

CONTENT

◆ Keynote Lectures	9
◆ Workshop “Transference og Technology”	10
◆ Session 1. General and tutorial lectures on New Materials and Advanced Technologies.	11
◆ Session 2. New Generation Nanostructured Materials, Hybrid Materials, Magnetic Materials, Glass and Ceramic, Dental Materials, Exotic Materials.	13
◆ Session 3. Natural Fibers, Composites and Environmentally Friendly Materials.	19
◆ Session 4. Polymeric Materials and Composites for Plastic Electronics and Solar Energy Conversion.	21
◆ Session 5. Advanced Materials and Composites for Photonics, Nano- and Biophotonics	26
◆ Session 6. Biomaterials and Biotechnology	29
◆ Poster Session	32
◆ Ceremonies and Social Activities	44

10th International Conference on Frontiers of Polymers and Advanced Materials

September 28 –October 2, 2009, Santiago de Chile

PROGRAM

KEYNOTE LECTURES

Monday, September 28, 2009

Chair G. González

- | | |
|---------------|--|
| 16:30 – 17:45 | Opening addresses |
| 17:45 – 18:00 | Pause |
| 18:00 – 18:50 | Nanomaterials to Meet the 21st Century Technical Challenges: Impact on Energy and Healthcare
<u>P. N. Prasad</u> , Institute for Lasers, Photonics and Biophotonics, Buffalo University, Buffalo, NY, USA |
| 18:50 – 19:30 | Advanced Functional Materials by Atom Transfer Radical Polymerization
<u>K. Matyjaszewski</u> , Carnegie Mellon University, Pittsburgh, PA, USA |
| 19:30 – 19:40 | The International Union of Pure and Applied Chemistry
<u>K. Matyjaszewski</u> , Carnegie Mellon University, Pittsburgh, PA, USA |
| 19:40 – 22:00 | Welcome Reception |

Tuesday, September 29, 2009

Chair P.N. Prasad

- | | |
|-------------|--|
| 8:30 – 9:10 | Magnetic Properties of Metal-Free dsDNAs
<u>J.I. Jin</u> , Department of Chemistry and Center for Advanced Materials Chemistry, Korea University, Seoul, Korea |
|-------------|--|

- 9:10 – 9:50 **Cylindrical Magnetic Nanoobjects Based on Atomic Layer Deposition**
K. Nielsch, Institute of Applied Physics, University of Hamburg, Germany
- 9:50 – 10:30 **Theory-Guided Optimization of Organic Electro-Optic Materials and Integration into Silicon Photonic Devices**
L. Dalton, Departments of Chemistry and Electrical Engineering, University of Washington, Seattle, WA, USA
- 10:30 – 10:45 Coffee break
- Chair K.S. Lee*
- 10:45 – 11:25 **Nanoimprinted Polymer-Nanoparticle Composites for Photonic Structures**
C. Sotomayor-Torres, Catalan Institute of Nanotechnology (CIN2-CSIC), Barcelona, Spain
- 11:25 – 12:05 **Biosensors Based on Conducting Polymer and Functionalized Carbon Nanotubes**
S. Cosnier, Département de Chimie Moléculaire UMR, CNRS, University Joseph Fourier, Grenoble, France
- 12:05 – 12:45 **The Power of Nanotechnology in Energy, Water, and Infrastructure Challenges.**
K.A. Blakely, The InVentures Group, Inc., Buffalo, NY, USA
- 13:00 – 14:30 Lunch

WORKSHOP

Tuesday, September 29, 2009

Chair N. Young

- 14:30 – 16:30 Transference of Technology

SESSION 1

General and tutorial lectures on New Materials and Advanced Technologies

Tuesday, 28 September 2009

Chair O.N. Oliveira Jr.

- 17:00 – 17:40 **Recent Progress in Technology and Application of Electro-Optic Polymers**
F. Kajzar, Angers University, France
- 17:40 – 18:20 **Grafting of Redox Molecules onto Silicon Surfaces: A Step towards Molecular Memories**
G. Bidan, M. Billon, F. Duclairoir, L. Dubois, B. Fleury and P. Maldivi, N. Joo, J. Buckley, G. Delapierre, K Huang, T. Pro, G. Nonglaton, E. Jalaguier, B. de Salvo, S. Deleonibus CEA/INAC, University of Grenoble, and, CEA-DSM, Grenoble, France
- 18:20 – 19:00 **Advanced in Two-Photon Stereolithography**
K. S. Lee, Hannam University, Daejeon, Korea

Wednesday, 29 September 2009

Chair J.-I. Jin

- 8:30 – 9:10 **Novel Molecular Architectures for Sensing and Biosensing**
O.N. Oliveira Jr., University Sao Paulo, Institute of Physics of SaoCarlos, Brazil
- 9:10 – 9:50 **Potential Applications of Gold Nanoparticles in Nanoelectronics And Biomedicina**
U. Simon, RWTH Aachen University, Germany
- 9:50 – 10:30 **Reversing the Arrow of Time Using Polymer-Dye Interactions**
M.G. Kuzyk, S. Ramini, E. De Leon, B. Anderson, C.W. Dirk, N. Westfall, Washington State University, Pullman, WA, and University of Texas at El Paso, El Paso, TX, USA
- 10:30 – 11:00 Coffee break

- 11:00 – 11:40 **Materials and Structures Technologies**
S. Ermer, Lockheed Martin Space Systems Company, Palo Alto, CA, USA
- 11:40 – 12:20 **Photochromic systems as models for opto-electrical switches**
J. Sworakowski, P. Lutsyk, K. Janus, S. Nešpůrek, A. Kochalska, Institute of Macromolecular Chemistry, Wrocław University of Technology, Poland Wrocław, Poland; and Academy of Sciences of the Czech Republic, Prague, Czech Republic.
- 12:20 – 13:00 **Structural Transitions and Growth Mechanisms in Nanostructured Materials. Nonlinear Optical Spectroscopy of Nanostructured Materials**
A. Craievich, University of São Paulo, Sao Paulo, Brazil
- 13:00 – 14:30 Lunch
- Chair B.L Rivas
- 14:30 – 15:10 **Chemical Recycling of Polystyrene. Sulphonation with Different Sulphonation Agents**
W. Sulkowski, K. Nowak, A. Sułkowska, A. Wolińska, W.M. Bajdur, D. Pentak, B. Mięka, University of Silesia, Katowice, Medical University of Silesia, Sosnowiec; and Technical University of Czestochowa, Poland
- 15:10 – 15:50 **Global activities in Advanced electronic materials**
M. Mah, The Air Force Office of Scientific Research, AFORS, Arlington, VA, USA
- 15:50 – 16:30 **Linear and Non-Linear Optical Properties of Carbon Nanotubes**
S. Lefrant, J.P. Buisson, J.Y. Mevellec, M. Baibarac, I. Baltog, Nantes University, France, and National Institute of Materials Physics, Bucharest, Romania
- 16:30 – 17:00 Coffe break
- 17:00 – 19:00 **Poster Session**

Friday, October 2 2009

Chair *M. Mah*

- 9:00 – 11:40 **Innovation of Photonics Polymer**
Y. Koike, Keio University, Yokohama; and Japan Science and Technology Agency, Kawasaki, Japan
- 9:40 – 10:20 **The Mechanism of Small Objects: Selected Experiments from Various Landscapes**
D. Wagner, Weizmann Institute of Science, Rehoboth, Israel
- 10:20 – 11:00 **Organic neat liquids and liquid crystals for multiple time scale passive optical switching.**
I. C. Khoo, Pennsylvania State University, University Park, PA, USA
- 11:15 – 11:45 Coffee break
- 11:45 **Closure**

SESSION 2

New Generation Nanostructured Materials, Hybrid Materials, Magnetic Materials, Glass and Ceramic, Dental Materials, Exotic Materials

Tuesday, 28 September 2009

Chair *R. M. Faria*

- 14:30 - 15:00 **PLENARY Brush-Coated Nanoparticles/Homopolymer Mixtures: Phase Behavior and Dynamics**
Peter F. Green, Hyun Joon Oh and Jenny Kim, University of Michigan, MI, USA
- 15:00 - 15:25 **INVITED Solid Phase Synthes of Segmented Copolymer Brushes**
J. T. Koberstein, H. Rengifo and C. Grigoras, Department of Chemical Engineering, Columbia University, USA

- 15:25 - 15:45 **Cellulose Composites an Alternative Materials from Proton Exchange Membrane**
Ana-Maria Albu, Georgeta Voicu^{1b}, Maria Maganu, Dumitru MirceaVuluga, University Politehnica of Bucarest; and Romanian Academy, Bucharest, Romania.
- 15:45 - 16:05 **Degradation of MWCNT during encapsulation via bulk-suspension polymerization**
L. Talamantes-López, J.G. Mendoza-Payán, E.A. Zaragoza-Contreras, Laboratorio Nacional de Nanotecnología, Chihuahua, Chih. México.
- 16:05 - 16:25 **Effect of Nanosphere Size on the Barrier Properties of Polypropylene Nanocomposites**
V.N .Dougnac, B.C. Peoples , R .Quijada, Centro para la Investigación Interdisciplinaria Avanzada en Ciencia de los Materiales (CIMAT), Universidad de Chile, Santiago, Chile
- 16:25 - 16:45 **Polyethylene/Graphite nanocomposites obtaiend by in situ polymerization**
F. de C. Fim, G. B. Galland, J. M. Guterres, N. R. S. Basso, Pontificia Universidade Católica do Rio Grande do Sul, RS, Brazil
- 16:45 – 17:00 Coffee break
- Chair R.J.J. Williams*
- 17:00 - 17:30 **PLENARY Hierarchical Carbons as 3D Electrodes for Applications in Energy**
D. Carriazo, M. C. Gutierrez, M. L. Ferrer, F. del Monte, CSIC, ICMM, Madrid, Spain
- 17:30 - 17:55 **INVITED Aromatic-Aromatic Interactions and their Role in Nanoparticle Formation**
Moreno-Villoslada, R. Araya-Hermosilla, C. Torres-Gallegos, T. Murakami, H. Nishide, University Austral de Chile, Valdivia, Chile
- 17:55 - 18:20 **INVITED Fatty Acid Intercalated Double Hydroxides**
N. Nhlapo, L. Moyo and W.W. Focke, University of Pretoria, Pretoria, South Africa
- 18:20 - 18:40 **Design and Synthesis of Inherently Nanostructured Si- and C-Based Materials**
G. Gueorguiev, S. Stafström, A. Furlan, L. Hultman, Linköping University, Linköping, Sweden

18:40 - 19:00 **Nuclear Magnetic Resonance Study of Hydrated Bentonite**
J.P. Donoso, C.J. Magon, I.D.A. Silva, R.I. Mattos, C.E. Tambelli, J.E. De Souza, M. Moreno, E. Benavente, G. Gonzalez, IFSC – University of Sao Paulo, Sao Carlo, Brazil; University Tecnológica Metropolitana, Santiago; and Universidad de Chile, Santiago, Chile

