

6th International Workshop on Polymer/Metal Nanocomposites

September, 16th-18th 2013, Toulouse, France

Monday, Sept. 16th, 2013			
08:30 – 09:00	Registration		
09:00 – 09:20	Opening remarks – Bernard Despax and Kremena Makasheva , Chairs of Nanoworkshop 2013, <i>Université de Toulouse; UPS, INPT, CNRS; LAPLACE (Laboratoire Plasma et Conversion d’Energie); 118 route de Narbonne, F-31062 Toulouse cedex 9, France</i>		
Session 1			Chair: Hynek Biederman
09:20 – 10:10	IN1	Franz Faupel (<i>Christian-Albrechts University at Kiel, Institute for Materials Science – Chair for Multicomponent Materials; Kaiserstr. 2, 24143 Kiel, Germany</i>), Polymer/metal nanocomposites prepared by vacuum based processes	p.
10:10 – 10:30	O1	Matthias Schwartzkopf (<i>Deutsches Elektronen-Synchrotron (DESY), Notkestr. 85, D-22607 Hamburg, Germany</i>), A. Buffet, V. Körstgens, E. Metwalli, K. Schlage, G. Benecke, J. Perlich, A. Rothkirch, B. Heidmann, G. Herzog, P. Müller-Buschbaum, R. Röhlberger, R. Gehrke, S. V. Roth, Real-time in situ μGISAXS study of gold cluster growth kinetics during magnetron sputter deposition (C18)	p.
10:30 – 10:50	O2	Jan Hanuš (<i>Charles University in Prague, Faculty of Mathematics and Physics, Department of Macromolecular Physics, V Holešovičkách 2, 180 00, Prague 8, Czech Republic</i>), Martin Petr, Ondřej Kylián, Tereza Steinhartová and Hynek Biederman, Modification of surfaces by metal and polymeric nanoparticles (C22)	p.
10:50 – 11:20	Coffee break		
Session 2			Chair: Paolo Milani
11:20 – 11:40	O3	Walter Caseri (<i>ETH Zürich, Department of Materials, 8093 Zürich, Switzerland</i>), Metal(0) compounds for nanocomposite preparation (C20)	p.
11:40 – 12:00	O4	Antoine Lonjon (<i>Physique des Polymères – Institut Carnot CIRIMAT Université Paul Sabatier, Toulouse, France</i>), L. Laffont, P. Demont, E. Dantras, C. Lacabanne, Polymer / metallic nanowires nanocomposites for flexible conductive electrode applications (C08)	p.
12:00 – 12:20	O5	Christian Ghisleri (<i>C.I.Ma.I.Na. and Dipartimento di Fisica, Università degli Studi di Milano - Via Celoria, 16 I-20133 Milano, Italy</i>), L. Ravagnan, M.A.C. Potenza, P. Milani, Nanocomposite based stretchable optics (C11)	p.
12:20 – 14:00	Lunch		

