoza Zelis
Luís Moraga
Luís Rino
<table>
<thead>
<tr>
<th>Name</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luis Rogerio de Oliveira Hein</td>
<td>X539</td>
</tr>
<tr>
<td>Luis Rogerio Oliveira Hein</td>
<td>Y535</td>
</tr>
<tr>
<td>Luís Silva Zambom</td>
<td>BB649</td>
</tr>
<tr>
<td>Luísa Maria Abrantes</td>
<td>K551</td>
</tr>
<tr>
<td>Luísa Maria Ribeiro Scolfaro</td>
<td>X570</td>
</tr>
<tr>
<td>Luismar Marques Porto</td>
<td>S561</td>
</tr>
<tr>
<td></td>
<td>S562</td>
</tr>
<tr>
<td></td>
<td>H600</td>
</tr>
<tr>
<td></td>
<td>BB646</td>
</tr>
<tr>
<td></td>
<td>H605</td>
</tr>
<tr>
<td></td>
<td>H606</td>
</tr>
<tr>
<td></td>
<td>H610</td>
</tr>
<tr>
<td></td>
<td>H612</td>
</tr>
<tr>
<td>Luiz Alberto Colnago</td>
<td>D530</td>
</tr>
<tr>
<td>Luiz Ângelo Moraes Cury</td>
<td>D582</td>
</tr>
<tr>
<td>Luiz Antonio DAvila</td>
<td>BB591</td>
</tr>
<tr>
<td>Luiz Antonio de Oliveira Nunes</td>
<td>PAA12</td>
</tr>
<tr>
<td>Luiz Antonio Ferreira Coelho</td>
<td>D606</td>
</tr>
<tr>
<td></td>
<td>T564</td>
</tr>
<tr>
<td>Luiz Antonio Pereira de Gusmão</td>
<td>C505</td>
</tr>
<tr>
<td></td>
<td>A656</td>
</tr>
<tr>
<td></td>
<td>A624</td>
</tr>
<tr>
<td>Luiz Augusto Sousa de Oliveira</td>
<td>I526</td>
</tr>
<tr>
<td>Luiz C A Oliveira</td>
<td>A505</td>
</tr>
<tr>
<td>Luiz Carlos Barbosa</td>
<td>L549</td>
</tr>
<tr>
<td>Luiz Carlos de Lima</td>
<td>I560</td>
</tr>
<tr>
<td>Luiz Carlos Gomide Freitas</td>
<td>E565</td>
</tr>
<tr>
<td>Luiz Carlos Pereira</td>
<td>BB549</td>
</tr>
<tr>
<td></td>
<td>BB550</td>
</tr>
<tr>
<td>Luiz Carlos Barbosa</td>
<td>A528</td>
</tr>
<tr>
<td>Luiz Carlos de Lima</td>
<td>E639</td>
</tr>
<tr>
<td>Luiz Carlos Gomide Freitas</td>
<td>Y532</td>
</tr>
<tr>
<td></td>
<td>I548</td>
</tr>
<tr>
<td></td>
<td>G550</td>
</tr>
<tr>
<td>Luiz Carlos Pereira</td>
<td>U527</td>
</tr>
<tr>
<td></td>
<td>H579</td>
</tr>
<tr>
<td>Luiz Carlos Pimentel Almeida</td>
<td>M532</td>
</tr>
<tr>
<td></td>
<td>M531</td>
</tr>
<tr>
<td>Luiz Carlos Poças</td>
<td>P519</td>
</tr>
<tr>
<td></td>
<td>P520</td>
</tr>
<tr>
<td>Luiz Carlos Salay</td>
<td>I563</td>
</tr>
<tr>
<td>Luiz Carvalho Benyosef</td>
<td>F520</td>
</tr>
<tr>
<td>Luiz de Sousa Santos Junior</td>
<td>BB712</td>
</tr>
<tr>
<td></td>
<td>BB590</td>
</tr>
<tr>
<td></td>
<td>BB592</td>
</tr>
<tr>
<td></td>
<td>BB722</td>
</tr>
<tr>
<td>Luiz Depine de Castro</td>
<td>C508</td>
</tr>
<tr>
<td></td>
<td>O510</td>
</tr>
<tr>
<td>Luiz Edmundo Bastos Soledade</td>
<td>BB629</td>
</tr>
<tr>
<td></td>
<td>BB695</td>
</tr>
<tr>
<td></td>
<td>BB610</td>
</tr>
<tr>
<td>Luiz Eduardo Celino Benedito</td>
<td>E564</td>
</tr>
<tr>
<td>Luiz Eduardo Serra Carneiro Pinto</td>
<td>H570</td>
</tr>
<tr>
<td>Luiz Everson da Silva</td>
<td>H593</td>
</tr>
<tr>
<td>Luiz Fernando Cótica</td>
<td>S520</td>
</tr>
<tr>
<td></td>
<td>S597</td>
</tr>
<tr>
<td></td>
<td>S600</td>
</tr>
<tr>
<td>Luiz Fernando gorup</td>
<td>D529</td>
</tr>
<tr>
<td>Luiz Fernando Magri Dias Galdino</td>
<td>A550</td>
</tr>
<tr>
<td>Luiz Fernando Pereira</td>
<td>T566</td>
</tr>
<tr>
<td></td>
<td>T567</td>
</tr>
<tr>
<td>Luiz H C Mattoso</td>
<td>PP7</td>
</tr>
<tr>
<td>Luiz Henrique Capparelli Mattoso</td>
<td>L531</td>
</tr>
<tr>
<td></td>
<td>L505</td>
</tr>
<tr>
<td></td>
<td>I550</td>
</tr>
<tr>
<td></td>
<td>I551</td>
</tr>
<tr>
<td></td>
<td>L522</td>
</tr>
<tr>
<td>Luiz Henrique de Almeida</td>
<td>L530</td>
</tr>
<tr>
<td></td>
<td>A594</td>
</tr>
<tr>
<td></td>
<td>A597</td>
</tr>
<tr>
<td></td>
<td>A603</td>
</tr>
<tr>
<td>Luiz Henrique Galvão Tizei</td>
<td>O514</td>
</tr>
<tr>
<td></td>
<td>A622</td>
</tr>
<tr>
<td></td>
<td>L552</td>
</tr>
<tr>
<td></td>
<td>A606</td>
</tr>
<tr>
<td>Luiz Kleber Carvalho de Souza</td>
<td>N510</td>
</tr>
<tr>
<td></td>
<td>N511</td>
</tr>
<tr>
<td></td>
<td>Z529</td>
</tr>
<tr>
<td></td>
<td>F526</td>
</tr>
<tr>
<td>Luiz Kleber Carvalho de Souza</td>
<td>F515</td>
</tr>
<tr>
<td></td>
<td>F516</td>
</tr>
<tr>
<td>Luiz Mamede Gonzalez Magalhães</td>
<td>D649</td>
</tr>
<tr>
<td></td>
<td>D639</td>
</tr>
<tr>
<td>Luiz Orlando Ladeira</td>
<td>N517</td>
</tr>
<tr>
<td>Luiz Pereira da Silva Neto</td>
<td>A529</td>
</tr>
<tr>
<td></td>
<td>C529</td>
</tr>
<tr>
<td></td>
<td>D575</td>
</tr>
<tr>
<td></td>
<td>H531</td>
</tr>
<tr>
<td></td>
<td>C552</td>
</tr>
<tr>
<td></td>
<td>C572</td>
</tr>
<tr>
<td>Luiz Pereira da Silva</td>
<td>T563</td>
</tr>
<tr>
<td>Luiz Sampaio</td>
<td>E526</td>
</tr>
<tr>
<td>Name</td>
<td>Code</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Marina Sparvoli</td>
<td>M508</td>
</tr>
<tr>
<td>Marina Vladimirovna Koudriachova</td>
<td>Y524</td>
</tr>
<tr>
<td>Marinalva Aparecida Alves Rosa</td>
<td>U524</td>
</tr>
<tr>
