

Symposium F

TUESDAY OCTOBER 10TH



10:30 – 12:15 P.M. ORAL SESSION F1

Chairperson: Guillermo Solórzano

Room: UFSC

10:30 – 11:00 A.M. USE OF IN SITU TEM TO STUDY NANOMATERIALS (F554,Invited) C. Barry Carter (University of Minnesota, USA); Joysurya Basu (University of Minnesota, USA); Ramachandran Divakar; Julia Deneen Nowak (University of Minnesota, USA).

11:00 – 11:30 A.M. FABRICATION AND CHARACTERIZATION OF NANOSTRUCTURES FOR ADVANCED ENERGY APPLICATIONS (F531,Invited). M. Grant Norton (Washington State); David N. McIlroy.

11:30 – 11:45 P.M. MICRORHEOLOGY OF POLY (BUTYLENE TEREPHTHALATE) / POLY(STYRENE-CO-ACRYLONITRILE) BLENDS COMPATIBILIZED BY MMA-GMA COPOLYMER (F561). Elias Hage Jr. (DEMa), Rosario Elida Bretas (DEMa), Luiz Antonio Pessan (DEMa), Carlos Trivenos Rios (DEMa), Nelson Marcos Larocca (DEMa) and Edson Noriyuki Ito (PPG-CEM).

12:00.M – 12:15 P.M. STRUCTURE AND THERMAL STABILITY OF TITANATE NANOTUBES AS A FUNCTION OF SODIUM CONTENT (F507). Fernando Rizzo (PUC-Rio), Antônio S. Araujo (UFRN), Oscar R.C. Pravia (CENPES - Petrobras), Bojan Marinkovic (PUC-rio), Marco A.S. de Abreu (CENPES - Petrobras), Paula Mendes Jardim (PUC-Rio) and Edisson Morgado Jr. (CENPES - Petrobras). ■



12:30 P.M. – 2:00 P.M – LUNCH



2:00 P.M. – 2:45 P.M – PLENARY LECTURE

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2:50 P.M. – 4:05 P.M. – ORAL SESSION F2

Chairperson: Barry Carter

Room: UFSC

2:50 – 3:20 P.M. NANOWIRES AND SUSPENDED ATOMIC CHAINS FROM Au-Ag ALLOYS (F514,Invited). Daniel Ugarte (IFGW-UNICAMP and LNLS); Douglas S. Galvão (DFA-IFGW-UNICAMP); Paulo Z. Coura (DF-UFJF); Fernando Sato (DFA-IFGW-UNICAMP) and Jefferson Bettini (LNLS).

3:20 – 3:50 P.M. TRANSMISSION ELECTRON MICROSCOPY STUDIES OF MESOPOROUS CARBON AEROGELS AND CARBON/METAL NANOCOMPOSITES PRODUCED USING SUPERCRITICAL CARBON DIOXIDE BASED PROCESS (F537, Invited). M. Aindow (University of Connecticut); A. Bayrakceken (Middle East Technical Uni); Y. Zhang (University of Connecticut); C.D. Saquing (University of Connecticut); U. Kitkamthorn (University of Connecticut); D. Kang (University of Connecticut) and C. Erkey (University of Connecticut).

3:50 – 4:05 P.M. EFFECT OF PROCESSING CONDITIONS ON THE MORPHOLOGY OF INDIUM-TiN-OXIDE NANOSTRUCTURES MADE BY PULSED LASER ABLATION (F505). Ednan Joanni (INESC Porto) and Raluca Savu (INESC Porto). ■



4:20 P.M. – 4:40 P.M. – COFFEE BREAK



4:20 P.M – 5:45 P.M – POSTER SESSION



5:50 P.M. – 7:20 P.M. – ROUND-TABLE

WEDNESDAY OCTOBER 11TH



8:30 – 10:15 A.M. – ORAL SESSION F3

Chairperson: Daniel Ugarte

Room: UFSC

8:30 – 9:00 A.M. ELEMENTAL MAPPING OF NANO-MATERIALS IN TEM AND STEM MODES (F547, Invited). Jim Bentley (ORNL)

9:00 – 9:30 A.M. ELECTRON TOMOGRAPHY OF NANOSTRUCTURES (F529,Invited). Paul Anthony Midgley (University of Cambridge); Dominik Eder (University of Cambridge); Edmund Ward (University of Cambridge); Ana Hungria (University of Cambridge) and Ian Kinloch (University of Cambridge)

9:30 – 9:45 A.M. GAS ATOMIZATION OF $Fe_{72}Nb_4Si_{10}B_{14}$ METALLIC GLASS (F539). Conrado Ramos Moreira Afonso (LME/LNLS), Walter José Botta Filho (Dema/UFSCar), Claudemiro Bolfarini (Dema/UFSCar) and Claudio Shyinti Kiminami (Dema/UFSCar)

9:45 – 10:00 A.M. CHARACTERIZATION BY ELECTRON MICROSCOPY OF THE REACTIVE MILLED POWDERS OF Mg + 5%FeF₃. **(F542)**. Daniel Rodrigo Leiva (PPGCEM/UFSCar), Tomaz Toshimi Ishikawa (DEMa/UFSCar), Alberto Moreira Jorge Junior (DEMa/UFSCar), Junji Saida (Tohoku University - Japan) and Walter José Botta Filho (DEMa/UFSCar).