Session 3		Chair: Caroline Bonafos	
14:00 – 14:50	IN2	Luciano Colombo (<i>Physics Department, University of Cagliari, Italy</i>), Atomistic modeling of metal-cluster implantation into a polymeric substrate	p.
14:50 – 15:10	O6	Petr Hotmar (<i>Department of Chemical and Biomedical Engineering, Florida State University, 2525 Pottsdamer Street, Tallahassee, FL 32310, USA</i>), R. Chella, Polyelectrolyte Dynamics in Confined Flows (C39)	p.
15:10 – 15:30	O7	Minoru Mizuhata (<i>Department of Chemical Science and Engineering, Graduate school of Engineering, Kobe University, 1-1 Rokkodai, Kobe 657-8501, Japan</i>), Takashi Hasegawa, Thomas Strunskus, Vladimir Zaporotjenko, Franz Faupel, LSPR properties of silver nanoparticles-Nafion membrane composite prepared by Photoreduction Process (C19)	p.
15:30 – 15:50	O8	Maxime Bayle (<i>CEMES-CNRS et Université de Toulouse, 29 rue Jeanne Marvig 31400 Toulouse, France</i>), P. Benzo, C. Bonafos, B. Pécassou, G. Benassayag, A. Zwick, J. Grisolia and R. Carles, 3D design of embedded plasmonic architectures in dielectrics: synthesis, properties and applications (C31)	p.
15:50 – 16:20	Coffee break		
Session 4		Chair: Mady Elbahri	
16:20 – 17:10	IN3	Michel Mitov (<i>Centre d'Elaboration de Matériaux et d'Etudes Structurales (CEMES-CNRS) et Université de Toulouse, 29 rue Jeanne Marvig 31400 Toulouse, France</i>), Rajaa Bitar and Gonzague Agez, Self-organization of gold nanoparticles in cholesteric liquid crystals	p.
17:10 – 17:30	O9	Millicent A. Firestone (<i>Center for Integrated Nanotechnologies, Los Alamos National Laboratory, Los Alamos, NM 87545, USA</i>), S. Lee, B. Ringstrand, Mesostructuring of Au nanoparticles through incorporation in polymerized ionic liquids (C35)	p.
17:30 – 17:50	O10	Peter Müller-Buschbaum (<i>Technische Universität München, Physik-Department, Lehrstuhl für Funktionelle Materialien, James-Franck-Str. 1, 85748 Garching, Germany</i>), Yuan Yao, Ezzeldin. Metwalli, Jean-Francois Moulin, Martin Haese-Seiller, Polymer-metal oxide nanocomposites prepared by self-assembly of nanoparticles in block copolymer films (C07)	p.
17:50 – 18:10	O11	Fanggao Chang (<i>College of Physics and Electronic Engineering, Henan Normal University, Xinxiang 453007, P. R. China</i>), Feng Yang, D. P. Almond, Na Zhang, and Guilin Song, The conductivity and permittivity of Ni-silicone rubber composites under uniaxial pressure (C32)	p.
19:00 – 20:00	Capitole (reception in the Salle des Illustres)		

Tuesday, Sept. 17th, 2013

Session 5		Chair: Walter Caseri	
09:00 – 09:50	IN4	<p>Kensuke Akamatsu (<i>Department of Nanobiochemistry, Frontiers of Innovative Research in Science and Technology (FIRST), Konan University, 7-1-20 Minatojimaminami, Chuo-ku, Kobe 650-0047, Japan</i>), Design, Structural Analysis and Properties of Metal Nanoparticle/Polymer Nanocomposites prepared by Ion-Doped Precursor Approach</p>	p.
09:50 – 10:10	O12	<p>Dmitri N. Muraviev (<i>Department of Chemistry, Autonomous University of Barcelona, 08193 Bellaterra, Barcelona, Spain</i>), Amanda Alonso, Julio Bastos-Arrieta, Maria Muñoz and Jordi Macanas, Bifunctional polymer-metal nanocomposites: modification of commercial polymeric ion exchangers with metal nanoparticles (C24)</p>	p.
10:10 – 10:30	O13	<p>Oleksandr Polonskyi (<i>Institute for Materials Science, Chair for Multicomponent Materials, Christian-Albrechts University at Kiel, Kaiserstr. 2, 24143 Kiel, Germany</i>), Tilo Peter, Amir Mohammad Ahadi, Thomas Strunskus, and Franz Faupel, Highly efficient transition metal nanoparticle generation in the gas phase by pulsed DC magnetron sputtering (C17)</p>	p.
10:30 – 11:00	Coffee break		
Session 6		Chair: Minoru Mizuhata	
11:00 – 11:20	O14	<p>Ezzeldin Metwalli (<i>Technische Universität München, Physik-Department, Lehrstuhl für Funktionelle Materialien, James-Franck-Str. 1, 85748 Garching, Germany</i>), Volker Körstgens, Adeline Buffet, Jan Perlich, Kai Schlage, Stephan V. Roth, Peter Müller-Buschbaum, Millisecond time resolved investigation of metal nanoparticle growth on polymer film surfaces (C06)</p>	p.
11:20 – 11:40	O15	<p>Stephan V. Roth (<i>Deutsches Elektronen-Synchrotron (DESY), Notkestr. 85, D-22607 Hamburg, Germany</i>), G. Benecke, S. Bommel, A. Buffet, R. Döhrmann, B. Heidmann, A. Rothkirch, G. Santoro, M. Schwartzkopf, S. Yu, E. Metwalli, P. Müller-Buschbaum, Gold sputter deposition on polystyrene thin films: Growth retardation, doping and final metal layer formation (C14)</p>	p.
11:40 – 12:00	O16	<p>Shun Yu (<i>HASYLAB, Deutsch Elektron-Synchrotron (DESY) Notkestraße 85, D-22607 Hamburg, Germany</i>), Gonzalo Santoro, Kuhu Sarkar, Benjamin Dicke, Jan Perlich, Marion Kuhlmann, Johannes F.H. Risch, Matthias Schwartzkopf, Peter Müller-Buschbaum, Stephan V. Roth, In situ GISAXS characterization of metal sputtering on Alq3 thin film (C13)</p>	p.
12:00 – 12:20	O17	<p>Felix H. Richter (<i>Max-Planck-Institut für Kohlenforschung; Heterogene Katalyse; Kaiser-Wilhelm-Platz 1, D-45470 Mülheim an der Ruhr, Germany</i>), Yan Meng, Tim Klasen, Laila Sahraoui, Ferdi Schüth, Polydivinylbenzene-supported nanoparticle catalysts that mimic the structure and morphology of inorganic catalysts for oxidation and hydrogenation (C21)</p>	p.
12:20 – 14:00	Lunch		