Wednesday, 29 September 2009

Chair S. Lefrant

8:30 - 9:00 **PLENARY Investigating Electrons, Phonons and the Electron-Phonon Interactions in Graphene by Raman**
M. A. Pimenta, L. M. Malard, D. L. Mafra, D. C. Elias, J. C. Brant, F. Plentz, E. S. Alves, S. K. Doorn, H. Htoon, J. Nilsson, A. H Castro-Neto, University Federal of Minas Gerais, Belo Horizonte, Brazil; Chemistry Division, Los Alamos National Laboratory, Los Alamos, New Mexico; and Boston University, Boston, MA, USA

9:00 - 9:25 **INVITED Graphene: a 2D Dream Coming True**
E. Dujardin, C. Soldano, A. Mahmood, S. Linas, CEMES CNRS, Toulouse, France

9:25 - 9:50 **INVITED Synthesis and Spectroscopy of Carbon Nanotubes, Graphene and Hybrid Nanostructures**
Cortés, E. Svåsand and **P. Häberle**, R. Segura, S. Hevia, R.G. Lacerda and A. Gonçalves, Universidad Técnica Federico Santa María, Valparaíso; Universidad de Valparaíso, Valparaíso; and Pontificia Universidad Católica de Chile, Santiago, Chile

9:50 - 10:15 **INVITED Continuous Wave and Pulsed EPR Spectroscopy as a Tool to Investigate Structure and Dynamics in Disordered Systems**
Claudio José Magon, José Pedro Donoso and José Fernando Lima, University Sao Paulo, Institute of Physics of Sao Carlos, Brazil

10:15 - 10:35 **Hydrogen Adsorption and Storage in Defective Single-Wall Carbon Nanotubes**
W. Orellana, Universidad Andrés Bello, Santiago, Chile

10:35 -11:00 Coffee break

Chair K. Nielsch

- 11:00 - 11:30 **PLENARY Disorder-Based Graphene Spintronics**
Fazio, Thiago B. Martins, Antônio J.R. da Silva, and A.R. Rocha, Instituto de Física, Universidade de São Paulo, São Paulo, SP; and Universidade Federal do ABC, Santo André, SP, Brazil
- 11:30 - 11:55 **INVITED Spin-Glass State, Gaussian Distribution and the Stability Magnetic Field**
J. Warczewski, J. Krok-Kowalski, P. Gusin, P. Rduch, G. Władarz, Silesian University, Katowice, Poland
- 11:55 - 12:20 **INVITED Identifying Magnetic Phases on Annealed Amorphous Alloys using FORC Diagrams**
Juliano C. Denardin, Roberto Lavín, Betzabé Torres, Daniel Serafini, University Santiago de Chile, Chile
- 12:20 - 12:45 **INVITED Tailoring Magnetic Properties at Nanoscale: Magnetic Hollow Nanospheres**
E. Lima Jr, J.M. Vargas, R.D. Zysler, H.R. Rechenberg, R. Cohen, J. Arbiol, G.F. Goya, A. Ibarra, M.R Ibarra, Atomic Center Bariloche, Argentina; Instituto de Física, Univ. de São Paulo, São Paulo, SP, Brazil; Instituto de Nanociencia de Aragón, Universidad de Zaragoza, Zaragoza, Spain
- 13:00 – 14:30 **Lunch**
- Chair W.W. Sulkowski*
- 14:30 - 14:55 **INVITED Hibrid Glass as Protective Coating for Aerospace Optical Fibers and Cables. Validation Test Results**
A.B. Wojcik and Mark Messer, Hybrid Glass Technology, Princeton, FL, USA
- 14:55 - 15:20 **INVITED New Aspects of Polymer Structure Formation in Microstructured Confinements**
H.-G. Braun and E.Meyer, Leibniz Institute of Polymer Research Dresden, Germany
- 15:20 - 15:55 **INVITED Polymeric Composites Based on Micro- and Nano-Particles from Different Sources**
M. Yazdani, Advanced Interdisciplinary Resaech on Materials; University of Chile, Santiago, Chile

- 15:55 - 16:20 **Novel Architectures of The Polymeric System Containing 4VP/Aac, Synthesized by Gamma Radiation, and their Metal-Ion-Uptake Properties.**
 INVITED Guillermina Burillo, Giovanni.Gonzalez-Perez, Ricardo Neri, Instituto Ciencias Nucleares, Universidad Nacional Autónoma de México, D.F., México
- 16:30 – 17:00 **Coffee Break**
- 17:00 – 19:00 **Poster session**

Thursday, October 1, 2009

Chair H.D. Wagner

- 8:30 - 9:00 **PLENARY Self-Assembly of Nanoparticles Dispersed in Polymers**
R.J.J. Williams, INTEMA, University of Mar del Plata, Argentina
- 9:00 - 9:25 **INVITED Organic and Inorganic Hybrid Nanomaerials for Photonic Applications**
O. Sugihara and T.Kaino, Tohoku University, Sendai, Japan
- 9:25 - 9:50 **INVITED Oxide Nanotubes Obtained by WET Chemical Methods**
M. Zaharescu, Institute of Physicla Chemistry of the Romanian Academy of Sciences, Bucharest, Romania
- 9:50 - 10:15 **INVITED Non-Carbonaceous Nanostructures and the Importance of their Defects**
V. Lavayen, C. O'Dwyer, O.E.D. Rodrigues, D. Navas, G. Gonzalez, C. Diaz, University Federico Santa María, Chile; and University of Limerick, Limerick, Ireland
- 10:15 - 10:35 **Organosoluble and Reactive Nanoparticles of Oxides Ready for Nanocomposite**
 Aboulaich, B. Boury, P.H. Mutin, CNRS –CMOS Université Montpellier 2, Montpellier, France.
- 10:40 – 11:10 **Coffee break**

Chair J. Ulanski

- 11:10 - 11:35 INVITED **Materials research in emerging non-volatile memory concepts**
J. G. Lizoni, FCFM, University of Chile, Santiago, Chile
- 11:35- 12:00 INVITED **Hydrothermal Preparation of Oxide Nanostructures**
V. M. Fuenzalida, R. Espinoza, R. A. Zárate and S. Fuentes, University of Chile, FCFM, Santiago, and Universidad Católica del Norte, Antofagasta, Chile.
- 12:00 - 12:25 INVITED **Lithium Dynamics in Intercalation Compounds Studied by Nuclear Magnetic Resonance**
J.P. Donoso, C.J. Magon, E.Benavente,M.A. Santa Ana, G. Gonzalez, University Sao Paulo, Institute of Physics of Sao Carlos, Brazil; Univ. Tecnológica Metropolitana, Santiago; and Universidad de Chile, Santiago, Chile
- 12:25 - 12:45 **Electrospun Antimicrobial Polyurethane Nanofibers Containing Silver Nanoparticles for Biotechnological Applications: Nano-Biotechnological Approach**
Faheem A. Sheikh, Nasser A. M. Barakat, Muzafar A. Kanjwal, Seol-Hee Jeon, Hyung-Sub Kang, Hyung-Sub Kang and Hak-Yong Kim, Korea
- 12:45 - 13:10 INVITED **Defect-Related Photoconductivity and Mobility Effects in TlBr**
V. Kažukauskas, A. Ziminskij, G. Davidyuk, V. Bozhko, G. Mironchuk Vilnius University, Vilnius, Lithuania; and National University, Lutsk, Ukraine
- 13:10 – 14:40 Lunch

Friday, October 2, 2009

Chair T. He

- 9:00 - 9:25 INVITED **Dendronized Polymers. Synthesis, Thermal Properties and Dielectric Behavior**
D. Radic, C. Sandoval, L. Alegría C. Sandoval, N. Alvarado L. Gargallo, Universidad Católica de Chile, Santiago, Chile
- 9:25 - 9:45 **pH Response of Surface Morphology of Radiation-Grafted Binary Copolymers**
Héctor Ivan Meléndez-Ortiz and Emilio Bucio, Takashi Isoshima and Masahiko Hara, Flucto-Order Functions Asian Collaboration Team, RIKEN Advanced Science Institute, Wako. Japan and Universidad Nacional Autónoma de México, Mexico

- 9:45 - 10:05 **Evaporation in Vacuum-Liquid-Solid System**
D.V.Alexandrov, and I.V. Alexandrova, Urals State University, Ekaterinburg,
 Russian Federation.
- 10:05 - 10:30 **INVITED Present and Future Trends in TiO₂ Nanotubes Elaboration,
 Characterization and Potential Applications**
Demetrescu, D.Ionita, C. Pirvu, D. Portan, Politehnica University of Bucharest,
 Romania
- 11:15 - 11:45 Coffee break
- 11:45 **Closure**

SESSION 3

Natural Fibers, Composites and Environmentally Friendly Materials

Tuesday, 28 September 2009

Chair M.I. Aranguren

- 14:30-15:00 **PLENARY Outlook for the International Year of Natural Fibers 2009. The Role
 of Biotechnological Research in Improving Natural Fibers**
R. M. Kozłowski, T. Kosmider , J. Barriga-Bedoya, J. Batog, W. Konczewicz, M.
 Mackiewicz-Talarczyk, J. Walentowska, K. Wielgus, M. Zimniewska, Institute of
 Natural Fibers & Medicinal Plants, Poznan, Poland
- 15:00-15:25 **INVITED Fume Nanosilica on Polyurethane Adhesives**
J.R. Vega-Baudrit, M.Sibaja-Ballester, J.M Martín-Martínez, LANOTEC,
 Universidad Nacional in Heredia, Costa Rica: and Adhesion and Adhesives
 Laboratory, Alicante, Spain
- 15:25-15:50 **INVITED Reducing any Negative Environmental Impacts from the
 Manufacturing and Utilization of Lignocellulosics-derived Materials. An
 overview on Research**
F. Caldeira, CIAGEB. University Fernando Pessoa, Oporto, Portugal

- 15:50-16:15 **INVITED Influence of Wood Species on Properties of Wood/HDPE Composites**
W. Gacitua E., Universidad del Bío-Bío, Concepción, Chile
- 16:15-16:35 **Pineapple Leaf Fibers for Production of Composites and Cellulose**
A.L. Leão and S. F. Souza, Sao Paulo State University, Botucatu, Brazil
- 16:35 – 17:00 Coffee break
- Chair R. M. Kozlowski*
- 17:00-17:30 **PLENARY Polymers and Composites from Vegetable Oils and Plant Fibers/ Fillers**
M. A. Mosiewicki, N.E.Marcovich and M.I. Aranguren, INTEMA, National University Mar del Plata, Argentina
- 17:30 – 17:55 **INVITED Evaluation of Vegetable Fibers as Sorbent Materials for Diesel Oil and Biodiesel**
A.L. Leão, A. Ferla, J.S.C. Pires, R. Rowell, S. Ferreira, Sao Paulo State University, Brazil, and University of Wisconsin, Madison, USA
- 17:55 – 18:20 **INVITED Cellulose Based Nanofibers as Reinforcement of Polyurethanes**
N.E. Marcovich, M. A. Mosiewicki and M.I. Aranguren, M.L. Auad and T. Richardson, INTEMA, Universidad Nacional de Mar del Plata, Argentina; and Auburn University, AL, USA
- 18:20 – 18:45 **INVITED Alginates: Extraction, Characterization, and Properties**
César G. Gómez, Marguerite Rinaudo, Marcelo A. Villar, PLAPIQUI, Universidad Nacional del Sur, Bahía Blanca; and Universidad Nacional de Córdoba, Córdoba, Argentina; and Université Joseph Fourier de Grenoble, Grenoble, France
- 18:45 – 19:05 **Native Crop Fibers for Micro and Nano Composites**
S.F. Souza, A.L. Leão, M. Sain, J.H. Cai, University of State of São Paulo, Brazil; and University of Toronto, Canada

