

Nanofair 2012 - Program

Tuesday, 12 June

8:00	Registration	
	Room: Saal 4	
9:00	Andreas Leson Institute of Surface and Manufacturing Technology, Dresden, Germany	
	Plenary Session Chair: A. Leson	
9:30	Developments in Nanoscience-Nanotechnologies: a European perspective and innovation strategy Christos Tokamanis European Commission, Brussels, Belgium	
10:15	The challenges in successfully commercializing nanomaterials - a small company perspective Lance Criscuolo Zyvex Technologies, Ohio, USA	
11:00	Coffee break with technical exhibition	
	Room: Saal 4	Room: Saal 5
	Materials / Composites Chair: V. Hilarius	Life Sciences Chair: G. Bachmann
11:30	Plasmonic nanocomposites: from transparent conductor to perfect absorber Mady Elbahri Christian-Albrechts-University, Kiel, Germany	Crosslinked and pH-responsive polymeric nanocapsules as synthetic bionanoreactor and carrier system Brigitte Voit et. al. Leibniz Institute of Polymer Research, Dresden, Germany
12:00	Optimized processes for production of ordered structures of nanofibrous materials fabricated by electrospinning Marek Pokorny et. al. Contipro Biotech, Dolni Dobrouc, Czech Republic	Novel nanocarriers containing metallic nanoparticles for nanomedicine applications against cancer Mauro Comes Franchini University of Bologna, Bologna, Italy
12:20	High density of narrow size distribution Au-Nanoparticles supported on large surface roughness solid Al ₂ O ₃ Arturo Garcia-Borquez et. al. Higher Education Center for Physics and Mathematics, National Polytechnic Institute (IPN), Mexico City, Mexico	Hybrid nanoparticles for biomedical applications Anitha Ethirajan Institute for Materials Research, Hasselt University, Diepenbeek, Belgium
12:40	Doped Nano-Silicon - A promising candidate for thermoelectrics applications Sophie M. Schnurre et. al. Institute for Energy and Environmental Technology, Duisburg, Germany	Growth and characterisation of carbon nanotube microelectrodes for neuronal recording applications Boris Stamm et. al. NMI Natural and Medical Sciences Institute at the University of Tübingen, Reutlingen, Germany
13:00	Lunch break with technical exhibition	
	Room: Saal 4	Room: Saal 5
	Carbon Based Materials I Chair: R. Baptist	Bioinspired Nanostructures, Systems and Manufacturing I Chair: B. Voit
14:00	ta-C coating of parts and tools for friction and wear reduction industrial scale Laser-Arc technology Hans-Joachim Scheibe Institute of Surface and Manufacturing Technology, Dresden, Germany	An eco-friendly nanotechnology for improving material functionality Hong Yee Low Institute of Materials Research and Engineering, Singapore, Republic of Singapore
14:30	High performance carbon nanotube reinforced composites Mary Chan-Park Nanyang Technological University, Singapore, Republic of Singapore	Artificial cell membranes - Application in nanomedicine Madhavan Nallani Institute of Materials Research and Engineering, Singapore, Republic of Singapore
14:50	Covalent Triazine Frameworks - from structural implications to possible applications Bettina Lotsch Ludwig-Maximilians-University, Munich, Germany	Biomimetic nanocomposite materials as a bone tissue replacement Karel Balik Academy of Sciences of the Czech Republic, Prague, Czech Republic
15:10	Vertically aligned carbon nanotubes as novel electrodes for energy storage applications Susanne Dörfler et. al. Fraunhofer Institute for Material and Beam Technology (IWS), Dresden, Germany	Transparent titanium dioxide colloids for medical applications Wojciech Macyk et. al. Jagiellonian University, Kraków, Poland
15:30	Coffee break with technical exhibition	
	Room: Saal 4	Room: Saal 5
	Carbon Based Materials II Chair: S. Kaskel	Bioinspired Nanostructures, Systems and Manufacturing II Chair: L. Liu
16:00	Carbon Nanohorns (CNHs) - A new class of nanoporous carbons Norbert Molitor Plejades GmbH, Griesheim, Germany	Free-standing, ultrastrong, and flexible SWCNT network nano-films with multifunctions Jian Jin Nano Bionics Department, SINANO, Chinese Academy of Sciences, Suzhou, China
16:30	Nano- and microfibers from single-walled carbon nanotubes Beata Lehmann et. al. Institute of Surface and Manufacturing Technology, University of Technology, Dresden, Germany	The making of gecko foot like robot through fabrication of array of carbon nanotubes Zhen Dong Dai Nanjing University of Aeronautics and Astronautics, Nanjing, China
16:50	Polymer/carbon nanotube composites for liquid sensing: processing, properties and model for response characteristics Petra Pötschke et. al. Leibniz Institute of Polymer Research, Dresden, Germany	Control of wettability and friction by immobilization of polyelectrolyte brushes with bio-inspired functional groups Atsushi Takahara Institute for Materials Chemistry and Engineering, Kyushu University, Fukuoka, Japan
17:10	NanoConnect - A new model for connecting nanotechnology and Australian industry Jonathan Campbell Flinders Centre for Nanoscale Science and Technology, Adelaide	Biomimetic soft microorigami: Smart 3D micro-constructs from self-folding polymer films Svetlana Zakharchenko Leibniz Institute of Polymer Research, Dresden, Germany
17:30	Poster Session	
19:15	Short walk together to evening reception (Starting in front of congress center)	
19:30	Evening reception with buffet Awarding of the Young Researcher Prize	Location: Zwinger Dresden, Nymphenbad