<i>Session 7</i>		<i>Chair: Franz Faupel</i>	
14:00 – 14:50	IN5	Fiorenza Fanelli (<i>Institute of Inorganic Methodologies and Plasmas (IMIP), National Research Council (CNR), c/o Department of Chemistry, University of Bari 'Aldo Moro', via Orabona 4, 70126, Bari, Italy</i>), A. M. Mastrangelo, P. Bosso, F. Fracassi, Atmospheric pressure plasma deposition of organic-inorganic nanocomposite films	p.
14:50 – 15:10	O18	Hynek Biederman (<i>Charles University in Prague, Faculty of Mathematics and Physics, Department of Macromolecular Physics, V Holešovičkách 2, 180 00, Prague 8, Czech Republic</i>), O. Kylian, O. Polonskyi, J. Hanus, A. Artemenko, M. Drabik, P. Solar, A. Choukourov, D. Slavinska, Nanoparticle based Nanostructured Films using Plasma Polymers (C23)	p.
15:10 – 15:30	O19	David Ruch (<i>Advanced Materials and Structures Department, CRP Henri Tudor, 66 rue de Luxembourg, L-4002, Esch sur Alzette, Luxembourg</i>), Nanostructured and functional polymers based materials: from macromolecules assemblies in thin films to industrial applications (C44)	p.
15:30 – 15:50	O20	Sombel Diahm (<i>Université de Toulouse; UPS, INPT, CNRS; LAPLACE (Laboratoire Plasma et Conversion d'Energie); 118 route de Narbonne, F-31062 Toulouse cedex 9, France</i>), F. SAYSOUK, M.-L. Locatelli, B. Belkerk, Y. Scudeller, V. Salles, R. Chiarac and F. Toche, Structural, Electrical and Thermal Characterizations of Polyimide/BN Nanocomposites (C40)	p.
15:50 – 17:10	Coffee break + Poster session		
<i>Session 8</i>		<i>Chair: Shigehito Deki</i>	
17:10 – 17:30	O21	Kremena Makasheva (<i>Université de Toulouse; UPS, INPT, CNRS; LAPLACE (Laboratoire Plasma et Conversion d'Energie); 118 route de Narbonne, F-31062 Toulouse cedex 9, France</i>), C. Villeneuve-Faure, S. Le Roy, B. Despax, L. Boudou, C. Laurent, and G. Teyssedre, Thin SiCOH layers with Ag-NPs tailored interface as model system of deep artificial traps for electric charges (C03)	p.
17:30 – 17:50	O22	Martin Drabik (<i>Empa, Swiss Federal Laboratories for Materials Science and Technology, Laboratory for Advanced Fibers, Lerchenfeldstrasse 5, 9014 St. Gallen, Switzerland</i>), H. Biederman, D. Hegemann, Ag/C:H:O Nanocomposites on Textile Fibers for Sensor Applications (C09)	p.
17:50 – 18:10	O23	Y. K. Vijay (<i>Department of Physics, University of Rajasthan, Jaipur 302004, India</i>) Polymers –Metal Composite Membranes: Synthesis, Characterization and Applications as Gas Filter	p.
20:00	Conference dinner		