<td>Marinalva Cerqueira Nasar</td>
<td>O525</td>
</tr>
<tr>
<td>Mario Andres Chavarria</td>
<td>Q522</td>
</tr>
<tr>
<td>Mario Bianchetti</td>
<td>D503</td>
</tr>
<tr>
<td>Mario Diaz de la Rosa</td>
<td>PG6</td>
</tr>
<tr>
<td>Mario Ernesto Giroldo Valerio</td>
<td>H509</td>
</tr>
<tr>
<td>Mário José Politi</td>
<td>S534</td>
</tr>
<tr>
<td>Mario Lucio Moreira</td>
<td>BB563</td>
</tr>
<tr>
<td>Mario Roberto Meneghetti</td>
<td>A621</td>
</tr>
<tr>
<td>Mario Roberto Rosenberger</td>
<td>Y507</td>
</tr>
<tr>
<td>Mario Ruben</td>
<td>PT10</td>
</tr>
<tr>
<td>Mario Sérgio de Carvalho Mazzoni</td>
<td>C514</td>
</tr>
<tr>
<td>Mário Ueda</td>
<td>R540</td>
</tr>
<tr>
<td>Mariona Sodupe</td>
<td>BB520</td>
</tr>
<tr>
<td>Marisa Masumi Beppu</td>
<td>L506</td>
</tr>
<tr>
<td>Mariselma Ferreira</td>
<td>I517</td>
</tr>
<tr>
<td>Maristela Alves da Silva</td>
<td>A617</td>
</tr>
<tr>
<td>Maritza Páez Collio</td>
<td>I530</td>
</tr>
<tr>
<td>Marivalda de Magalhaes Pereira</td>
<td>H619</td>
</tr>
<tr>
<td>Marize Varella de Oliveira</td>
<td>H579</td>
</tr>
<tr>
<td>Mark Asta</td>
<td>PZ4</td>
</tr>
<tr>
<td>Mark Bown</td>
<td>Q528</td>
</tr>
<tr>
<td>Mark Cassidy</td>
<td>W509</td>
</tr>
<tr>
<td>Mark E Eberhart</td>
<td>Y564</td>
</tr>
<tr>
<td>Mark Freeman</td>
<td>E525</td>
</tr>
<tr>
<td>Mark Griep</td>
<td>A549</td>
</tr>
<tr>
<td>Mark Hempenius</td>
<td>P510</td>
</tr>
<tr>
<td>Mark Kreuzer</td>
<td>I509</td>
</tr>
<tr>
<td>Marko B Radovic</td>
<td>A548</td>
</tr>
<tr>
<td>Marko Rosic</td>
<td>A548</td>
</tr>
<tr>
<td>Marko VIRŠEK</td>
<td>A587</td>
</tr>
<tr>
<td>Markus Antonietti</td>
<td>P501</td>
</tr>
<tr>
<td>Markus Weigand</td>
<td>E604</td>
</tr>
<tr>
<td>Marlene de Barros Coelho</td>
<td>D544</td>
</tr>
<tr>
<td>Marley Maria B Rebuzzi Vellasco</td>
<td>Y516</td>
</tr>
<tr>
<td>Marli Leite Moraes</td>
<td>I516</td>
</tr>
<tr>
<td>Marli Luiza Tebaldi Sordi</td>
<td>A568</td>
</tr>
<tr>
<td>Marla Vallerius da Costa</td>
<td>R548</td>
</tr>
<tr>
<td>Marlus Koehler</td>
<td>M533</td>
</tr>
<tr>
<td>Marta Buffa</td>
<td>M530</td>
</tr>
<tr>
<td>Marta Duarte da Fonseca</td>
<td>U525</td>
</tr>
<tr>
<td>Marta Elisa Rosso Dotto</td>
<td>R547</td>
</tr>
<tr>
<td>Marta López</td>
<td>K501</td>
</tr>
<tr>
<td>Marta Lopez Jenssen</td>
<td>W507</td>
</tr>
<tr>
<td>Marta Machado Pinheiro Salazar</td>
<td>Y550</td>
</tr>
<tr>
<td>Marta Rossel</td>
<td>Q520</td>
</tr>
<tr>
<td>Martha Lux-Steiner</td>
<td>PA2</td>
</tr>
<tr>
<td>Martha McCartney</td>
<td>F533</td>
</tr>
<tr>
<td>Martin A Bates</td>
<td>PT12</td>
</tr>
<tr>
<td>Martin Bram</td>
<td>H527</td>
</tr>
<tr>
<td>Martin Couillard</td>
<td>PF1</td>
</tr>
<tr>
<td>Martin Dornheim</td>
<td>PV2</td>
</tr>
<tr>
<td>Martin Emilio Mendoza</td>
<td>F517</td>
</tr>
<tr>
<td>Martin Heeney</td>
<td>PO7</td>
</tr>
<tr>
<td>Martin Hernan Gaitán</td>
<td>A521</td>
</tr>
<tr>
<td>Martin Houfek</td>
<td>H565</td>
</tr>
<tr>
<td>Martin Petrenec</td>
<td>X522</td>
</tr>
<tr>
<td>Martin Schmal</td>
<td>D596</td>
</tr>
<tr>
<td>Martin Sirena</td>
<td>S510</td>
</tr>
<tr>
<td>Martin Walker</td>
<td>PT12</td>
</tr>
<tr>
<td>Martina Cecília Avalos</td>
<td>H621</td>
</tr>
<tr>
<td>Martina Luysberg</td>
<td>PA5</td>
</tr>
<tr>
<td>Mary Anne White</td>
<td>S504</td>
</tr>
<tr>
<td>Mary Cristina Ferreira Alves</td>
<td>BB609</td>
</tr>
<tr>
<td>Mary Grace Burke</td>
<td>N519</td>
</tr>
<tr>
<td>Mary Roberta Meira Marinho</td>
<td>W503</td>
</tr>
<tr>
<td>Maryline Guilloux-Viry</td>
<td>BB609</td>
</tr>
<tr>
<td>Maryory Gomez Botero</td>
<td>BB610</td>
</tr>
<tr>
<td>Marysilvia Ferreira da Costa</td>
<td>BB621</td>
</tr>
<tr>
<td>Marystela Ferreira</td>
<td>R551</td>
</tr>
<tr>
<td>Masa Kawasaki</td>
<td>D579</td>
</tr>
<tr>
<td>Masaaki Takaya</td>
<td>B508</td>
</tr>
<tr>
<td>Masafumi Yamaguchi</td>
<td>PM2</td>
</tr>
<tr>
<td>Masahide Ikegami</td>
<td>U575</td>
</tr>
<tr>
<td>Masahiro Sadakane</td>
<td>D525</td>
</tr>
<tr>
<td>Masaki Imamura</td>
<td>PD3</td>
</tr>
<tr>
<td>Masaki Koba</td>
<td>X518</td>
</tr>
<tr>
<td>Masami Okamoto</td>
<td>PL2</td>
</tr>
<tr>
<td>Masanori Tomonari</td>
<td>D545</td>
</tr>
<tr>
<td>Masato Michiuchi</td>
<td>V521</td>
</tr>
<tr>
<td>Massimo Morbidelli</td>
<td>P502</td>
</tr>
<tr>
<td>Mateus Colli</td>
<td>A626</td>
</tr>
<tr>
<td>Mateus Geraldo Schiavetto</td>
<td>R545</td>
</tr>
<tr>
<td>Mateus VB Pinto</td>
<td>E639</td>
</tr>
<tr>
<td>Matheus Martini</td>
<td>AA522</td>
</tr>
<tr>
<td>Matheus Modesto Paula</td>
<td>H508</td>
</tr>
<tr>
<td>Mathew David Halls</td>
<td>Y505</td>
</tr>
<tr>
<td>Mathias Steinmayr</td>
<td>Q508</td>
</tr>
<tr>
<td>Mathieu Perrin</td>
<td>Q537</td>
</tr>
<tr>
<td>Name</td>
<td>Code</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Matias De Angelis Korb</td>