SESSION 4

Polymeric Materials and Composites for Plastic Electronics and Solar Energy Conversion

Tuesday, September 29, 2009

Chair T. Ogawa

- 17:00 – 17:30 **PLENARY Functional Polymer Materials in Conjunction with Membranes to Remove Ions**
Bernabé L. Rivas, University of Concepción, Concepción Chile
- 17:30 – 17:55 **INVITED How Do Highly Conducting Films of Plasdoped Polyaniline Bridge th Gap between Polymers & Organic Crystals?**
D.Djurado, J. Faure-Vincent, A. Pron, and J.P. Travers, L. Walmsley, CEA Grenoble, France; and Universidade Estadual Paulista, Rio Claro, São Paulo, Brazil
- 17:55 – 18:20 **INVITED Features of Polaronic Charge Carriers in Polysilanes: Experimental and Theoretical Approach**
S. Nešpurek, J. Nožár, A. Kadashchuk, I.I. Fishchuk, Institute of Macomolecular Chemistry, Prague, Czech Republica; and Institute of Physics, National Academy of Sciences of Ukraine, Kiev, Ukraine
- 18:20 – 18:40 **Characteristic of Micro Pump Driven by Conducting Polymer Soft Actuator with Open/Close Movement**
M.Fuchiwaki, Y.Naka and K.Tanaka, Kyushu Institute of Technology, Fukuoka, Japan
- 18:40 – 19:00 **Tensile Properties and Deformation Behaviour of Superelastic Polymers**
R. Weidisch, R. Schlegel, Y. Duan, J. Mays, N. Hadjichristidis, Friedrich-Schiller-University, Jena, Germany; University of Tennessee, Knoxville, USA; University of Athens, Greece

Chair J.T Koberstein

- 11:00 – 11:30 **PLENARY Self-Organized SEBS-Copolymer Nanostructures as Patterning Template**
M. A. Pereira-da Silva, A. J. F. Carvalho, R. H. Longaresi, R. M. Faria, IFSC-University of Sao Paulo; and Federal University of São Carlos, Brazil
- 11:30 – 11:55 **INVITED Multiple Metastable Morphologies of Diblock Copolymer Tuned by Solvent Treatment**
Yumei Gong, Haiying Huang, Guo Rui and Tianbai He, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, China
- 11:55 – 12:20 **INVITED Some Applications of Acyclic Diene Methathesis Polymerization, ADMET**
F. Zuluaga, K. B. Wagener, P. Matloka, P. Delgado, Universidad del Valle, Cali, Colombia; and University of Florida, Gainesville FL, USA
- 12:20 – 12:40 **Hidden Dynamics in Nanophase Segregated Multiblocks Copolymer Melts**
F.I. Roschztardt, University of Leeds, UK; and University of Santiago, Santiago, Chile
- 12:40 – 13:00 **New Possibility of Ionic Liquids as a Novel Initiator of Radical Polymerization**
S. Kanno, Tohoku Seikatsu Bunka Junior College, Miyagi, Japan
- 13:00 – 14:30 Lunch

Chair J.H. Zagal

- 14:30 – 14:55 **INVITED Metal Complexes with Extended π Conjugated Bipyridine Ligands and their Potencial Use in Material Science**
B. Loeb, F.E. Gajardo, F. Angel, M. Barrera, R. Vargas, C. Zúñiga, I. Crivelli, P. Universidad Católica de Chile, Santiago; and Universidad de Chile, Santiago, Chile

- 14:55 – 15:20 **INVITED Pani Films, SAM and Cerium Conversion Layer Applied on Aluminum Alloys Surfaces**
A.J. Motheo, Institute of Chemistry of São Carlos, University of São Paulo, Sao Carlos, Brazil
- 15:20 – 15:40 **Study of Self Assembled Monolayers and Polyaniline as Protection Against Corrosion of 2024 and 7075 Aluminum Alloys**
D.P.B. Silva and A.J.Motheo, Institute of Chemistry of São Carlos, University of São Paulo, Sao Carlos, Brazil
- 15:40 – 16:00 **Dynamics of Molecular Reorientation in Liquid-Crystalline Azo-Polymers**
J. Mysliwiec, M. Czikowski, A. Miniewicz, A.Kochalska, Z.Sedlakova, S.Nespurek, Wroclaw University of Technology, Wroclaw, Poland; and Academy of Science of the Czech Republic, Prague, Czech Republic
- 16:30 – 17:00 Coffee break
- 17:00 – 19:00 Poster Session

Thursday, October 1, 2009

Chair C.A. Barbero

- 8:30 – 9:00 **Effect of Ageing of ZPc/C60 Solar Cells on Charge Transport Properties**
PLENARY V. Kažukauskas, A. Arlauskas, and M. PranaitisR. Lessmann, M. Riede, and K. Leo, Vilnius University, Vilnius, Lithuania; Technische Universität Dresden, Germany
- 9:00 – 9:30 **Durable and Efficient Polymer Solar Cells - Surface and Interface Effect**
PLENARY O.Ok. Park, Dong Hwan Wang, Hang Ken Lee, Ji Hye Jeon, Sang Hyuk, Jong Hyeok Park, Jai-Kyeong Kim, Dept. Chem. & Biomolecular Eng., KAIST, Daejeon; KRICT, Daejeon; Sungkyunkwan University, Suwon; and Korea Institute of Science; and Technology, Seoul, Korea
- 9:30 – 9:55 **INVITED Anthocianin Sensitized TiO₂/Chitosan-NH₄I(I₂)-BMII Junction Solar Cell**
M.H. Buraidah, L.P. Teo, S.R. Majid and A.K. Arof, University of Malaya, Kuala Lumpur, Malaysia

- 9:55 – 10:15 **Aging Model for Polymeric Materials in Solar Thermal Applications**
A. Olivares, J. Rekestad, M. Meir, Universidad Técnica Federico Santa María, Valparaíso, Chile; University of Oslo, Blindern, Norway
- 10:40 – 11:10 Coffee break
- Chair A. Pawlika*
- 11:10 – 11:35 **INVITED Synthesis, Properties and Applications of Conducting Polymer Nano-Objects**
C.A. Barbero, D.F. Acevedo, E. Yslas, M. Broglia, D.O. Peralta, E. Frontera, R. Rivero, C. Rivarola, M.C. Miras, University of Rio Cuarto, Rio Cuarto Argentina
- 11:35 – 12:00 **INVITED Molecular Electrodes with Macrocyclic Complexes, Versatile Materials for Multiple Applications in Electrocatalysis, Sensors, and Remediation**
José H. Zagal, Jorge.Pavez and Maritza.Páez, J.Francisco Silva, Mamie Sancy, University Santiago de Chile, Santiago, Chile
- 12:00 – 12:20 **Ionic Conductivity in Solvent Free Si Dispersed Composite Electrolyte**
Amit Saxena, Bhaskar Bhattacharya, Hindustan College of Science and Technology, Mathura, India
- 12:20 – 12:40 **Structure-Properties Relationship of Sago Hampas/Polyvinyl Alcohol Composites**
J.C. Lai, W. A. Wan Abdul Rahman, W.Y. Toh, Universiti Teknologi Malaysia, Johor, Malaysia
- 12:40 – 13:00 **Electrodeposition of Polypyrrole/Poly(Styrene Sulphonate) Composite Coatings on Ti₆Al₇Nb Alloy**
C. Pirvu, M. Mindroiu, S. Popescu and I. Demetrescu, University Politehnica of Bucharest, Bucharest, Romania
- 13:10 – 14:40 Lunch

- 9:00 – 9:30 **PLENARY Electrical Doping in Organic Semiconductors**
Jang-Joo Kim, Jae-Hyun Lee and Dong-Seok Leem, Seoul National University,
Seoul, Korea
- 9:30 – 10:00 **PLENARY Polymer-Semiconductor Nanocomposites by Controlled
Crystallization**
T. Marszalek, S. Kotarba, M. Wiatrowski, E. Dobruchowska, J. Jung, J. Ulanski,
University of Lodz, Lodz, Poland
- 10:00 – 10:25 **INVITED PEDOT/PEO Semi-IPN Architectures with Tuneable IR**
C. Chevrot, D. Teyssié, F. Vidal, P-H. Aubert, P. Verge, F. Tran-Van, L. Beouch, L.
Sauques, Université de Cergy-Pontoise; and Université de Tours, France
- 10:25 – 10:50 **INVITED Spin injection and transport in organic semiconductors**
H. Tada, Osaka University, Toyonaka, Japan
- 10:50 – 11:10 **Synthesis of New Arylene Bisimides and their Application in all Organic
Field Effect Transistors (OFETs)**
P. Gawrys, M.Zagorska, D.Boudinet, J.-M. Verilhac, D.Djurado and A.Pron,
Warsaw University of Technology, Warszawa, Poland; CEA/LITEN/LCH, Grenoble;
and University J, Fourier-Genoble, France
- 11:15 – 11:45 Coffee break
- 11:45 Closure

SESSION 5

Advanced Materials and Composites for Photonics, Nano- and Biophotonics

Wednesday, September 30, 2009

Chair C.M. Sotomayor-Torres

- 8:30 – 9:00 **PLENARY Random Laser Action in Bulk and Photonic Crystal Fibers**
A.S.L. Gomes, Universidade Federal of Pernambuco, Recife, Brazil
- 9:00 – 9:30 **PLENARY Various Types of Nonlinear Chromism in Organometallics**
Marek Samoc, Mark G. Humphreyc, Marie P. Cifuentes, Wroclaw University of Technology, Wroclaw, Poland; Australian National; University, Canberra, Australia
- 9:30 – 10:00 **PLENARY VLSI Photonics: How Can We Approach Using Micro/Nano-Materials?**
E.H. Lee, National Research Center of Excellence for VLSI Photonics, Inha University, Incheon, Korea
- 10:00 – 10:25 **INVITED Luminiscence Properties of $\text{La}_2\text{TeO}_6:\text{Eu}^{3+}$ Phosphors Prepared by Pechini Sol-Gel Process**
Rodrigo Castillo and Jaime Llanos, Universidad Católica del Norte, Antofagasta, Chile
- 10:30 – 11:00 Coffee break
- 13:00 – 14:30 Lunch