Wednesday, 13 June 2012

	Room: Saal 4
	Plenary Session Chair: A. Leson
9:00	Relevancy of nanotechnologies and nanoanalysis to paper electronics Rodrigo Martins University de Lisboa, Lisboa, Portugal
9:30	Innovative 3D Patterning Peter Gnauck Carl Zeiss NTS GmbH, Oberkochen, Germany
10:00	Chemical and structural nanoanalysis - Recent development and application Michael Kopnarski Institute for Surface and Thin Film Analysis GmbH, Kaiserslautern, Germany
10:30	<i>Coffee break with technical exhibition</i>

	Room: Saal 4	Room: Saal 5
	Electronics Chair: M. Werner	Analytics & 4D Microscopy I Chair: E. Zschech
11:00	Photonic and diffractive elements by holographic patterning of organic-inorganic nanocomposites Joachim Stumpe et. al. Fraunhofer Institute for Applied Polymer Research (IAP), Potsdam, Germany	The Emergence of 3D X-Ray Microscopy in 4D and in situ Studies of Materials Arno Merkle Xradia Inc., Pleasanton, USA
11:30	Modeling and Simulation of Nanodevices Jörg Schuster et. al. Fraunhofer Institute for Electronic Nanosystems ENAS, Chemnitz, Germany	Nanoscale x-ray tomography and spectroscopy with the HZB TXM Gerd Schneider et. al. Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, Berlin, Germany
11:50	A new instrument for sizing nanoparticles suspended in liquids Thomas Krinke et. al. TSI Incorporated, Shoreview, USA	Nanometer multilayer mirrors - Powerful tools to monochromate, collimate or focus x-rays Markus Krämer et. al. AXO GmbH, Dresden, Germany
12:10	Nano particle surface modifications of screen-printed sensors for enhanced sensitivity Thomas Rabbow et. al. Fraunhofer Institute for Ceramic Technologies and Systems (IKTS), Dresden, Germany	Transmission electron microscopy of nanoscale multilayer materials Wolfgang Jäger Christian-Albrechts-University, Kiel, Germany
12:30	<i>Lunch break with technical exhibition</i>	

	Room: Saal 4	Room: Saal 5
	Energy Applications Chair: G. Bachmann	Analytics & 4D Microscopy II Chair: E. Zschech
13:30	Nanostructured Si/C composites as anodes for Li-ion batteries of enhanced capacity Krzysztof Kierzek et. al. Wroclaw University of Technology, Wroclaw, Poland	4D characterisation of Li-ion Battery Materials Paul R. Shearing et. al. University College London, Great Britain
14:00	New nano materials for the next generation of lithium-based batteries - a prospective system analysis Marcel Weil et. al. Karlsruhe Institute of Technology (KIT), Eggenstein-Leopoldshafen, Germany	Characterisation of the structure of solid oxide fuel cells by nano-scale x-ray tomography Robert S. Bradley et. al. University of Manchester, Manchester, Great Britain
14:20	Synthesis and characteristics of carbon nanofibers and their application as a conducting additive of supercapacitor electrode Agata Sliwak et. al. Wroclaw University of Technology, Wroclaw, Poland	Multi-Scale Imaging of Multi-Phase Flow in Porous Media Matthew Andrew et. al. Qatar Carbonates and Carbon Storage Research Centre (QCCSRC), Imperial College, London, Great Britain
14:40	Monodisperse ZnS nanodot films by Spray-ILGAR - process, growth mechanism and application for highly efficient thin film solar cells Christian-Herbert Fischer et. al. Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, Berlin, Germany	XPS chemical imaging of fuel cell membranes Andrey Lyapin et. al. Physical Electronics GmbH, Ismaning, Germany
15:00	<i>Lunch break with technical exhibition</i>	

	Room: Saal4
	Plenary Session Chair: A. Leson
15:30	Perfect Absorber Sensor: Towards Single Catalytic Detection students award winner - Andreas Tittl
15:45	Potential contribution of nanotechnology to sustainable manufacturing David Rickerby European Commission Joint Research Centre, Ispra, Italy
16:15	Concerning bridging the gap between lab based and industrial application in nanotechnology Bertrand Fillon CEA-LITEN, Grenoble, France
16:45	Closing remarks
17:00	End of the conference