<td>R557</td>
</tr>
<tr>
<td>Matias Valdes</td>
<td>M512 M524</td>
</tr>
<tr>
<td>Matjaz Spreitzer</td>
<td>PBB17</td>
</tr>
<tr>
<td>Matsutani Takahiro</td>
<td>X511</td>
</tr>
<tr>
<td>Matthew James Allen</td>
<td>C509</td>
</tr>
<tr>
<td>Matthias Eppe</td>
<td>H525 G517</td>
</tr>
<tr>
<td>Mattias Cook</td>
<td>IS76</td>
</tr>
<tr>
<td>Mattias L Aslund</td>
<td>IS75 IS76</td>
</tr>
<tr>
<td>Maureen Joel Lagos</td>
<td>F514 B523</td>
</tr>
<tr>
<td>Maurice de Koning</td>
<td>Y566</td>
</tr>
<tr>
<td>Mauricia Bedin-Fritzen-Garcia</td>
<td>IS87</td>
</tr>
<tr>
<td>Mauricio A.C. de Melo</td>
<td>A512</td>
</tr>
<tr>
<td>Mauricio Barreto Lisboa</td>
<td>F526</td>
</tr>
<tr>
<td>Mauricio Brant Pinheiro</td>
<td>G560 C549</td>
</tr>
<tr>
<td>Mauricio Manfrini</td>
<td>E556</td>
</tr>
<tr>
<td>Mauricio Pamplona Pires</td>
<td>Y520</td>
</tr>
<tr>
<td>Maurício Ribeiro Baldan</td>
<td>C527 C545</td>
</tr>
<tr>
<td>Mauricio Silva Baptista</td>
<td>BB664</td>
</tr>
<tr>
<td>Mauricio Terrones</td>
<td>C511 C568 F525 L571 F528 C570 C569</td>
</tr>
<tr>
<td>Mauricio Veloso Brant Pinheiro</td>
<td>S557 D600</td>
</tr>
<tr>
<td>Mauricio Vicente Donadon</td>
<td>BB507</td>
</tr>
<tr>
<td>Maurizio Ferrari</td>
<td>M543</td>
</tr>
<tr>
<td>Mauro André Dresch</td>
<td>K539</td>
</tr>
<tr>
<td>Mauro Cesar Terence</td>
<td>L565</td>
</tr>
<tr>
<td>Mauro Coelho dos Santos</td>
<td>K528 K529</td>
</tr>
<tr>
<td>Mauro Francisco Da Silva</td>
<td>S534</td>
</tr>
<tr>
<td>Mauro Laranjeira</td>
<td>H592</td>
</tr>
<tr>
<td>Mauro Luciano Baesso</td>
<td>H582 S594</td>
</tr>
<tr>
<td>Mauro Miguel Costa</td>
<td>IS68 U552</td>
</tr>
<tr>
<td>Mauro Roberto Fernandes</td>
<td>M548</td>
</tr>
<tr>
<td>Maxim Petrovich Nikitin</td>
<td>IS29</td>
</tr>
<tr>
<td>Maxim Vasilievich Chuprin</td>
<td>IS03 IS04</td>
</tr>
<tr>
<td>Maximiliano Delany Martins</td>
<td>E569</td>
</tr>
<tr>
<td>Maximiliano Luis Munfurd</td>
<td>E622</td>
</tr>
<tr>
<td>Maximiliano Moreno Zapata</td>
<td>BB517</td>
</tr>
<tr>
<td>Máximo Lopez Lopez</td>
<td>E647</td>
</tr>
<tr>
<td>Maximo Siu Li</td>
<td>BB568 BB620 BB627</td>
</tr>
<tr>
<td>Maxson Souza Vieira</td>
<td>S579</td>
</tr>
<tr>
<td>Maxwell J Crossley</td>
<td>IS75</td>
</tr>
<tr>
<td>Mayara Carmello</td>
<td>M529</td>
</tr>
<tr>
<td>Mayara Klimuk Uchiyama</td>
<td>IS94</td>
</tr>
<tr>
<td>Mayka Schmitt</td>
<td>Y501</td>
</tr>
<tr>
<td>Mayra González Hurtado</td>
<td>G539</td>
</tr>
<tr>
<td>Maysa Terada</td>
<td>H573 N508</td>
</tr>
<tr>
<td>Mayur Chintamani Valodkar</td>
<td>B536</td>
</tr>
<tr>
<td>McGlennon da Rocha Régis</td>
<td>T546</td>
</tr>
<tr>
<td>Md Shuhazly Mamat</td>
<td>K510</td>
</tr>
<tr>
<td>Mehdi Cinna Hoorang</td>
<td>G529</td>
</tr>
<tr>
<td>Mehdi El Ouali</td>
<td>B520</td>
</tr>
<tr>
<td>Melânia Cristina Mazini</td>
<td>BB587</td>
</tr>
<tr>
<td>Melina Daniele Pinheiro</td>
<td>D526</td>
</tr>
<tr>
<td>Melissa Fabiola Siqueira Pinto</td>
<td>BB584 BB667</td>
</tr>
<tr>
<td>Menendez Proupin Eduardo</td>
<td>Y567</td>
</tr>
<tr>
<td>Mercedes Boronat</td>
<td>Y543</td>
</tr>
<tr>
<td>Méri Domingos Vieira</td>
<td>E565</td>
</tr>
<tr>
<td>Mersha Elizabeth Campos</td>
<td>D530</td>
</tr>
<tr>
<td>Mervyn John Rose</td>
<td>Q549</td>
</tr>
<tr>
<td>Metaab A Al Badrani</td>
<td>P506</td>
</tr>
<tr>
<td>Metin Usta</td>
<td>H516</td>
</tr>
<tr>
<td>Meuris Gurgel Carlos da Silva</td>
<td>L506 L544 L563</td>
</tr>
<tr>
<td>Michael Anthony Burke</td>
<td>PN1</td>
</tr>
<tr>
<td>Michael Asoro Adewunmi</td>
<td>D568 D577</td>
</tr>
<tr>
<td>Michael Chabiny</td>
<td>PO4</td>
</tr>
<tr>
<td>Michael Curcic</td>
<td>E604</td>
</tr>
<tr>
<td>Michael David Brown</td>
<td>Q514</td>
</tr>
<tr>
<td>Michael F Rubner</td>
<td>B517</td>
</tr>
<tr>
<td>Michael Fokine</td>
<td>IS70</td>
</tr>
<tr>
<td>Michael Frenklach</td>
<td>BB665 BB676</td>
</tr>
<tr>
<td>Michael J Burek</td>
<td>PB1</td>
</tr>
<tr>
<td>Michael J Graf</td>
<td>E608</td>
</tr>
<tr>
<td>Michael J Kaufman</td>
<td>X584</td>
</tr>
<tr>
<td>Michael J Mills</td>
<td>O512</td>
</tr>
<tr>
<td>Michael J Schoening</td>
<td>IS58</td>
</tr>
<tr>
<td>Michael Jones da Silva</td>
<td>P536</td>
</tr>
<tr>
<td>Michael Kappl</td>
<td>G506</td>
</tr>
<tr>
<td>Michael S. Strano</td>
<td>PI3</td>
</tr>
<tr>
<td>Michael Sommer</td>
<td>T503 PM7</td>
</tr>
<tr>
<td>Michael Stevenson</td>
<td>IS56</td>
</tr>
<tr>
<td>Michael Toney</td>
<td>H639</td>
</tr>
<tr>
<td>Michael W Phaneuf</td>
<td>N520</td>
</tr>
<tr>
<td>Michael Weisser</td>
<td>X517</td>
</tr>
<tr>
<td>Michail Vardavoulias</td>
<td>R559</td>
</tr>
<tr>
<td>Michal Falkowski</td>
<td>E518</td>
</tr>
<tr>
<td>Michal Kotoul</td>
<td>BB574</td>
</tr>
<tr>
<td>Michel Felipe Cano</td>