Chair L.R. Dalton

- 14:30 – 15:00 **PLENARY Carbon Nanotube Photonics**
W. Blau, School of Physics, Trinity College Dublin, Dublin, Ireland
- 15:00 – 15:30 **PLENARY Nonlinear Optical Spectroscopy of Nanostructured Materials**
C.B. de Araujo, Universidade Federal de Pernambuco, Recife, Brazil

Chair M. Samoc

- 8:30 – 9:00 **PLENARY Alternative Fabrication Techniques for Organic Field-Effect Devices**
Eva Feldmeier, Martin Schidleja, Christopher Siol, Christian Melzer, Heinz von Seggern, Institute of Materials Science, Technische Universitaet Darmstadt, Darmstadt, Germany
- 9:00 – 9:25 **INVITED Structuration of Functionalized Porlymers for Optical Devices**
Fort, A. Barsella, K. D. Dorkenoo, L. Mager, H. El Harrach, E. Sungur, IPCMS-GONLO, CNRS UMR, Strasbourg, France
- 9:25 – 9:50 **INVITED Free Radical Formation and Magnetic Property of Diphenyloctatetrayne Heated Below its Melting Point**
M.F.Beristain, R.Escudero, and T.Ogawa, Instituto de Investigaciones en Materiales, Universidad Nacional Autónoma de México, México DF, Mexico
- 9:50 – 10:10 **Control of Fret By Counter Ions in Conjugated Polyelectrolyte-Based DNA Detection**
O.K. Nag, M. Kang, S. Hwang, H.Y.Woo, Pusan National University, Miryang, Republic of Korea,

10:40 – 11:10 Coffee break

Chair S. Ermer

- 11:10 – 11:40 **PLENARY Organic Nanocrystals for Photonics**
H. Nakanishi, Tohoku University, Sendai, Japan
- 11:40 – 12:05 **INVITED Molecular Engineering for Biphotonic Bio-Imaging**
Yann Bretonnière, Olivier Maury, Chantal Andraud, Ecole Normale Supérieure de Lyon, Lyon, France

- 12:05 – 12:30 **INVITED Steering the 2D Self-Asembling of 3D Molecular building blocks: A Way to Access the 3rd Dimension**
 D. Bléger, I. Arfaoui, F. Mathevet, D. Kreher, A.-J. Attias, G. Schull, I. Arfaoui, L. Douillard, C. Fiorini-Debuisschert, and F. Charra, University Paris 6; P.& M. Curie University of Paris, CEA, Saclay, France
- 12:30 – 12:55 **INVITED A New approach to achieve polar systems from achiral LC azo-containing polymeric materials and composites**
 C.M. Gonzalez-Henríquez, E.A. Soto-Bustamante, D.A Waceols-Gordillo, G.A., Rodriguez-Leyht, University of Chile, Santiago, Chile
- 13:10 – 13:40 Lunch

Friday, October 2, 2009

Chair Ch. Andreaud

- 9:00 – 9:30 **PLENARY Wedge-Shaped PolyCryps Grating as a Tuneable Phase Modulator**
Roberto Caputo, Ivan Trebisacce, Luciano De Sio and Cesare Umeton, Liquid Crystal Italian Laboratory CNR-INFM; and University of Calabria, Arcavacata Rende, Italy
- 10:00 – 10:30 **PLENARY Pre-Poling History Paradigm for Poled Guest-Host Systems: Experiment and Monte Carlo Studies**
 A.C. Mitus and G. Pawlik, I. Rau, Francois Kajzar, Wroclaw Technical University, Poland; POMA CNRS, Universite d'Angers, Angers, France
- 10:30-10:55 **INVITED Luminescent Clusters for New Materials**
R. Arratia-Pérez¹, L. Hernández-Acevedo, R. Ramirez-Tagle, University Andres Bello, Santiago, Chile
- 10:55 – 11:15 **Recent Advances in Photorefractive Materials**
Nakjoong Kim, Hanyang University, Seoul, Korea
- 11:15 – 11:45 Coffe break
- 11:45 **Closure**

SESSION 6.

Biomaterials and Biotechnology

Tuesday, September 28, 2009

Chair U. Simon

- 14:30 – 15:00 **PLENARY New Biomolecule Immobilization Strategies onto Polymers and Conducting Surfaces for Microarrays and Biochips**
L.J. Blum and C.A. Marquette, Université Lyon 1/CNRS, Lyon, France
- 15:00 – 15:25 **INVITED Aggregation, Gelation and phase Separation: a way for texturing globular proteins**
Dominique Durand, Taco Nicolai, Komla Ako, Karine Baussay, CNRS-Université du Maine, Le Mans, France

Wednesday, September 30, 2009

Chair A. Sulikowska

- 8:30 – 9:00 **PLENARY Biomaterials, Biotechnology and Systems Biology: from Antarctica to the Atacama Desert**
J.A. Asenjo, Centre for Biochemical Engineering and Biotechnology, University of Chile, Santiago, Chile
- 9:00 – 9:30 **PLENARY Polysaccharides Organofunctionalized for Species Removal from Solid/Liquid Interface and Thermodynamic of Interactions**
C. Airoidj, University of Campinas, Campinas, Brazil
- 9:30 – 9:55 **INVITED Metallic Nanoparticles for Therapy**
M. J. Kogan, C. Adura, E. Araya, S. Guerrero, C. Molina, J. Mena, C. Henriquez, A. Neira, M. Yasdany, University of Chile, University of Santiago de Chile, Universidad Tecnológica Metropolitana, Santiago, Chile, AUG, Buenos Aires, Argentina
- 9:55 – 10:15 **Porous Biodegradable Tubes for Nerve Guide Implants**
J. Laska, P.Bednarz S. Błażewicz, D. Szarek, W. Jarmundowicz, AGH University of Science and Technology, Kraków; Wrocław Medical University, Wrocław, Poland
- 10:15 – 11:00 Coffee break

- 11:00 – 11:30 **PLENARY Nanostructures Based on Hydrophobins**
M. Kainlauri, J. Kivioja, J. Ahopelto, P. Laaksonen, and M. Linder, VTT Technical Research Centre of Finland, Espoo; VTT Nanobiomaterials, Espoo, Finland
- 11:30 – 11:55 **INVITED Strategies for Tissue Scaffolds Design**
Gema Gonzalez, Instituto Venezolano de Investigaciones Cientificas, IVIC, Caracas, Venezuela
- 11:55 – 12:20 **INVITED Conductivity Study of Gelatin- and DNA-Based Gel Electrolytes**
A.F. Nascimento and A. Pawlicka, Institute of Chemistry of Sao Carlos, University of Sao Paulo, Sao Carlos, Brazil
- 12:20 – 12:40 **Preparation and Characterization of Solid Polymeric Electrolyte Using Pectin and Nanoparticles**
Juliana R. Andrade, Giorgio G. Morbioli, Agnieszka Pawlicka, Institute of Chemistry of Sao Carlos, University of Sao Paulo, San Carlos, Brazil
- 12:40 – 13:00 **Preparation and Characterization of Poly (3-Hydroxybutyrate-Co-Hydroxyvalerate)/Chitosan Hybrid Mats**
B. Veleirinho, J.A. Lopes-da-Silva, R. M. Ribeiro-do-Valle, Federal University of Santa Catarina, Florianópolis, Brazil
- 13:00 – 14:30 Lunch

Thursday, October 1, 2009

- 8:30 – 9:00 **PLENARY Light-Induced Nanoparticles of Polyethyleneglycol and Phenothiazinic Nucleous**
L. Nantes, T. Rodrigues, C. G. Santos, M. S. Baptista, L. R. S. Barbosa, R. Itri, O. R. Nascimento, UFABC, SP; University Mogi das Cruzes, SP; IQ-USP, SP; IF-USP, SP; IF-USP/São Carlos, Brazil
- 9:00 – 9:25 **INVITED Power Production with Biofuel Cells**
Zebda, S. Tingry, M. Cretin, C. Innocent, Institut Européen des Membranes, university of Montpellier 2, Montpellier, France

9:25 – 9:50 **INVITED Polymeric Nanoparticles for Protein Delivery**
Soon Hong Yuk, Department of Advanced Materials, Hannam University, Daejeon, Korea

9:50 – 10:10 **Targeted Polymeric System for Cancer Treatment**
Tomas Etrych, Karel Ulbrich, Institute of Macromolecular Chemistry, Academy of Sciences Czech Republic, Prague, Czech Republic

10:15 – 11:00 Coffee break

Chair L Nantes

11:00-11:30 **PLENARY Liposomes as a System in Transport of Drugs Used in Cancer Multidrug Therapy**
A. Sułkowska, D. Pentak, W.W. Sułkowski, Medical University of Silesia, Sosnowiec; University of Silesia, Katowice, Poland

11:30-11:55 **INVITED On the Stability and Degradation of DNA and Collagen Based Thin Films**
Ileana Rau, Roxana Popescu, Mirela Moldoveanu, Aurelia Meghea, James G. Grote, Francois Kajzar, Politehnica University of Bucharest, Romania; US Air Force Research Laboratory, Wright-Patterson Air Force Base, OH, USA, Universite d'Angers, UMR-CNRS, Angers, France

11:55-12:20 **INVITED Synthesis, Analysis and Possibility of Application of Poly(aspartic acid) Synthesized under Microwave Irradiation**
Jan Pielichowski, Edyta Hebda, Cracow University of Technology, Krakow, Poland

12:20:12:40 **Correlation Between Antioxidant Activity and Hepatoprotective Effect of a Vegetal Bioproduct**
C. Nichita, G. Neagu, Virginia Vulturescu, R. Albulescu, Viorel Vulturescu, N. Badea, M.Giurginca, M. Meghea, National Institute for Chemical-Pharmaceutical Research and Development, Bucharest; University POLITEHNICA of Bucharest, Romania

Poster Session

Wednesday, 30th September, 16:00 hrs.