10:00 – 10:15 A.M. BUBBLE AND BLISTER FORMATION IN P-TYPE SILICON BY COMBINING CONVENTIONAL IMPLANTATION AND PLASMA IMERSION **(F509)** Paulo Fernando P. Fichtner (DEMET/ UFRGS), Jean-François Barbot (LMP-Poitiers Univ.), Tatiana Marcondes (UFRGS), Marie-France Beaufort (LMP-Poitiers Univ.), Augusto A. D. de Mattos (UFRGS/Poitiers Univ.) and Shay Reboh (UFRGS). ■



10:15 A.M. – 10:30 A.M. – COFFEE BREAK



10:30 A.M. – 12:00 M. ORAL SESSION F4

Chairperson: Walter Botta

Room: UFSC

10:30 – 11:00 A.M. SUB-NM EELS MAPPING OF PHYSICAL PROPERTIES IN INDIVIDUAL NANOSTRUCTURES. **(F558, Invited)**. Christian Colliex (Université Paris-Sud, France).

11:00 – 11:30 A.M. UNDERSTANDING THE NATURE OF NANOSTRUCTURED HETEROGENEOUS CATALYSTS **(F541, Invited)**. Jimmy Liu (Monsanto Company).

11:30 – 11:45 AM MORPHOLOGY OF CELLULOSE ACETATE/ POLYETHYLENEGLYCOL/MONTMORILLONITE COMPOSITES. **(F534)**. Rafaelle Bonzanini (Unicamp); Maria do Carmo Gonçalves (Unicamp).

11:45 A.M.– 12:00M.ELECTRON BEAM EFFECTS ON AMORPHOUS MOLYBDENUM OXIDE NANOSTRUCTURES GROWN BY CONDENSATION IN A CARRIER GAS **(F502)**. Victor Manuel Fuenzalida (U. de Chile), Sonia Guaño (PUC Rio de Janeiro), Donovan Enrique Diaz-Droguett (U. de Chile) and Guillermo Solorzano (PUC Rio de Janeiro). ■



12:30 P.M. – 2:00 P.M – LUNCH



2:00 P.M. – 2:45 P.M – PLENARY LECTURE

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2:50 P.M. – 4:05 P.M. – ORAL SESSION F5

Chairperson: Paulo Fichtner

Room: UFSC

2:50 – 3:20 P.M. ATOMIC SCALE SCANNING TRANSMISSION ELECTRON MICROSCOPY **(F552,Invited)**. Juan Idrobo (University of Illinois), Ilke Arslan (Sandia National Lab), Alexander Ziegler (LBNL), Rolf Erni (FEI), Nigel Browning (University of California), Eric Stach (Purdue University) and Andrew Bleloch (UK SuperSTEM).

3:20 – 3:50 P.M MICROSTRUCTURAL CHARACTERIZATION OF CU-BASED BULK METALLIC GLASS CONTAINING NANOPARTICLES **(F533, Invited)**. Claudemiro Bolfarini (UFSCar), Alberto Moreira Jorge Jr (UFSCar), Thiago Jose Mesquita (UFSCar), Michael Joseph Kaufman (University of North Texas), Walter Jose Botta Filho (UFSCar) and Claudio Shyinti Kiminami (UFSCar).

3:50 – 4:05 P.M. ADHESION IN HETEROGENEOUS SYSTEMS: FORMATION OF NANOHYBRID AGGREGATES **(F526)**Elisângela Moura Linares (Unicamp), Fábio do Carmo Bragança (Unicamp), Cristiane Aparecida Silva (Unicamp), Leonardo Fonseca Valadares (Unicamp) and Fernando Galembeck (Unicamp). ■



4:20 P.M. – 4:40 P.M. – COFFEE BREAK



4:20 P.M – 5:45 P.M – POSTER SESSION PF1

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5:50 P.M. – 7:00 P.M – PLENARY SESSION



20:30 P.M. *Conference Dinner* ↗

Local: Swimming Pool Lounge

THURSDAY OCTOBER 12TH



9:30 A.M. – 10:45 A.M. – POSTER SESSION PF2



10:15 A.M. – 10:30 A.M. – COFFEE BREAK



10:45 A.M. - CLOSING PLENARY SESSION