<td>R572</td>
</tr>
<tr>
<td>Michel Issao Miyamoto</td>
<td>V566</td>
</tr>
<tr>
<td>Michel Milan</td>
<td>C571</td>
</tr>
<tr>
<td>Michel Perez</td>
<td>PZ3</td>
</tr>
<tr>
<td>Michelangelo Durazzo</td>
<td>A592</td>
</tr>
<tr>
<td>Michele Aparecida Rocha</td>
<td>A591</td>
</tr>
<tr>
<td>Michele Cristina Formolo Garcia</td>
<td>L542</td>
</tr>
</tbody>
</table>
Michele Dondi
Michele Muccini
Michele Tonezzer
Micheli Lucia Celestino
Micheline Reis de Araújo
Michelle Cequeira Feitor
Michelle L Gabriele
Michelle Mendes Gomes
Michelle Pereira Babisk
Michely Santos Araújo
Michihiro Ohta
Michitaka Ohtaki
Miguel A Novak
Miguel Aangel Arvizu
Miguel Adolfo Ponce
Miguel Alejandro Zorro
Miguel Angel Alterach
Miguel Angel Rodriguez-Perez
Miguel Jafelicci Jr
Miguel Jose-Yacaman
Miguel Justino Ribeiro Barboza
Miguel Melendez Lira
Miguel Novak
Miguel Ramírez
Miguel Tafur
Miguel Yacaman
Mihaela Lostun
Mihai Stoica
Mika Lastusaari
Mike Melo do Vale
Mikhail Kosinskiy
Mikhail Mikhailovich Myshlyaev
Milan Lalic
Mildred Dresselhaus
Mildred S Dresselhaus
Milena Luz Sabino
Miles Beaux
Milton Morais Xavier Jr
Milton Sergio Fernandes Lima
Min Suk Choi
Mindaugas Daukšys
Ming-Yong Han
Minxing Wang
Mirabel Cerqueira Rezende
Mirela de Castro Santos
Mirella Lorrayne Altoé
Miriam Estrada
Miriam Susana Castro
Mirian de Lourdes Noronha Motta Melo
Mirtha Pillaca Quispe
Miryam Ricon Joya
Mitjan KALIN
Mitsuhiko Murayama
Mkhitar Hobosyan
Moacir Kaiser
Moacyr Comar Jr
Moema Martins
Mohamed Seif
Mohamed Khalil
Mohamed Mokhter Mostafa
Mohammad Ashraf Gondal
Mohammad Ghaafari
Mohammad Malaheh–Nikouei
Mohammad Ramezani
Mohd Rafie Johan
Mohsen Hosseinkhani
Moises Hernandez-Garcia
Moisés Meza Pariona
Moisés Rómosolos Cesário
Moni Behar
Mônica Alonso Cotta
Monica Ari
Monica Bernal Salamanca
Mônica Couto de Oliveira
Monica de Mesquita Lacerda
Monica de Oliveira Penna
Mônica Diuana Calasans-Maia
Monica Miryam Rabinovich
Monique Angelo da Silva
Monique Nonato Silva Petersem
Monique Osorio Talarico Conceição
Monirobu Endo
Morsyleide de Freitas Rosa
Motoaki Iwaya
Motonori Nishida
Mouna Ben Yahia
Moungi G Bawendi
Moustafa Aljerf
Muhammad Akram Randhawa
Muhammad Anis-ur-Rehman
Muhammad Anis-ur-Rehman
Mukundan Thelakkat
Muntuwenkosi Chili
Murat Pierre Pierre
Muriel de Pauli
<table>
<thead>
<tr>
<th>Name</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neide Kazue Kuromoto</td>
<td>R534 H588 H627</td>
</tr>
<tr>
<td>Neil Anderson</td>
<td>C511</td>
</tr>
<tr>
<td>Neil De La Cruz Centeno</td>
<td>BB523 BB522</td>
</tr>
<tr>
<td>Neil McManus</td>
<td>BB515</td>
</tr>
<tr>
<td>Neil Neil Robertson</td>
<td>BB676</td>
</tr>
<tr>
<td>Neil Young</td>
<td>PF6</td>
</tr>
<tr>
<td>Nelci Fenalti Höehr</td>
<td>G535</td>
</tr>
<tr>
<td>Nelcy Della Mohallem</td>
<td>D536 F511 S542 R569</td>
</tr>
<tr>
<td>Nelicio Faria de Sales</td>
<td>I545</td>
</tr>
<tr>
<td>Nélio Henrique Nicoleti</td>
<td>BB660</td>
</tr>
<tr>
<td>Nelly Alba</td>
<td>R509</td>
</tr>
<tr>
<td>Nelly Cecília de Sanchez</td>
<td>X528 R507</td>
</tr>
<tr>
<td>Nelson Batista de Lima</td>
<td>A553 R543</td>
</tr>
<tr>
<td>Nelson C Furtado</td>
<td>L533 L534 BB680 BB679</td>
</tr>
<tr>
<td>Nelson Durán</td>
<td>G535</td>
</tr>
<tr>
<td>Nelson H Morgon</td>
<td>BB618 BB625</td>
</tr>
<tr>
<td>Nelson Ordonez</td>
<td>K551</td>
</tr>
<tr>
<td>Nelson Porras</td>
<td>E640 E642 M504</td>
</tr>
<tr>
<td>Nenad Lazarevic</td>
<td>E553</td>
</tr>
<tr>
<td>Neri Alves</td>
<td>Q542 T554 T556</td>
</tr>
<tr>
<td>Néstor Ghenzi</td>
<td>S522 E560</td>
</tr>
<tr>
<td>Nestor Jaime Torres</td>
<td>Q517 S528 U536 S518</td>
</tr>
<tr>
<td>Nestor Perea–Lopez</td>
<td>F525</td>
</tr>
<tr>
<td>Newton Luiz Dias Filho</td>
<td>A547</td>
</tr>
<tr>
<td>Newton Martins Barbosa Neto</td>
<td>P519 P520 T568 T569</td>
</tr>
<tr>
<td>Newton Soares Da-Silva</td>
<td>C542</td>
</tr>
<tr>
<td>Ney Mattoso</td>
<td>V562</td>
</tr>
<tr>
<td>Ney Sodre</td>
<td>Z521</td>
</tr>
<tr>
<td>Neyda Om Tapanes</td>
<td>BB681</td>
</tr>
<tr>
<td>Neyde Tomazin Floreoto</td>
<td>E513</td>
</tr>
<tr>
<td>Neyde Y Murakami Iha</td>
<td>O526</td>
</tr>
<tr>
<td>Ng Chi Chung</td>
<td>X513</td>
</tr>
<tr>
<td>Nicholas Pieczonka</td>
<td>A640</td>
</tr>
<tr>
<td>Nick Savvides</td>
<td>O515</td>
</tr>
<tr>
<td>Nicolas Cayetano</td>
<td>D558</td>
</tr>
<tr>
<td>Nicolas Garcia</td>
<td>E622</td>
</tr>
<tr>
<td>Nicolas Mujica</td>
<td>BB708</td>
</tr>
<tr>
<td>Nicolás Vargas</td>
<td>E544</td>
</tr>
<tr>
<td>Nicolau Silva de Souza</td>
<td>C561</td>
</tr>
<tr>
<td>Nicole Duran</td>
<td>D546</td>
</tr>
<tr>
<td>Nicole Raymonde Demarquettete</td>
<td>PP3</td>
</tr>
<tr>
<td>Nicoleta Lupu</td>
<td>E552 E551</td>
</tr>
<tr>
<td>Nicolle Dal Acqua</td>
<td>D542</td>
</tr>
<tr>