- ◇ **1.- Synthesis and Characterization of Novel Conjugated Polymer for Organic Optoelectronic Device.**
E. Jeong, H. Y. Woo*, Pusan National University (BK21), Korea
- ◇ **2.- The Surface Defects of some Composites Based on Starch.**
R. M. Coserea, F. Pop, D. Dimonie, C. Duncianu, I. "P. Poni", I. Romania, I. Kelnar, Institute of Macromolecular Chemistry and University Politehnica Bucharest, Romania
- ◇ **3.- Coiled Coil Heterodimers and Hydrophilic Synthetic Polymers: Synthesis, Properties and Applications.**
M. Pechar, R. Pola, L. Kostka, K. Ulbrich, L. Bednárová, P. Malon, Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, Czech Republic
- ◇ **4.- Influence of The Structural Disorder on the Charge Carrier Mobility in Triphenylene Stacking.**
M. Mikolajczyk, W. Bartkowiak, P. Toman, Wrocław University of Technology, Poland
- ◇ **5.- Comparison of Nonlinear Optical Response of Hbonded Chains.**
A. Zawada and W. Bartkowiak, Wrocław University of Technology, Poland
- ◇ **6.- Study of the Lamellae Periodicity of Ptt/Mmt and Pbt/Mmt Injected Molding Nanocomposites by SAXs.**
M.M. Favaro and R.E.S. Bretas, Federal University of São Carlos, Brazil
- ◇ **7.- Study of the Catalytic Activity of the Pom System (Na)_{10.5}[(H₂O)V₁₂B₁₈O₆OH₆]. 16H₂O.**
K. Brown, P. Aguirre, E. Spodine, V. Paredes-García, D. Venegas-Yazigi, A. Vega, E. Le Fur, University of Chile, U. Tecnológica Metropolitana, U. de Santiago de Chile, U. Andrés Bello, Centro para el Desarrollo de Nanociencias y Nanotecnología (CEDENNA) Chile and Ecole Nationale Supérieure de Chimie de Rennes, France
- ◇ **8.- Effect of Dynamic Vulcanization on the Morphology of Pvc/Nbr Blends.**
F.R.Passador and S.M.Gheno, Federal University of São Carlos, Brazil
- ◇ **9.- Effect of Functionalized Polyprylene (Pp) as Compatibilizer on The Properties Of Multiwalled Carbon Nanotubes (Mwcnt)/PP Nanocomposites.**
C. Menzel, M. Yazdani-Pedram, J. Miranda, P. Toro, R. Quijada. University of Chile, Chile
- ◇ **10.- Photopolymerization of TEGDMA/UDMA Dental Resin: Effect of Resin Matrix Composition on Thermal Stability and Degree of Conversion.**
L.C. Santos, R. P. de Carvalho, G.Bannach, E. T. G. Cavalheiro, C. C. S. Cavalheiro, M.G. Neumann, University of São Paulo, Brazil
- ◇ **11.- The Influence of Using Different Montmorillonites on Processing and Rheological Characterization of Polyamide 6 Nanocomposites.**
C.A.G. Beatrice, M.M. Favaro, M.C. Branciforti, C.A.G. Beatrice, M.M. Favaro, M.C. Branciforti, Federal University of São Carlos, Brazil

- ◇ **12.- NMR and Conductivity Study of Agar-Based Polymers Electrolytes.**
R. I. Mattos, E. Raphael, A. Pawlicka, C.E. Tambelli, C.J. Magon, J. P. Donoso, IQSC, University of São Paulo, Brazil
- ◇ **13.- Study of the Mechanical, Electrical and Glass Transition Behavior of Copper-PMMA Nanocomposites,**
V. H. Pobleto, M. P. Álvarez, M. S. Díaz, University Technological Metropolitan, Pontificia Universidad Católica de Valparaíso and Universidad de Santiago de Chile, Chile
- ◇ **14.- Chitosan-Based Films for Application as Polymeric Electrolytes,**
A. Pawlicka, R. I. Mattos, E. Raphael, M. Danczuk, IQSC, Universidade de São Paulo - USP São Carlos Brazil and DENAM, Universidade Estadual do Centro Oeste – Unicentro, Brazil
- ◇ **15.- Morphological Induced Variation of Chemical Reactivity at Ultrathin Polymer Film Surfaces.**
E. Meyer and H.-G. Braun, Leibniz Institute of Polymer Research, Germany
- ◇ **16.- Electron Paramagnetic Resonance Study of Cu(II) Intercalated in Bentonite.**
O J.P. Donoso, R. Nascimento, J.P. Donoso, C.J. Magon, J.F. Lima, M. Moreno, E. Benavente, G. Gonzalez, IFSC, University of São Paulo, Brazil, Univ. Tecnológica Metropolitana, Universidad de Chile, Chile
- ◇ **17.- Chemical Interactions and Mechanical Properties of Starch/CMC/ Montmorillonite Nanocomposite Films.**
A. Silva-Weiss, E.G. Garrido, M.L. Mora, V. Bifani, J. Suazo, B.K. Theng, University of the Frontera, Chile
- ◇ **18.- Potassium Intercalation in the Lamellar Phase MnPS₃ Assisted by Microwave Radiation.**
P. Valencia-Gálvez, D. Ruiz-Leon, M. Novak, V. Paredes-García, D. Venegas-Yazigi, E. Spodine. University of Chile, Universidad de Santiago de Chile, Universidad de Federal do Rio de Janeiro, Brazil and Universidad Tecnológica Metropolitana, Chile
- ◇ **19.- The Influence of Sulphonation Degree on the Thermal Behaviour of Sulphonated Poly(Aryleneethersulfones).**
L. Abate, V. Asarisi, I. Blanco, G. Cicala, G. Recca, University of Catania, Italy
- ◇ **20.- Catalytic Properties of a Metal Organic Frameworks (MOF) Based on 1,2,4,5-Tetracarboxylicbenzene Acid.**
E. Spodine, P. Cancino, P. Aguirre, V. Paredes-García, D. Venegas-Yazigi. University of Chile, U. Tecnológica Metropolitana, U. de Santiago de Chile and Centro para el Desarrollo de Nanociencias y Nanotecnología (CEDENNA) Chile
- ◇ **21.- Composite Polymer Electrolytes Based on Pectin and Sn Nanoparticles.**
J.R.Andrade, G. G. Morbioli, A. Pawlicka, IQSC, University of São Paulo, Brazil
- ◇ **22.- Functionalization of Microstructures Fabricated by Two-Photon Absorption Polymerization. D. S. Corrêa,**
V. Tribuzi, D. T. Balogh, C. R. Mendonça, University of São Paulo, Brazil
- ◇ **23.- Photoactivated Polymerization of Aniline.**
C.A. Barbero, G.M. Morales, M.C. Miras, Universidad Nacional de Rio Cuarto, Argentina

- ◇ **24.- Thermodynamics of Lithium Intercalation In CeO₂-TiO₂ Thin Films.**
A.Pawlicka and C.O.Avellaneda, IQSC, University of São Paulo, Brazil
- ◇ **25.- Preparation and Characterization of Sodium Alginate Based Gel Electrolytes.**
Y.O.Iwaki and A.Pawlicka, IQSC, University of São Paulo, Brazil
- ◇ **26.- Thin Films of DNA: Pedot – Electrical and Optical Properties.**
V. Kažukauskas, A. Arlauskas, M. Pranaitis, O. Krupka, F. Kajzar, Z. Essaidi, B. Sahraoui. Vilnius University, Lithuania and Angers University, France
- ◇ **27.- Characterization of Clay-Dimethacrylate Composites Obtained by In-Situ Photopolymerization.**
M.G. Neumann, I.C. Rigoli, C.C. S. Cavalheiro, T. Batista. Universidade de São Paulo, Brazil
- ◇ **28.- Clay/Cassava Starch/Natural Rubber Bionanocomposites.**
M. M. Rippel and F. Galembeck, University of Campinas, Brazil
- ◇ **29.- Agar-Based Gel Electrolytes with LiClO₄.**
E. Raphael and A. Pawlicka. IQSC, University of São Paulo, Sao Carlos, Brazil
- ◇ **30.- The Effect of Low Molecular Compatibilizers on the Quality of Cellulose/Pla Blends.**
J. Janicki, R. Fryczkowski, B. Fryczkowska, M. Rom, J. Fabia. University of Bielsko- Biala, Poland.
- ◇ **31.- Self Assembled Gold Nanoparticles Wires by Discontinuous Vertical Colloidal Deposition.**
A. Arbaoui, M. Reeves, Z. Hesham, Y. Boughaleb, University Chouaib Doukkali, Morocco and George Washington University, USA
- ◇ **32.- Fabrication of Surface Enhanced Raman Spectroscopy Substrates by Direct Laser Interference Patterning.**
C.A. Barbero, D.F. Acevedo, J. Toledo Arana, M. Broglia, A. Lasagni, F. Mucklich, H.J. Salavagione, E. Morallon, Universidad Nacional de Rio Cuarto, Argentina, Universitaet Saarland, Germany and Universidad de Alicante, Spain
- ◇ **33.- Synthetic Porous Carbon as Support of Platinum Nanoparticles for Fuel Cell Electrodes.**
C.A. Barbero, M.M. Bruno, J. Balach, N.G.Cotella, G. A. Planes, Universidad Nacional de Rio Cuarto, Argentina and Universidad de La laguna, Spain
- ◇ **34.- Microwave Assisted Combinatorial Synthesis of Acrylamide Monomers.**
J.Tuninetti, N.Monge, M.C. Miras, C.A. Barbero, Universidad Nacional de Rio Cuarto, Argentina
- ◇ **35.- Controlling Drug Release from Smart Hydrogels Using Electrostatic and Hydrophobic Interactions With Probe Molecules.**
C.A. Barbero, Maria A. Molina, Claudia R. Rivarola, Universidad Nacional de Rio Cuarto, Argentina
- ◇ **36.- Bulding Self-Assembled Multilayers of Nanoporous Carbon Microparticles.**
C.A. Barbero, J.M. Balach, N. G. Cotella, D. F. Acevedo, Universidad Nacional de Rio Cuarto, Argentina
- ◇ **37.- Gelatin-Based Electrolytes for Solar Cells.**
L.P.Mota and A.Pawlicka, IQSC, University of São Paulo, Sao Carlos, Brazil