Wednesday, Sept. 18th, 2013

<i>Session 9</i>		<i>Chair: Bernard Despax</i>	
09:00 – 09:50	IN6	Daniel Fourmy (<i>Université Paul Sabatier, EA2405, Toulouse, France</i>), Nanocomposite vectors for cancer diagnosis and therapy	p.
09:50 – 10:10	O24	M. S. Mohy Eldin (<i>Polymer Materials Research Department, Advanced Technology and New Materials Research Institute, Scientific Research and Technology Applications city, New Borg El-Arab City 21934, Alexandria, Egypt</i>), M. A. Abu Saied and D. G. Mita, Preparation and characterization of nanomagnetic particles Chitosan composite for enzyme immobilization (C12)	p.
10:10 – 10:30	O25	Celso Pinto de Melo (<i>Departamento de Física – Universidade Federal de Pernambuco, 50.670-901 Recife – PE – Brazil</i>), Use of the Enhanced Fluorescence of (Conducting Polymer)/(Metallic Nanoparticle) Composites for the Development of Rapid Diagnostics Tests (C27)	p.
10:30 – 11:00	Coffee break		
<i>Session 10</i>		<i>Chair: Richard Clergereaux</i>	
11:00 – 11:20	O26	Mady Elbahri (<i>Institute of Polymer Research, Helmholtz-Zentrum Geesthacht, Nanochemistry and Nanoengineering, Institute for Materials Science, Faculty of Engineering, Christian-Albrechts –University, Kiel, Germany</i>), Shahin Homaeigohar, D. Disci-Zayed, R. Abdelaziz, Plasmonic Bionanocomposites (C34)	p.
11:20 – 11:40	O27	Gonzalo Santoro (<i>Deutsches Elektronen Synchrotron, DESY, Notkestr. 85, D-22607, Hamburg, Germany</i>), S. Yu, M. Schwartzkopf, G. Herzog, S. Bommel, R. Döhrmann, B. Heidmann, J. Perlich, E. Metwalli, P. Müller-Buschbaum, S.V. Roth, Preparation of Ag coatings for antibacterial and plasmonic applications (C15)	p.
11:40 – 12:00	O28	Thomas Strunskus (<i>Institute for Materials Science, Chair for Multicomponent Materials, Christian-Albrechts University at Kiel, Kaiserstr. 2, D-24143 Kiel, Germany</i>), N. Allisawi, J. Xiong, T. Peter, Z. Ghori, T. Hrkac, F. Faupel, Fine tuning the silver release properties of polymeric or ceramic silver nanocomposite coatings using thin barriers (C26)	p.
12:00 – 12:20	O29	Andreas Heilmann (<i>Fraunhofer Institute for Mechanics of Materials IWM, Walter-Hülse-Str.1, 06120 Halle (Saale), Germany</i>), U. Hirsch, N. Teuscher, Antifouling Properties of Reverse-Osmosis Filtration Membranes with Silver Nanoparticles (C30)	p.
12:20 – 12:40	Closing remarks		
12:40 – 14:30	Lunch		