<td>Niédson José da Silva</td>
<td>Z505 Z506</td>
</tr>
<tr>
<td>Nielson F P Ribeiro</td>
<td>K506 L533</td>
</tr>
<tr>
<td>Nierlly Karinni de Almeida Maribondo Galvão</td>
<td>BB575</td>
</tr>
<tr>
<td>Nihar Ranjan Biswas</td>
<td>G504</td>
</tr>
<tr>
<td>Nijan Dogan</td>
<td>PP7</td>
</tr>
<tr>
<td>Nikie Planckaert</td>
<td>PE9</td>
</tr>
<tr>
<td>Nikolai Novikov</td>
<td>B531</td>
</tr>
<tr>
<td>Nikolay Antonovich Brusentsov</td>
<td>I529</td>
</tr>
<tr>
<td>Nikolay B Cherkasov</td>
<td>C539</td>
</tr>
<tr>
<td>Nikolay M Burykin</td>
<td>H511</td>
</tr>
<tr>
<td>Nílce Carbonel Rocha</td>
<td>H535</td>
</tr>
<tr>
<td>Nilo Antonio de Souza Sampaio</td>
<td>H529</td>
</tr>
<tr>
<td>Nilson dos Santos Ferreira</td>
<td>D598 P535 E635 T577 D645</td>
</tr>
<tr>
<td>Nilson Tadeu Camarinho de Oliveira</td>
<td>H543</td>
</tr>
<tr>
<td>Nilton Silva Maia</td>
<td>L569</td>
</tr>
<tr>
<td>Nirton Cristi Vieira</td>
<td>I562 I581</td>
</tr>
<tr>
<td>Nivaldo Cabral Kuhnen</td>
<td>U538 A592</td>
</tr>
<tr>
<td>Nivaldo Eloi Souza</td>
<td>S600</td>
</tr>
<tr>
<td>Niyazi Serdar Sarıçiftçi</td>
<td>M518</td>
</tr>
<tr>
<td>Nizamara Simenremis Pereira</td>
<td>T524</td>
</tr>
<tr>
<td>Nizomar Souza Goncalves</td>
<td>D585</td>
</tr>
<tr>
<td>Nobuaki Kojima</td>
<td>PM2</td>
</tr>
<tr>
<td>Nobuyuki Nishiyama</td>
<td>V506 PV10</td>
</tr>
<tr>
<td>Noé Cheung</td>
<td>Y544</td>
</tr>
<tr>
<td>Noemi Elisabeth Walsoe</td>
<td>D503</td>
</tr>
<tr>
<td>Noemi Raquel Checca</td>
<td>E563</td>
</tr>
<tr>
<td>Nonoy Velasco</td>
<td>A562</td>
</tr>
<tr>
<td>Nor Ashikin Rasih</td>
<td>S526</td>
</tr>
<tr>
<td>Norberto Mangiavacchi</td>
<td>H501</td>
</tr>
<tr>
<td>Noriko Nitta</td>
<td>PD3</td>
</tr>
<tr>
<td>Noriko Saidoh</td>
<td>PV10</td>
</tr>
<tr>
<td>Nouga Cardoso Batista</td>
<td>H642</td>
</tr>
<tr>
<td>Novica Paunovic</td>
<td>E553</td>
</tr>
<tr>
<td>Nozomu Togashi</td>
<td>PV10</td>
</tr>
<tr>
<td>Nr Phillips</td>
<td>O530</td>
</tr>
<tr>
<td>NS Saxena</td>
<td>M540</td>
</tr>
<tr>
<td>Nurul Akmal Chelah</td>
<td>X502</td>
</tr>
<tr>
<td>Name</td>
<td>Code</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Paulo Fernando Papaleo Fitchner</td>
<td>E619 V556 M550 D615</td>
</tr>
<tr>
<td>Paulo Ferreira</td>
<td>D568 D577 D579</td>
</tr>
<tr>
<td>Paulo Fichtner</td>
<td>D599</td>
</tr>
<tr>
<td>Paulo Goncalves Junior</td>
<td>BB709</td>
</tr>
<tr>
<td>Paulo Henrique Neves Santos</td>
<td>H580</td>
</tr>
<tr>
<td>Paulo Henrique Santos Rosa</td>
<td>BU649</td>
</tr>
<tr>
<td>Paulo Inforçatti Neto</td>
<td>H581</td>
</tr>
<tr>
<td>Paulo Jorge Bártolo</td>
<td>H636</td>
</tr>
<tr>
<td>Paulo Jorge Ribeiro Montes</td>
<td>U561</td>
</tr>
<tr>
<td>Paulo José Modenesi</td>
<td>Z519</td>
</tr>
<tr>
<td>Paulo La Roca</td>
<td>X560</td>
</tr>
<tr>
<td>Paulo M Bisch</td>
<td>AA521</td>
</tr>
<tr>
<td>Paulo Montes</td>
<td>BB659 U559</td>
</tr>
<tr>
<td>Paulo Noronha Lisboa Filho</td>
<td>E537 E606</td>
</tr>
<tr>
<td>Paulo Pureur</td>
<td>S604 S591</td>
</tr>
<tr>
<td>Paulo Ribeiro</td>
<td>L588</td>
</tr>
<tr>
<td>Paulo Roberto Baracho</td>
<td>BB682</td>
</tr>
<tr>
<td>Paulo Roberto Bueno</td>
<td>S612 Q515 J506 J508</td>
</tr>
<tr>
<td>Paulo Roberto Mei</td>
<td>I542 J510 J511</td>
</tr>
<tr>
<td>paulo Rogério Miranda</td>
<td>I583</td>
</tr>
<tr>
<td>Paulo Sérgio Calefi</td>
<td>H550</td>
</tr>
<tr>
<td>Paulo Sergio de Paula Herrmann</td>
<td>I555 I557 I564</td>
</tr>
<tr>
<td>Paulo Sérgio Pizani</td>
<td>BB579 BB605 BB627</td>
</tr>
<tr>
<td>Paulo Vinicius dos Santos Rebeque</td>
<td>P536</td>
</tr>
<tr>
<td>Paulo Vitor Socholodak</td>
<td>S597</td>
</tr>
<tr>
<td>Pavol Miskovsky</td>
<td>I509</td>
</tr>
<tr>
<td>Pawel Jozwik</td>
<td>V532 V533</td>
</tr>
<tr>
<td>Pedro Alves da Silva Autreto</td>
<td>T544</td>
</tr>
<tr>
<td>Pedro Antonio Prieto</td>
<td>B502</td>
</tr>
<tr>
<td>Pedro Antonio Tamayo</td>
<td>X516 X526</td>
</tr>
<tr>
<td>Pedro Augusto de Paula Nascente</td>
<td>R506</td>
</tr>
<tr>
<td>Pedro Berci Filho</td>
<td>S534</td>
</tr>
<tr>
<td>Pedro Carlos de Oliveira</td>
<td>A631</td>
</tr>
<tr>
<td>Pedro Cezar Zavitoski</td>
<td>I557</td>
</tr>
<tr>
<td>Pedro D Vaz</td>
<td>A547</td>
</tr>
<tr>
<td>Pedro Faulino Souza Jr</td>
<td>U556</td>
</tr>
<tr>
<td>Pedro Geraldo Pascutti</td>
<td>BB552 BB703</td>
</tr>
<tr>
<td>Pedro Henrique Benites Aoki</td>
<td>I537 I550 I551 A647 I538</td>
</tr>
<tr>
<td>Pedro Igor Barbosa</td>
<td>Z532</td>
</tr>
<tr>
<td>Pedro Iris Paulin-Filho</td>
<td>R506</td>
</tr>
<tr>
<td>Pedro Jose Arango</td>
<td>R573</td>
</tr>
<tr>
<td>Pedro Kunihiroki Kiyohara</td>
<td>S565</td>
</tr>
<tr>
<td>Pedro Landeros</td>
<td>E542 E573 E617</td>
</tr>
<tr>
<td>Pedro Lapidio Loureiro</td>
<td>BB703</td>
</tr>
<tr>