- ◇ **38.- Evaluating Environmental Impact Factors as Heavy Metals on Behavior of Temporary Teeth.**
I. Demetrescu, D. Ionita, R. Luca, University Politehnica Bucharest, Romania and University of Medicine and Pharmacy "Carol Davila", Bucharest, Romania
- ◇ **39.- The Morphology and Barrier Properties of Some LDPE Based Nanocomposites Films.**
Z. Vuluga, D. Florea, M. Iorga, C. Radovici, D. M. Vuluga, M. Ionescu, I. Rau, University Politehnica Bucharest, Institute of Food Bioresources, Romania
- ◇ **40.- Electrochemical Stability of Polypyrrole / Ti₆Al₇Nb Alloy in Hank Solution for Development of New Biocompatible Surfaces.**
C. Pirvu, M. Mihaela, S. Popescu, I. Demetrescu, University Politehnica Bucharest, Romania
- ◇ **41.- BSA/HA Coating on Titanium Alloy in Order to Activate Direct Bond Formation at the Implant Surface.**
D. Ionita, M. Prodana, I. Demetrescu, R. Vasilescu, P. Drob. University Politehnica Bucharest, Institute of Rumanian Academy of Science, Romania
- ◇ **42.- Enhancing the Stability of Polypyrrole Film on Titanium Substrate by PEG Incorporation.**
C. Pirvu, S. Popescu, M. Mindroiu, I. Demetrescu, University Politehnica Bucharest, Romania
- ◇ **43.- Evaluation of TiO₂ Nanotubes Changes After Ultrasonication Treatment.**
I. Demetrescu, C.C. Manole, C. Pirvu, F. Miculescu. University Politehnica Bucharest, Romania
- ◇ **44.- In Situ Polymerization of Nanocomposites Polypropylene/Graphite.**
L. S. Montagna, N. R. S. Basso, G. B. Galland. Pontifical Catholic University of Rio Grande do Sul, Brazil
- ◇ **45.- Polyaniline/Graphite Nanocomposites.**
N.R.S. Basso, G. Gheno, R. Hübler, Pontifical Catholic University of Rio Grande do Sul, Brazil
- ◇ **46.- Spontaneous Adsorption of Gold Copolymer Nanoparticles on Surfaces Modified with Polyelectrolytes.**
A. Leiva, M. Urzúa, X. Briones, C. Saldías, F. Espinoza, Pontifical Catholic University of Chile, Universidad de Chile and Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional (CINVESTAV-QUERETARO), México
- ◇ **47.- Synthesis and Characterization of Gold-Copolymer Nanoparticles. Influence of the Copolymers Structure.**
C. Saldías, A. Leiva, L. Gargallo, D. Radic. Pontifical Catholic University of Chile, Chile
- ◇ **48.- Degradation of Mwcnt During Encapsulation Via Bulk Suspension Polymerization.**
E.A. Zaragoza-Contreras, E.D. Lozano-Rodríguez, C.A. Hernández-Escobar, Centro de Investigación en Materiales Avanzados, Chihuahua, México
- ◇ **49.- Nanostructured Block Copolymers: Order-Order and Order-Disorder Transitions in Model Poly(Butadiene-B-Dimethylsiloxane)S.**
M. A. Villar, L. R. Gómez, D. A. Vega, M.D. Ninago, A. E. Ciolino, E. M. Vallés. Planta Piloto de Ingeniería Química, PLAPIQUI (UNS-CONICET), Argentina

- ◇ **50.- Polyaniline Lithography Using a Combinatorially Synthesized and Screened Amphiphilic Counterion.**
M.C. Miras, N. Monge, C.A. Barbero, Universidad Nacional de Rio Cuarto, Argentina
- ◇ **51.- New Trends in Architecture of Azo-Polymer Materials with Applications in Optical Field.**
A.M. Albu and D.S. Vasilescu. University Politehnica Bucharest, Romania and Centre for Organic Chemistry Costin D. Nenitescu, Romanian Academy, Romania.
- ◇ **52.- Photocatalytic Activity of Transition Metal Oxide/Silica Materials Removed From Wastewaters.**
M. Mihaly, A.F. Comanescu, A.E. Rogoza, A. Marin, A. Meghea, University Politehnica Bucharest, Romania
- ◇ **53.- Synthesis, Characterization and Photocatalytic Applications of Nanostructured C60 Silica Materials.**
M. Mihaly, A.E. Rogoza, A.F. Comanescu, A. Meghea, University Politehnica Bucharest, Romania
- ◇ **54.- Synthesis and Characterization of Some Newly Maleimide-Styrene Copolymers Containing Chromophore Units.**
F. Nicolescu, V. Jerca, D.Vuluga, D.S. Vasilescu, I. Rau. University Politehnica Bucharest, Romania and Centre for Organic Chemistry Costin D. Nenitescu, Romanian Academy, Romania
- ◇ **55.- Preparation of Chloromethylstyrene -2 - Hydroxyethyl Methacrilate – Cloisite 30B Composite Obtained by “In Situ” Radical Copolymerization.**
N. Stanciu, V. Jerca, D. Vuluga, A.M. Albu and M. Teodorescu, University Politehnica Bucharest, Romania and Centre for Organic Chemistry Costin D. Nenitescu, Romanian Academy, Romania
- ◇ **56.- Influence of Amorphous Silica Into Polypropylene Composites.**
L. C. Costa, J. D. Ambósio, H. Otaguro. Universidade Federal de São Carlos, Brazil.
- ◇ **57.- Synthesis and Characterization of Urea Inclusioncompounds with Carboxylic Acids and the Interaction with Gold Nanoparticles.**
N.Yutronic, E. Lang, L. Barrientos, P. Jara, R. Sierpe, M. Muñoz, University of Chile, Chile.
- ◇ **58.- Fe-Porphyrin Adsorbed and Single-Wall Carbon Nanotubes For Heterogeneous Catalysis.**
I. Ruiz-Tagle and W. Orellana. University Andres Bello, Chile.
- ◇ **59.- Nanostructured Au From Polymer/Organometallic Mixtures.**
C. Díaz, M. L. Valenzuela, G. A. Carriedo, University of Chile, Chile and Universidad de Oviedo, Spain.
- ◇ **60.- Electrochemical Transducers Based On Polyaniline Nanowires Arrays.**
J.Pavez, C. Silva M, C. Vera-Oyarce, M. Páez, J. Silva, I, De Mattos, J. Zagal, University of Santiago, Chile.
- ◇ **61.- Carbon Nanotube Composites: Effect of Dispersing Agent on the Electroactivity of Modified Electrodes.**
S. Bollo, K. González, G.A. Rivas, University of Chile, Chile and Universidad Nacional de Córdoba, Argentina.
- ◇ **62.- Dynamics of Topological Defects in Block Copolymer Membranes.**
A. D. Pezzutti, D.A. Vega, M. A. Villar, Universidad Nacional del Sur, Argentina.

- ◇ **63.- Comparative Study of the Reduction of Molecular Oxygen Catalyzed by Fe and Co Macrocyclic Complexes Confined on Gold Modified with Self- Assembled Monolayers of Thiols.**
I. Ponce, J. Pavez, M. Paez, J.F. Silva, J.H. Zagal. University of Santiago, Chile.
- ◇ **64.- Preparation of Nickel-Based Electrodes with Activity for Alcohol Oxidation.**
M.S. Ureta-Zañartu, T. González, F. Fernández, University of Santiago, Chile.
- ◇ **65.- The Thermal Characterization of Some Novel Random Copolyethersulfones at Various Chain Rigidities.**
I. Blanco, L. Abate, G. Cicala, A. Mamo, G. Recca, A. Scamporrino, University of Catania, Italy.
- ◇ **66.- Preparation of Polyethylene/Alpo Nanocomposite Membranes and Their Gas Permeation Properties.**
C. Covarrubias and R. Quijada. University of Chile, Chile.
- ◇ **67.- Sulfonated Poly(Urethanes) Containing Silarylene or Germarlyene Moieties. Synthesis and Characterization.**
C.A.Terraza, L.H. Tagle, A. Leiva, Pontifical Catholic University of Chile, Chile.
- ◇ **68.- Synthesis and Characterization of Bis(p-(Carboxymethyl) Phenyl) (R)Phenylsilanes as Precursors of Monomers For Preparing Condensation Polymers.**
L.H. Tagle, C.A.Terraza, H. Lembach, Pontifical Catholic University of Chile, Chile.
- ◇ **69.- Synthesis and Characterization of BaTiO₃ Nanoparticles in Subcritical Water.**
S. Fuentes, R.A. Zarate, E. Chavez, V. Ayala. University Catholic del Norte and Universidad de Chile, Chile.
- ◇ **70.- Molecular Electrodes Based on Vitamin B12 for the Amperometric Detection of Hydroxylamine.**
I. Ponce and J. H. Zagal, University of Santiago, Chile
- ◇ **71.- Molecular Sensors for L-Cysteine Based on Fe Phthalocyanines Confined on Carbon Electrodes.**
C. Gutierrez, J.F. Silva, J. Pavez, J. H. Zagal, University of Santiago, Chile
- ◇ **72.- Unveiling the Structure of Ni/Ni Oxide Nanoparticles System.**
V. Lavayen, L. Barrientos, P. Jara, N. Yutronic, University Federico Santa Maria, Valparaiso, Universidad de Chile and UMCE, Chile
- ◇ **73.- Vanadium Oxide Nanostructures: Historical Point of View.**
V. Lavayen and C. O'Dwyer, University Federico Santa Maria, Valparaiso, Chile and University of Limerick, Ireland
- ◇ **74.- Theoretical Study DFT of the Phase Change Cubic tetragonal of Barium Titanate.**
E. Chavez, R.A. Zarate, S. Fuentes, L. Padilla-Campos, P. Leyton, University Catholic del Norte, Antofagasta and Pontificia Universidad Católica de Valparaiso, Chile
- ◇ **75.- Chitosan Chemically Modified with Isophthaloyldichloride Followed by Diethylenetriamine: Synthesis, Characterization and Thermodynamic Data of Lead / Biopolymer Interactions.**
E. C. N. Lopes de Lima and C. Airoidi, University of Campinas, Brazil

- ◇ **76.- Preparation, Characterization and Effect of Grafted Chitosan with Polyvinilsulfonic Acid as a Template for Crystal Growth of CaCO₃.**
A. Neira-Carrillo, M. Yazdani-Pedram, P. Mercadé Jaque, M. Diaz-Dosque, J. L. Arias, University of Chile and Center for Advanced Interdisciplinary Research in Materials (CIMAT), Chile
- ◇ **77.- Chitosan Based Solid Polymer Electrolyte for Natural Dye-Sensitized Solar Cell.**
A.K. Arof, M.H. Buraidah, L.P. Teo, S.R. Majid, University of Malaya, Malaysia
- ◇ **78.- Structural and Magnetic Properties of Co-Doped TiO₂ Powders and Thin Films Prepared by a Sol-Gel Method.**
L. Alexandrescu, O. Oprea, C. Covaliu, J. Neamtu, G. Georgescu, I. Jitaru, University Politehnica Bucharest, Romania
- ◇ **79.- Magnetic Properties of Ordered Arrays of Pseudo-Onedimensional Nanostructures With Modulated Diameters.**
J.Escrig, C. Morales, K. Pitzschel, J. M. Montero Moreno, O. Albrecht, J. Bachmann, K. Nielsch, University of Santiago, Chile and University of Hamburg, Germany
- ◇ **80.- Magnetic Properties of Cobalt Nanowire Arrays.**
R. Lavín, J. C. Denardin, M. Cornejo, G. González, A. Cortés, H. Gómez, University of Santiago, Universidad Técnica Federico Santa María, Valparaíso and Universidad Católica de Valparaíso, Chile
- ◇ **81.- Surfactant-Mediated Variation of Band-Edge Emission in CdS Nanocomposites.**
Z. Lopez-Cabaña, C. O'Dwyer, V. Lavayen, N. Mirabal, M.A. Santa Ana, E. Benavente, O. Schops, U. Woggon, C.M. Sotomayor Torres, G. González. University of Chile, Chile University of Limerick, Ireland, Universidad Técnica Federico Santa María, Chile, Universidad Tecnológica Metropolitana, Chile, Universitat Dortmund, Germany and Catalan Institute of Nanotechnology, Spain
- ◇ **82.- Tungsten Oxide Nanoparticles Grown in Vapor-Phase.**
D. G. Gálvez, D.E. Díaz-Droguett, V.M. Fuenzalida, University of Chile, Chile
- ◇ **83.- Synthesis of Nanostructured LiMnO₄ Using Porous Oxide Silicon as a Template for Lithium-Ion Batteries.**
H. Ahumada and J.L. Gautier, University of Santiago, Chile
- ◇ **84.- Insights Into the Solid State Luminescent Mechanism of [Hg(O-C₆F₄)]₃.**
R.Arratia-Perez, A. Muñoz-Castro, D. Mac-Leod Carey, University Andres Bello, Chile
- ◇ **85.- Cu Nanostructures Obtained with a Supramolecular Template.**
P.Jara, N. Silva, S. Moris, B. Herrera, E. Peña, N. Yutronic, M. Kogan, University of Chile, Chile
- ◇ **86.- Measurement of Void Content and Distribution in Composite Materials by Quantitative Microscopy.**
T.G.Cruz, M.O.H.Cioffi, R.J.Voorwald, UNESP/DMT, Brazil
- ◇ **87.- Quaternary Rare Earth Thiophosphate K₂SmpP₂S₇.**
V. Manríquez, A. Galdámez, M.B. Veliz, F. López-Vergara, P Barahona, R. Ávila, University of Chile, Chile, Universidad Católica del Maule, Talca, Chile and CCHEN, Departamento de Materiales Nucleares, Santiago-Chile