<td>Pedro Mendes Gomes</td>
<td>W506</td>
</tr>
<tr>
<td>Pedro Mitshuo Takahashi</td>
<td>I571</td>
</tr>
<tr>
<td>Pedro Nascente</td>
<td>Q546</td>
</tr>
<tr>
<td>Pedro Novaes</td>
<td>U510 U511 K522</td>
</tr>
<tr>
<td>Pedro Nuñez</td>
<td>K559 K561</td>
</tr>
<tr>
<td>Pedro Paulo Merat</td>
<td>A643</td>
</tr>
<tr>
<td>Pedro Prieto</td>
<td>R509 E615 O519 D547</td>
</tr>
<tr>
<td>Pedro Prieto</td>
<td>V501 R507 PE5</td>
</tr>
<tr>
<td>Pedro Venezuela</td>
<td>BB719</td>
</tr>
<tr>
<td>Peilin Chen</td>
<td>A549</td>
</tr>
<tr>
<td>Person Pereira Neves</td>
<td>U542</td>
</tr>
<tr>
<td>Peter Eklund</td>
<td>S565</td>
</tr>
<tr>
<td>Peter Fejes</td>
<td>F533</td>
</tr>
<tr>
<td>Peter Fischer</td>
<td>PE3</td>
</tr>
<tr>
<td>Peter Grutter</td>
<td>B520</td>
</tr>
<tr>
<td>Peter Hammer</td>
<td>R545</td>
</tr>
<tr>
<td>Peter HL Notten</td>
<td>PJ1</td>
</tr>
<tr>
<td>Peter Jürgen Tatsch</td>
<td>I590</td>
</tr>
<tr>
<td>Peter Kempinnen</td>
<td>Q528</td>
</tr>
<tr>
<td>Péter Ludvig</td>
<td>A529</td>
</tr>
<tr>
<td>Peter Mascher</td>
<td>D606</td>
</tr>
<tr>
<td>Peter Morse</td>
<td>T521</td>
</tr>
<tr>
<td>Peter Svec</td>
<td>PV14</td>
</tr>
<tr>
<td>Peter Svec Sr</td>
<td>PV14</td>
</tr>
<tr>
<td>Peter Tatsch</td>
<td>Y557 Y558</td>
</tr>
<tr>
<td>Petr Ivanovich Nikitin</td>
<td>I529</td>
</tr>
<tr>
<td>Petr Mikhailovich Vetoshko</td>
<td>I529</td>
</tr>
<tr>
<td>Petr Vosnek</td>
<td>H518 H519</td>
</tr>
<tr>
<td>Petrucia Duarte Silva</td>
<td>BB588 BB622 BB628 BB589</td>
</tr>
<tr>
<td>Petrucio Barrozo da Silva</td>
<td>S563 S564 I577</td>
</tr>
<tr>
<td>Petrus Santa-Cruz</td>
<td>A641 I593 X582</td>
</tr>
<tr>
<td>Phabyanno Rodrigues Lima</td>
<td>I569 I583 I584</td>
</tr>
<tr>
<td>Philipp Schroeder</td>
<td>E530</td>
</tr>
<tr>
<td>Philippe Jean Gleize</td>
<td>A564 U541</td>
</tr>
<tr>
<td>Philippe Kempre</td>
<td>B526</td>
</tr>
<tr>
<td>Philippe MARTY</td>
<td>PV17</td>
</tr>
<tr>
<td>Philippe Thomas</td>
<td>BB557 BB559</td>
</tr>
<tr>
<td>Philippe Vanderbemden</td>
<td>O508</td>
</tr>
<tr>
<td>Piedad Gañan</td>
<td>H532 L561</td>
</tr>
<tr>
<td>Pierre Labbé</td>
<td>I598</td>
</tr>
<tr>
<td>Pietro Carelli Reis de Oliveira Caltabian</td>
<td>BB649</td>
</tr>
<tr>
<td>Pilar Aranda</td>
<td>T572</td>
</tr>
<tr>
<td>Pilar Hidalgo</td>
<td>E580</td>
</tr>
<tr>
<td>Pirjo Laurila</td>
<td>PU4</td>
</tr>
<tr>
<td>Piter Gargarella</td>
<td>V516 R512 PV7</td>
</tr>
<tr>
<td>Poliana Lima da Silva</td>
<td>C563</td>
</tr>
<tr>
<td>Polyana Alves Radi</td>
<td>R570</td>
</tr>
<tr>
<td>Prakriti Tayalia</td>
<td>P514</td>
</tr>
<tr>
<td>Praveena Sarve Dhola</td>
<td>P522</td>
</tr>
<tr>
<td>Name</td>
<td>Code</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Ulame Umbelino Gomes</td>
<td>A558</td>
</tr>
<tr>
<td>Ulisso Schwantz Sias</td>
<td>M553</td>
</tr>
<tr>
<td>Ulisses Bezerra</td>
<td>BB711</td>
</tr>
<tr>
<td>Ulrich Dahmen</td>
<td>PZ4</td>
</tr>
<tr>
<td>Urquisa de Oliveira Bicalho</td>
<td>D537</td>
</tr>
<tr>
<td>Ute Schmidt</td>
<td>C510</td>
</tr>
<tr>
<td>Uwe Amann</td>
<td>S515</td>
</tr>
<tr>
<td>V Dua</td>
<td>I600</td>
</tr>
<tr>
<td>V Eposito</td>
<td>PK8</td>
</tr>
<tr>
<td>V Rossi Albertini</td>
<td>PK10</td>
</tr>
<tr>
<td>V V Silberschmidt</td>
<td>BB666</td>
</tr>
<tr>
<td>Vadim Guliants</td>
<td>D525</td>
</tr>
<tr>
<td>Vaeud Valdimo de Oliveira</td>
<td>A545</td>
</tr>
<tr>
<td>Vagif Malik Akhmedov</td>
<td>D531</td>
</tr>
<tr>
<td>Vagner Eustáquio de Carvalho</td>
<td>S524</td>
</tr>
<tr>
<td>Vagner Romito Mendonça</td>
<td>D535</td>
</tr>
<tr>
<td>Valberto Peduzzi Nascimento</td>
<td>E587</td>
</tr>
<tr>
<td>Valcinir Aloísio Scalla Vulcanti</td>
<td>H522</td>
</tr>
<tr>
<td>Valdemar Leal</td>
<td>H523</td>
</tr>
<tr>
<td>Valdemir Ludwig</td>
<td>V561</td>
</tr>
<tr>
<td>Valdemir Santos</td>
<td>A528</td>
</tr>
<tr>
<td>Valdemir Velani</td>
<td>C546</td>
</tr>
<tr>
<td>Valdir Mano</td>
<td>BB590</td>
</tr>
<tr>
<td>Valdir Soldi</td>
<td>BB592</td>
</tr>
<tr>
<td>Valdirene Aparecida da Silva</td>
<td>D570</td>
</tr>
<tr>
<td>Valdirlei Fernandes Freitas</td>
<td>S525</td>
</tr>
<tr>
<td>Valeira Santos Malta</td>
<td>O525</td>
</tr>
<tr>
<td>Valeria Moraes Longo</td>
<td>S519</td>
</tr>
<tr>
<td>Valeria Perna de Souza</td>
<td>S533</td>
</tr>
<tr>
<td>Valeria S Razina</td>
<td>S597</td>
</tr>
<tr>
<td>Valéria Spolon Marangoni</td>
<td>S590</td>
</tr>
<tr>
<td>Valéria Weiss-Angeli</td>
<td>S502</td>
</tr>
<tr>
<td>Valerie Bouquet</td>
<td>K567</td>
</tr>
<tr>
<td>Valerio Rossi Albertini</td>
<td>BB658</td>
</tr>
<tr>
<td>Valery V Lunin</td>
<td>BB502</td>
</tr>
<tr>
<td>Valmor Roberto Mastelaro</td>
<td>BB609</td>
</tr>
<tr>
<td>Valquiria Cruz Rodrigues</td>
<td>BB610</td>
</tr>
<tr>
<td>Valquiria Silva Melo</td>