- ◇ **88.- ¹H NMR Studies of Sweet Cherry Fruits (Prunus Avium) Wax Components Identified Key Components that May Confers Resistance to Cracking.**
J.C.Rios, E. Lang and H. Silva, University Andres Bello. Chile and Universidad de Chile
- ◇ **89.- New Supra-Nanomolecular Sístems: Synthesis and Structural Characterization of an Ordered Arrangement of Metallic Nanoparticles onto Supramolecular Complexes.**
L. Barrientos, N. Yutronic, P. Jara, M. Gutiérrez, Ma L. Ferrer, F. del Monte, University of Chile, Universidad Metropolitana de Cs. de la Educación, Chile and ICMM – CSIC Madrid-Spain
- ◇ **90.- Local Characterization of Multiferroic Nanoprisms.**
E. Ramos-Moore, A.L. Cabrera, C. Keena, D. Lederman, V. M. Fuenzalida, E. Chávez, R.A. Zárate, Pontifical Catholic University of Chile, Chile, West Virginia University, WV, USA and Universidad Católica del Norte, Antofagasta, Chile
- ◇ **91.- Mechanical Properties of Poly(Ethylene Oxide)/Clay-Nanocomposite Films.**
M.Moreno, R. Quijada, E. Benavente, G. González. University of Chile, Centro para la Investigación Interdisciplinaria Avanzada en Ciencia de los Materiales (CIMAT) and Universidad Tecnológica Metropolitana, Chile
- ◇ **92.- Block Copolymers PVP/PCL. Nanostructuring in Solution and Interfaces.**
A.Leiva, N. Pérez, L. Gargallo, D. Radic, Pontifical Catholic University of Chile, Chile
- ◇ **93.- Synthesis and Potential Applications of Anionic Polyelectrolytes.**
M.Urzúa, L. Román, C. Delgado, M. Peña, H.Ríos, University of Chile, Chile
- ◇ **94.- Silicon Modification with Molecules Derived from Ferrocene: Effect of the Silicon Crystallographic Orientation in Electron–Transfer Rates.**
G. Riveros, C. Garín, S. Meneses, S. Escobar, University of Valparaíso and Pontificia Universidad Católica de Valparaíso, Chile
- ◇ **95.- Supramolecular Structure, Thermal aand Spectroscopic Properties of a New Coordination Polymer: Catena- bis (M₂-4,4'-Dipyridyldisulfide- 2 N, N')-bis(Aquo)- Copper(II) Di-Trifluoromethanesulfonate.**
I. Brito, J. Vallejos, A. Cárdenas, J. Albanez, D. Vargas, M. López-Rodríguez, University of Antofagasta, Chile and Universidad de La Laguna, Tenerife, Spain
- ◇ **96.- Solvothermal Synthesis and Characterization of Copper Bismuth Oxides.**
H.Lozano, C. E. Alarcón, L. C. Moreno-Aldana, J. S. Valencia, University National of Colombia, Colombia
- ◇ **97.- Understanding the Conformation and Morphology of Oligosaccharid Supramolecular Structures.**
E.Lang, M. Muñoz, V. Lavayen, L. Barrientos, P. Jara, N. Yutronic, University of Chile, Universidad Técnica Federico Santa María, Valparaíso, Chile, UMCE, Chile
- ◇ **98.- Inclusion Compounds of Long Chain Amines into α -Cyclodextrin.**
C. Gonzalez, M. Muñoz, P. Jara, N. Yutronic, E. Lang, University of Chile, Chile
- ◇ **99.- Thin Films of Amphiphilic Polyelectrolytes on Aminoterminated Solid Surface.**
M. Urzua, X. Briones, A. Leiva, F.Espinoza, University of Chile, Chile, Pontificia Universidad Católica de Chile and Centro de Investigación y de Estudios Avanzados CINVESTAV, México

- ◆ **100.- Spontaneous Deposition Of Molybdenum Disulfide on a Gold Surface.**
E. Benavente, G. Riveros, N. Casagn, P. Gómez-Romero, M.A. Santa Ana, G. González. University Technological Metropolitan, Universidad de Valparaíso, Chile, Instituto de Ciencias de Materiales de Barcelona, Spain
- ◆ **101.- Mesostructured Lamellar ZnO Nanocomposites. Optical and Photocatalytic Properties.**
J. Arredondo, M. Segovia, E. Benavente, Z. Lopez-Cabaña, G. Gonzalez. University Technological Metropolitan and Universidad de Chile, Chile
- ◆ **102.- Photocatalytic Properties of Mesostructured TiO₂. Photodegradation of Methylene Blue.**
E. Benavente, J. Arredondo, C. Salgado, Z. López-Cabaña, G. González. University Technological Metropolitan and Universidad de Chile, Chile
- ◆ **103.- Hybrid Chitosane Mercaptopropyltrimethoxysilane Films. Synthesis and Properties.**
S. Fuentes, V. Ayala, G. Gonzalez, P. Tuyan, E. Benavente, University Catholic del Norte, Universidad de Chile and University Technological Metropolitan, Chile
- ◆ **104.- Coating of Magnetic Nanowires with Biocompatible Polymer.**
M. Cornejo, M.A. Santa Ana, G. González- Moraga. University of Chile, Chile
- ◆ **105.- Nanocomposites Organic-Inorganic Layered MoS₂-Amines.**
A. Aliaga, J. Poblete, N. Mirabal, E. Benavente, G. Gonzalez. University of Chile and University Technological Metropolitan, Chile
- ◆ **106.- Wettability of Heat Treated Woods.**
A.C. Ziglio, A. Brisolari, R. M. Oliveira, A.C. Soares, D. Gonçalves, University of São Paulo, Brazil
- ◆ **107.- Influence of Parameters on Synthesis of Pani/MnO₂ Composites.**
A.J. Motheo, L.D. Bisanha, S.R. Moraes, University of São Paulo, Brazil
- ◆ **108.- Preparation and Properties of Balsa Wood Plastic Composites Made of Recicled Polypropylene.**
M.C. Branciforti, A.L. Marinelli, M. Kobayashi, J. D. Ambrosio, M.R. Monteiro, L.C. Costa, A.D. Nobre, DEMa/UFSCar, Brazil
- ◆ **109.- Sugarcane Bagasse Fibers/Hips Composites.**
D. R. Mulinari, K. C. C. Carvalho, M. O. H. Cioffi, H. J. C. Voorwald, UNESP/DMT, Brazil
- ◆ **110.- The Mechanism of Complex Diffraction Efficiency Dynamics of the Holographic Grating Recoring in Azo-Polymer.**
A. Sobolewska, S. Bartkiewicz, E. Schab-Balcerzak, Wroclaw University of Technology, Poland and Center of the Polymer and Carbon Materials, Poland
- ◆ **111.- Miscibility and Properties of PVC/ABS Blends in Presence of Maleic Anhydride Functionality.**
J.P. Mohammad Hosseinpour, Morshedian, M. Barikani, H. Azizi, Iran Polymer and Petrochemical Institute, Iran
- ◆ **112.- Photodegradation Of Poly (Alkyl Methacrylates) Containing Macroinitiators Based on Thioxanthone.**
L. F. A. Pinto, B. E. Goj, M. G. Neumann, C. C. Schmitt. Universidade de São Paulo, Brazil

- ◇ **113.- Biodegradable Polymer Composites.**
M. Kobayashi and J. A.M. Agnelli, Federal University of São Carlos, Brazil
- ◇ **114.- Structural Characterization by SAXS Of Blown Films of HDPE/Mmt Nanocomposites Compatibilized with Eva.**
J. Marini, M.M. Favaro, M.C. Branciforti, R.E.S. Bretas, PPG-CEM, UFSCar, Brazil
- ◇ **115.- Plasma Polymerized Calixarene Thin Films and Their Sensing Properties to Volatile Organic Vapors.**
H. Goktas, F. G. Ince, S. Sen, M. E. Ozel, Z. Ozbek, R. Capan, F. Davis, Canakkale Onsekiz Mart University, Balikesir University, Turkey and Cranfield University at Silsoe, UK
- ◇ **116.- Dynamics of Structure Transformation in Block Copolymers During Shear Processing.**
J.Stasiak, G.D.Moggridge,A.M. Squires, V. Castelletto, I.W. Hamley, University of Cambridge and University of Reading, UK
- ◇ **117.- Synthesis of Control Release Fertilizers with Hydrogel Matrix.**
B.Tyliszczak, J. Polaczek, J. Pielichowski, K. Pielichowski, Cracow University of Technology, Poland
- ◇ **118.- Reversible Functionalization of Polyaniline with Azo Linkages.**
D.F.Acevedo, C. Glanzmann, M.C. Miras, C.A. Barbero, Universidad Nacional de Rio Cuarto, Argentina
- ◇ **119.- New Catalysts Based on Poly(Aspartic Acid) for Oxidation Reaction.**
E.Hebda and J. Pielichowski. Cracow University of Technology, Poland
- ◇ **120.- Modification of Calcium Oxalate Crystal Morphology by New Carboxylated Monomethylitaconate Grafted Polymethylsiloxane.**
A. Neira-Carrillo, P. Vasquez-Quitral, M. Yazdani-Pedram, J. Arias, University of Chile, Chile
- ◇ **121.- PLA Membranes Modified With PANI.**
R.Fryczkowski, J.Janicki, R. Fryczkowska, University of Bielsko- Biala, Poland
- ◇ **122.- Synthesis of Polythiophene Derivatives and their Application as Sensors for Organochloride Vapors.**
V. C. Gonçalves and D. T. Balogh, IFSC, University of São Paulo, Brazil
- ◇ **123.- Gel Polymer Electrolyte for Application in Electrochromic Windows.**
A.K. Arof, L.P. Teo, M.H. Buraidah, S.R. Majid, University of Malaya, Malaysia
- ◇ **124.- Magnetic Properties of Polypyrrole Pellets Doped with Iron.**
E.C. Pereira, L.F.Q. P. Marchesi, F. R. de Paula, A. J. A. de Oliveira, Universidade Federal de Sao Carlos, Brazil
- ◇ **125.- Kinetic Analysis of Polyaniline Formation from Temperature-Time Data Obtained in a Batch Reactor.**
D.F. Acevedo, D. Muñoz, M.C. Miras, C.A. Barbero, Universidad Nacional de Rio Cuarto, Argentina
- ◇ **126.- Making a Microwave Driven Actuator by Interpenetration of a Conductive Polymer in a Thermosensitive Hydrogel.**
C.A. Barbero, M.A. Molina, C.R. Rivarola, Universidad Nacional de Rio Cuarto, Argentina