<td>BB621</td>
</tr>
<tr>
<td>Valquiria Villas-Boas</td>
<td>M505</td>
</tr>
<tr>
<td>Valtencir Zucolotto</td>
<td>C539</td>
</tr>
<tr>
<td></td>
<td>D505</td>
</tr>
<tr>
<td></td>
<td>BB605</td>
</tr>
<tr>
<td></td>
<td>U542</td>
</tr>
<tr>
<td></td>
<td>D520</td>
</tr>
<tr>
<td></td>
<td>I602</td>
</tr>
<tr>
<td></td>
<td>I604</td>
</tr>
<tr>
<td></td>
<td>A529</td>
</tr>
<tr>
<td></td>
<td>AA519</td>
</tr>
<tr>
<td></td>
<td>E619</td>
</tr>
<tr>
<td></td>
<td>A518</td>
</tr>
<tr>
<td></td>
<td>I508</td>
</tr>
<tr>
<td></td>
<td>I512</td>
</tr>
<tr>
<td></td>
<td>BB596</td>
</tr>
<tr>
<td></td>
<td>I546</td>
</tr>
<tr>
<td></td>
<td>I551</td>
</tr>
<tr>
<td></td>
<td>I554</td>
</tr>
<tr>
<td></td>
<td>M532</td>
</tr>
<tr>
<td></td>
<td>I556</td>
</tr>
<tr>
<td></td>
<td>I558</td>
</tr>
<tr>
<td></td>
<td>I563</td>
</tr>
<tr>
<td></td>
<td>I567</td>
</tr>
<tr>
<td></td>
<td>I579</td>
</tr>
<tr>
<td></td>
<td>I581</td>
</tr>
<tr>
<td></td>
<td>I591</td>
</tr>
<tr>
<td></td>
<td>G550</td>
</tr>
<tr>
<td></td>
<td>I550</td>
</tr>
<tr>
<td></td>
<td>G549</td>
</tr>
<tr>
<td></td>
<td>G553</td>
</tr>
<tr>
<td></td>
<td>I586</td>
</tr>
</tbody>
</table>
Vamberto Dias Mello E636
Vamir Antonio Chitta S527
Van Der Heyden Angeline Angeline PI1
Vananêlia Pereira Nunes Geraldo G562
Vanessa Akeda L527
Vanessa Cristina Gonçalves T508 T527
Vanessa Farias Silva BB621
Vanessa Feliciano L555
Vanessa Motta Chad B518
Vanessa Petrilli Bavarese H530 H581
Vanessa Rodrigues Cunha H641
Vanessa Schmidt H630
Vanessa Sobue Franzo H522 H523
Vani Oliveira Júnior IS71
Vania Caldas Sousa K527
Vânya Márcia Duarte Pasa A569
Varlei Rodrigues F514 B529 F519 D574 E601
Vasant Vidyadhar Chabukswar A511
Veer Pal Singh Awana E579
Velimir Radmilovic PZ4 PD5
Venkat Reddy Vummadi P513
Vera Lucia da Silva Marinho Y533 K535 K532
Vera Lucia Mazzocchi H509
Vera Lúcia Othéro de Brito IS13 IS14
Vera Regina Leopoldo Constantino A530 A599 H641 A667
Vera Rosa Capelossi RS46
Veronica Araujo Calado BB678
Verônica de Carvalho Teixeira U561
Veronica Dionisio Lima A546
Verônica Mara Cortez Alves Oliveira X531 X532
Viacheslav Yermishkin X516
Vincent Dupuis E625
Vicente Braz Trindade X534 X535
Vicente Cantavella U519 PU6
Vicente Donderis M545
Vicente S Sagredo E582
Vicente Sousa Marques BB715 BB712 BB722
Victor Alexandrovich Dmitriev BB558
Victor Alexandrovich Lyakah Q550
Victor Anthony Garcia Rivera S541 S560 S573 S589
Victor Antonio Peña Rodriguez BB510 BB517 BB535
BB536 E638
Victor Aurel Andrei R532
Victor Carozo C519
Victor Castano PA3A
Victor Ciro Solano Reynoso D626
Victor Ferreira V513
Victor Jayme Roget Rodriguez Pita A623 A660 A653
Victor Luiz Leidens A618
Victor Manuel Fuenzalida D509 D522
Victor Manuel Prida E549
Victor S Batista M546
Victor Vega E549
Victor Vitorino Sarmento R545
Vikram Singh D637
Viktor Nikolaeевич Matveev F509
Vinayak P Dravid PG4
Vincent Crasta P522
Vincent G Harris PE11
Vincent Meunier C570 PC3
Vincent Meyer N511
Vincent Pagneux BB707
Vincenzo Giannini IS21
Vinicius Bertuzzo Lima BB516
Vinicius Bossoni Amaral RS20
Vinicius C de Franco E619
Vinicius Claudio Zoldan E612 E622
Vinicius Dantas Araujo DS11 D520
Vinicius Maltarollo BB578
Vinícius Rodrigues Henriques RS02 H508 U567 U566
Vinícius Romero Gonçales A521 J505
Vinícius Zacarias Rizzo Q513
Vinnius Hirdes Krüger H627
Virgilio Carvalho dos Anjos A528 A575 C546
Vitali Prakapenka F512
Vitaliy Bilovol E626 E627
Vitoldo Swinka Filho H588
Vitor Alexandre Garcia Godoy A614
Vitor Baranauskas D548
Vitor Cesar Dumont H580
Vitor da Costa Z537
Vitor de Moraes Zamarion A613
Vitor Gouveia D502
Vitor Henrique Grigull L542
Vitor Rodrigo Melo Melo BB629
Vitor Toshiyuki Abrão Oiko B529
Vitória MTS Barthem E639
Vittoria Perroti H543
Viviana Possamai Della U510 U511
Viviane Cristina Albarici BB577
Viviane Monteiro Azambuja V535 H585 V559
Viviane Mota Bispo H604
Viviane Silva Gomide H619
W

W Nelson O530
Wagner Figueiredo E575 E612
Wagner Izaltino Alves dos Santos R550
Wagner Sade O517
Waldek Waldimir Bose Filho X520
Waldemar A Macedo E643
Waldemar Alfredo Monteiro L588
Waldemar Augusto de Almeida Macedo E569 C529 A552
Waleed Khaled El-Zawawy L525
Walker Soares Drumond H574 H589
Walman Benicio Castro X509 W503
Walter Antonio Ospina Muñoz M521 M561
Walter Barreiro Cravo Jr F530
Walter Caseri P532
Walter Colli I594
Walter DalMaz Silva X579
Walter Jaimes Salcedo A608 I589
Walter Jose Botta R512 V516 V517 V522 V526
Walter Lindolf Weingaertner U521 U522
Walter Mendes de Azevedo D566 D576 A663 D589
Walter Miyakawa D611 D540
Walter Moreira Lima H582
Walter Orellana Y555 PY1
Walter Oswaldo Sosa S553
Wanda Valle Marcondes Machado T539 BB674
Wanderley Amorim Júnior BB678
Wanderley Marzano Y557 Y558
Wang Jian-Yi X501