- ◆ **127.- Grafting of Oxazoline- Functional Polymer Particles with Azo Dyes.**
V.V. Jerca, F. A. Nicolescu, D. S. Vasilescu D. M. Vuluga, Centre for Organic Chemistry C.D. Nenitzescu, Romanian Academy, Romania
- ◆ **128.- Removal of Pesticide from Aqueous Solutions by Adsorption Processes Using, a Biopolymer, Chitin and Chitosan.**
M. Bakasse, L. El Gaini, H. El Harmmodi, A.Tolaimate, M. Rhazi, A. Meghea, University Chouaib Doukkali, ENS Ecole Normale Supérieure, Morocco and University Politehnica of Bucharest, Romania
- ◆ **129.- Conformational Dependence of Poly (Maleic Acid-CO- 1-Octene) on Polymer Charge and Ionic Strength. Molecular Dynamics Simulations.**
B.E. Weiss-López, V. Bahamonde-Padilla, M. Urzúa, H.Ahumada, University of Chile and University of Santiago of Chile, Chile
- ◆ **130.- Preparation of Polylactide by Ring-Opening Polymerization of Lactide.**
K. Boua-in, N.Chaiyut, B.Ksapabutr, Silpakorn University, and Chulalongkorn University, Bangkok, Thailand
- ◆ **131.- Biopolymer Thin Films Based on Aligned DNA.**
K. Matczyszyn, P. Hanczyc, J.Olesiak, A.Chyla, A.Miniewicz, Wroclaw University of Technology, Poland
- ◆ **132.- Relaxation Properties of Composites Obtained from Polyurethane and Rubber Waste.**
W. W. Sułkowski, G. Bartecka, A. Sułkowska, J. Borek, S. Maslanka, A. Danch and M. Moczynski, University of Silesia and Medical University of Silesia, Poland
- ◆ **133.- Synthesis and Relaxation Properties of Model Oligoester – Tetrakis(5-Hydroxypentyl) Piromelite.**
S. Maslanka, W. W. Sułkowski and A. Sułkowska. University of Silesia and Medical University of Silesia, Poland
- ◆ **134.- The Influence of the Type of Catalyst on the Polymer Waste Thermo-Destruction.**
W. W. Sułkowski, W. Famulska, A. Sułkowska, M. Moczynski and S. Maslanka, University of Silesia and Medical University of Silesia, Poland
- ◆ **135.- Oligomers of DPB as a Precursor of Highly Conjugated Material.**
M.F.Beristain and T.Ogawa, Instituto de Investigaciones en Materiales, Universidad Nacional Autónoma de México, Apartado Postal, 70-360, Ciudad Universitaria, México DF, 04510, México
- ◆ **136.- Second Order Nonlinear Optical Property of Poly(Hexa-2,4-Diynylene-1,6-Dioxy)Dibenzoate and Cinnamate Containing a Polar Chromophore, 4-N,N-Bis(2-Hydroxyethyl)Amino-3,5-Dimethyl-4'(4'' Nitrophenylazo)Azobenzene.**
T.Ogawa, A.Ortega, A.L.Pérez-Martínez, Universidad Nacional Autónoma de México, México
- ◆ **137.- Highly Polarizable Metallic Complexes for Nonlinear Optics.**
L.Alexandrescu, L. Craciun, O. Oprea, University of Bucharest, Romania
- ◆ **138.- Nonlinear Optical Absorption of Polyaniline.**
D. S. Correa, L. De Boni, D. T. Balogh, C. R. Mendonça, Universidade de São Paulo, Brazil
- ◆ **139.- NLO Properties of Poled Azocarbazole-Epoxy Composites.**
J. Nizioł and J. Pielichowski, Cracow Technical University, Poland

- ◆ **140.- High-Molecular Weight Poly(Ethylene Glycol)-Cystine: Reducible Polymers for Gene Delivery.**
A. Braunová, R.Laga, M.Pechar, T.Etrych, P.Chytil, K.Ulbrich, K.D.Fisher, L.W.Seymour, Institute of Macromolecular Chemistry, Czech Republic and University of Oxford, UK
- ◆ **141.- Processing and Characterization of Nano Biocomposites Based on Plasticized PHBV With Organomodified Montmorillonites.**
M. C. S. Corrêa, E. Pollet, P. A. P. Nascente, J. A. M. Agnelli, L. Averous. University of Strasbourg, France
- ◆ **142.- Modification of SWY-1 Montmorillonite Surfaces Using Cationic Surfactants: Particles Size Analyzed by Dynamic Light Scattering.**
A.L.P.Leves, C.E. Sakoda, F. Gessner, M.G. Neumann, C.C. Schmitt, Universidade de São Paulo, Brazil
- ◆ **143.- Study of the Ibuprofen/Phospholipid Interactions With Langmuir Monolayers.**
V. P. N. Geraldo, A. Pavinatto, F. J. Pavinatto, O. N. Oliveira Jr., IFSC, University of São Paulo, Brazil
- ◆ **144.- In Vitro Biocompatibility of Human Endothelial Cells with Collagen-Doxycycline Matrices.**
M.G.Albu, I.Titorencu, V.Jinga, M.Simionescu, V. Trandafir, M. Giurginca, I.Antoniac, C.Cotrut, F.Miculescu. Leather and Footwear Research Institute and University Politehnica of Bucharest, Romania
- ◆ **145.- Development of Polymeric Nanoparticle of Alginateot Containing Local Anesthetic Bupivacaine.**
L.F.Fraceto, R. Grillo, N.F.S. Melo, D.S. Cocenza, M.S. Silva, L. Sottovia, A.H. Rosa, E. de Paula, State University Julio de Mesquita Filho and State University of Campinas, Brazil
- ◆ **146.- Characterization of Atrazine Loaded Biodegradable Poly(Hydroxybutyrate-Co-Hydroxyvalerate) Microspheres.**
L.F. Fraceto, R. Grillo, N.F.S. de Melo, D.S. Cocenza, M.S. Silva, R.W. Lourenço, A.H.Rosa, State University Julio de Mesquita Filho and University of Sorocaba, Brazil
- ◆ **147.- Therapeutic Effect of Flavonoids Derived from Plantago Sp.**
I. Rau, N.Radu, I.Ghita, O.Coman, University Politehnica Bucharest and University of Medicine and Pharmacy Carol Davila, Romania
- ◆ **148.- Polypyrrole Biosensors Based on Immobilization of Purified Urease and Crude Extract for Urea Detection in Milk Samples.**
J.C. Soares, A. Brisolari, V.C. Rodrigues, E. A. Sanches, D. Gonçalves, University of São Paulo, Brazil
- ◆ **149.- Enzymatic Activity of Biosensors Based on Polypyrrole Matrices with Immobilized Tyrosinase for the Analysis of Phenolic Compounds.**
A. Brisolari, V.C. Rodrigues, J.C. Soares, D. Gonçalves, University of São Paulo, Brazil
- ◆ **150.- Controlled Drug Delivery Systems Based on Collagen-Doxycycline Crosslinked With Tannic Acid.**
M.G. Albu, V. Trandafir, M. Ghica, L. Popa, M. Leca, C. Borlescu, E. Cremenescu, University of Medicine and Pharmacy "Carol Davila", University of Bucharest and University Politehnica Bucharest, România
- ◆ **151.- Obtaining And Characterization Of Collagen Gel Peg -Ha Films With Potential Applications.**
R. Popescu, G. Tihan, I. Demetrescu, University Politehnica Bucharest, Romania
- ◆ **152.- Local Anesthetic Tetracaine Loaded PLGA Nanospheres: Physico-Chemical Characterization.**
L. F. Fraceto, L. Sottovia, N. F.S. de Melo, R.Grillo, A. H. Rosa, UNESP, Brasil.

- ◇ **153.- Characterization of the Antibacterial Process of TiO₂-B Nanostructures.**
A. Zárate, S. León, E. Chávez, S. Fuentes, C. Demergasso, A. Echeverría, D. Díaz, R. Espinoza, University Catholic del Norte and Universidad de Chile, Chile
- ◇ **154.- Poly(Lactic Acid) Preparation by Polycondensation Method.**
N. Chaiyu, P. Laonud, B. Ksapabutr, Chulalongkorn University, Silpakorn University, Thailand
- ◇ **155.- Use of Crosslinked Chitosans to Make Biocompatible Gold Nanoparticles for a Potential Therapy of Alzheimer's Disease.**
C. Molina, J. Mena, M. Yazdani, A. Neira, E. Araya, Universidad de Chile, Chile and Instituto de Biomedicina Aplicada, Buenos Aires, Argentina
- ◇ **156.- Biocompatibility: In Vitro Tests of The BR3G – Biovitroceramic.**
K.R. Pereira, F. H.S. Nunes, E. Neves, C.A. Fortulan, J.M.A. Rollo, University of São Paulo, Brazil
- ◇ **157.- Biopigments, Obtaining and Properties.**
I. Rau, N.Radu, C.Corobea, I. Ghita, O. Coman. University Politehnica Bucharest, University of Medicine and Pharmacy Carol Davila and ICECHIM Bucharest, Romania
- ◇ **158.- Synthesis Of Hydrophobic Azopolymers and the Study of their Langmuir and Langmuir-Blodgett (Lb) Films.**
R.C. Sanfelice, F.J. Pavinatto, D.T. Balogh, O.N. Oliveira Jr, Instituto de Física de São Carlos, USP - São Carlos- SP – Brazil
- ◇ **159.- Gelation Process Analisis by Ultrasound Method of a Rigid PVC Compound.**
H. Finocchio, E.Hage Jr, R.V. Laurini, A. Rodolfo Jr., Braskem S.A, C. Bertolo and R. Goncalves. PPG-CEM/UFSCar- Federal University of Sao Carlos, Sao Carlos, Sp and Estate University of Campinas, Brazil

CEREMONIES AND SOCIAL ACTIVITIES

Monday, September 28, 2009

16:30 – 17:30 **Opening Addresses**

19:40 – 22:00 **Welcome Reception**

Thursday, October 1, 2009

15:00 – 18:00 **Excursion**

19:00 – 22:00 **Conference Dinner**

Friday, October 2, 2009

11:45 **Conference Closure**