Wang Shu Hui H574 H589 L580 L589
Wania Aparecida Cristinelli D607
Wania da Conceição Moreira I554
Warren C. Oliver PR3
Washington da Silva Sousa T538
Washington Formiga Fernandes BB548
<table>
<thead>
<tr>
<th>Name</th>
<th>ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wataru Ueda</td>
<td>D525 PA3</td>
</tr>
<tr>
<td>Watson Beck Jr</td>
<td>G511</td>
</tr>
<tr>
<td>Wei Li Wang</td>
<td>F529</td>
</tr>
<tr>
<td>Wei Lu</td>
<td>E566 Z515 E591 Z520</td>
</tr>
<tr>
<td></td>
<td>E592 E593</td>
</tr>
<tr>
<td>Welber Gianini Quirino</td>
<td>T537 T555 T559 T564</td>
</tr>
<tr>
<td>Welter CantanhÊde da Silva</td>
<td>I586</td>
</tr>
<tr>
<td>Wen Chen</td>
<td>C517</td>
</tr>
<tr>
<td>Wen-Bin Zhang</td>
<td>PP4</td>
</tr>
<tr>
<td>Wen-Yong Lai</td>
<td>PQ5</td>
</tr>
<tr>
<td>Wendel Andrade Alves</td>
<td>IS71</td>
</tr>
<tr>
<td>Wesley de Souza Bezerra</td>
<td>IS71</td>
</tr>
<tr>
<td>Wesley LC Ribeiro</td>
<td>IS71</td>
</tr>
<tr>
<td>Wesley Renato Viali</td>
<td>IS71</td>
</tr>
<tr>
<td>Whidong Kim</td>
<td>IS71</td>
</tr>
<tr>
<td>Wido Herwing Schreiner</td>
<td>IS71</td>
</tr>
<tr>
<td>Wiktor Ratuszek</td>
<td>IS71</td>
</tr>
<tr>
<td>William Trujillo Herrera</td>
<td>IS71</td>
</tr>
<tr>
<td>William A Lester Jr</td>
<td>IS71</td>
</tr>
<tr>
<td>William aperador</td>
<td>IS71</td>
</tr>
<tr>
<td>William Arvey Molano</td>
<td>IS71</td>
</tr>
<tr>
<td>William Davis</td>
<td>IS71</td>
</tr>
<tr>
<td>William Fernando Zambuzzi</td>
<td>IS71</td>
</tr>
<tr>
<td>William John Orts</td>
<td>IS71</td>
</tr>
<tr>
<td>William Junior Nascimento</td>
<td>IS71</td>
</tr>
<tr>
<td>William Lester</td>
<td>IS71</td>
</tr>
<tr>
<td>William Mathiazzi Graciano</td>
<td>IS71</td>
</tr>
<tr>
<td>William Paul</td>
<td>IS71</td>
</tr>
<tr>
<td>William Pyrz</td>
<td>IS71</td>
</tr>
<tr>
<td>William Rafael Lopez</td>
<td>IS71</td>
</tr>
<tr>
<td>William Thomas Reynolds Jr</td>
<td>IS71</td>
</tr>
<tr>
<td>William Alayo Rodriguez</td>
<td>IS71</td>
</tr>
<tr>
<td>William Campos Ribeiro</td>
<td>IS71</td>
</tr>
<tr>
<td>William Cirineu Ferreira</td>
<td>IS71</td>
</tr>
<tr>
<td>Wilmar Barbosa Ferraz</td>
<td>IS71</td>
</tr>
<tr>
<td>Wilmer Oswaldo Bucheli</td>
<td>IS71</td>
</tr>
<tr>
<td>Wilmer Saldarriaga</td>
<td>IS71</td>
</tr>
<tr>
<td>Wilney de Jesus Santos</td>
<td>IS71</td>
</tr>
<tr>
<td>Wilson Acchar</td>
<td>IS71</td>
</tr>
<tr>
<td>Wilson Alexander Hormaza</td>
<td>IS71</td>
</tr>
<tr>
<td>Wilson Ilopera</td>
<td>IS71</td>
</tr>
<tr>
<td>Wilson Ricardo Weinand</td>
<td>IS71</td>
</tr>
<tr>
<td>Wim Van Roy</td>
<td>IS71</td>
</tr>
<tr>
<td>Wolfgang Jager</td>
<td>IS71</td>
</tr>
<tr>
<td>Wu Wen-Chang</td>
<td>IS71</td>
</tr>
<tr>
<td>Wyne Thomas Shier</td>
<td>IS71</td>
</tr>
</tbody>
</table>
Y

Y A Kim C569
Y Kagawa O536
Yacine Badjah Hadj Ahmed P506
Yair Ein-Eli PW3
Yan Li V552 V553
Yan Lu T502
Yang Shao PF1
Yang Shao-Horn D577
Yang Shen O529
Yangkyu Ahn G548
Yaniv J Rosen PE16
Yannis F Missirlis H594
Yao Koutsawa Y517
Yasuharu Fujiyama PM5
Yasuyuki Sugiyama D545
Ying Chen PB3
Yingfeng Tu PP4
Yoana Pérez-Badell BB520 BB521
Yoichi Miyahara B520
Yoko Matsumura PO2
Yolanda Elinor Bravo-Garcia I606
Yong-Cheng Lin X542 Q521
Yong-Hang Zhang PM15
Yongchang Fan Q549
Yongwoo Kim M525
Yoong Ahm Kim PC6
Yoshihiro Takeda PA8
Yoshihiro Yokoyama V502
Yoshihiro Ishitani PM8
Yoshio Ohshita PM2
Yoshitaka Gushikem I506 S507 I523 I533 I595
Yosuke Kuwahara PM5
Younes Messaddeq P518 V542 V544 V545 V555
Young Duck Kim B515
Young Joo Kim S580
Youngkyun Moon C526
Yu Wang PZ6
Yuhua Zhang BB506 BB504 BB551 BB505
BB633 BB637 BB644
BB645 BB503
Yuji Ohkubo Q504 A524 R516 R536
Yujie Ma P510
Yuki Asabe Q504 A524 R516 R536
Yuki Chuiyo D545
Yukihiro Nakada O511
Yun Daniel Park B515
Yuri Gurevich BB632
Yuri Lizbeth Chipatecua Godoy R537
Yuri Torres A558
Yurii Gunko M542
Yurimiler Leyet Ruiz S556
Yusif Alekberovich Kasumov F509
Yutaka Kagawa O511 U575
Yuta Tao Pei D550 R535
Yutao Xing E503 E536 E596
E614 E595
Yuxin Wang E566 Z515 E591
Z520 E592 E593
Yvan Houbart Z501
Yvonne B Gerbig B525
Z

Zacarias Eduardo Fabrim
Zahra Fakraai
Zaine Teixeira
Zakarya Ahmed
Zane W Wyatt
Zbigniew Bojar
Zbigniew S. Wronski
Zbigniew Zaranski
Zdenek Knesl
Zeid Abdullah Alothman
Zélia Maria da Costa Ludwig
Zélia Soares Macedo
Zelma Rocha da Silva
Zeynep Baz
Zhang Xue Qing
Zheshuai Lin
Zhi Zhang
Zhixing Guo
Ziarat Shah Afridi
Zilvam Melo dos Santos
Zineb Mekhalif
Zoe Boekelheide
Zoran V Popovic
Zorana D Dohcevic-Mitrovic
Zou Zhigang
Zulmira Guerrero Marques Lacava
Zygmunt Nitkiewicz

V556 M550
B541
G535
K563
PV4
V532 V533
PV8
V533
BB574
P506
A528 A575 C546
Q551 U553 A635
S601 D618
X585
S609
BB633 BB637
PS1
N501
X506
R541
H646
R510 R511 R544
PS37
E553 A548
A548 E553
J502
G536
X507