

Scientific Program

Nanotechnology Congress & Expo

August 11-13, 2015 Frankfurt, Germany

Exhibitor



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OMICS International Conferences

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Raume/Room-5



08:30-08:55

Opening Ceremony

Keynote Forum

- 08:55-09:00 **Introduction**
- 09:00-09:30 **Hari Shanker Sharma**
Uppsala University, Sweden
- 09:30-10:00 **Mahi R Singh**
Western University, Canada
- 10:00-10:30 **Ashok Vaseashta**
Claflin University, USA

Group Photo @ Raume/Room-5

Networking & Refreshment Break 10:30-10:45 @ Foyer

Track 1: Advanced Nanomaterials

Session Chair: Sabyasachi Sarkar, Indian Institute of Engineering Science and Technology, India

Session Introduction

- 10:45-11:05 **Title: Synthesis of subnano-size metal particles using a nano-reactor**
Kimihiya Yamamoto, Tokyo Institute of Technology, Japan
- 11:05-11:25 **Title: Well-defined thermo-responsive polymers as injectable gels**
Theoni K Georgiou, Imperial College London, UK
- 11:25-11:45 **Title: Long, 140 ns electron spin lifetime in chemically synthesized graphene and related nanostructures and its strong interplay between the surface bound oxygen**
Balint Nafradi, Ecolepolytechniquefederale de Lausanne EPFL, Switzerland
- 11:45-12:05 **Title: Photodynamic therapy of upconversion nanoparticles prepared by laser ablation in liquid**
Hiroyuki Wada, Tokyo Institute of Technology, Japan
- 12:05-12:15 **Title: Channel length modulation effect on monolayer graphene nanoribbon field effect transistor**
Mehdi Saeidmanesh, UniversitiTeknologi Malaysia, Malaysia

Track 2: Nanomaterials Fabrication, Characterization and Tools

Session Chair: Michael Hietschold, Technische Universität Chemnitz, Germany

Session Introduction

- 12:15-12:35 **Title: Hierarchical nano- or bio-composites based on magnetic nanostructures**
Beata Kalska-Szostko, University of Bialytsok, Poland
- 12:35-12:55 **Title: Application of a difference electron nanoscope (DEN): correlation between 3D magnetical structures of synthetic fayalite with synchrotron and neutron diffraction and mössbauer spectroscopy part II**
Werner Lottermoser, Salzburg University, Austria

Lunch Break 12:55-13:40 @ Restaurant

- 13:40-14:00 **Title: Usefulness of galvanic displacement reactions to efficiently fabricate metal nanostructures for surface-enhanced spectroscopy**
Yuko S Yamamoto, Kagawa University, Japan
- 14:00-14:20 **Title: Pattern control in molecular self-assembly**
Michael Hietschold, Technische Universität Chemnitz, Germany
- 14:20-14:40 **Title: Characterization of nanodosimeter for real time measurements in radiotherapy and medical physics**
Abdulhamid Chaikh, Grenoble University Hospital, France
- 14:40-14:50 **Title: Low cost fabrication of organic semiconductor monolayer via Organic Solid-Solid Wetting Deposition (OSWD): Physico-chemical basics, controllability, process capability**
Alexander Eberle, Ludwig Maximilian University of Munich, Germany

Networking & Refreshment Break 14:50-15:05 @ Foyer

Track 3: Nanoscale Electronics

Track 4: Nanotech for Energy and Environment

Session Chair: Shashi Paul, De Montfort University, UK

Session Co-Chair: Takashi Tokumasu, Tohoku University, Japan

- 09:00-09:20 **Title: Large scale molecular simulations for transport phenomena in polymer electrolyte fuel cell**
Takashi Tokumasu, Tohoku University, Japan
- 09:20-09:40 **Title: Printed nanomaterial-based flexible device sheet**
Kuniharu Takei, Osaka Prefecture University, Japan
- 09:40-10:00 **Title: Rare-earth-element free luminescent materials for warm white LEDs**
Ching-Fuh Lin, National Taiwan University, Taiwan
- 10:00-10:20 **Title: Growth and surface engineering of Si nanowires for opto-electronic applications**
Muhammad Y Bashouti, Max-Planck Institute for the Science of Light, Germany
- 10:20-10:40 **Title: Thermometry at the nanoscale**
Carlos D S Brites, Aveiro Institute of Materials, Portugal

Networking & Refreshment Break 10:40-10:55 @ Foyer

- 10:55-11:15 **Title: Advanced electrode materials for hybrid energy storage**
Pedro Gomez-Romero, Institut Catala de Nanociencia i Nanotecnologia, Spain
- 11:15-11:35 **Title: In-situ scattering experiment and structural analysis of hydrogen storage materials by high intensity neutron total diffractometer (NOVA)**
Kazutaka Ikeda, High Energy Accelerator Research Organization (KEK), Japan
- 11:35-11:55 **Title: synthesis and reactivity of AU/G-C₃N₄/TiO₂ nanocomposites for water-splitting and H₂ production under solar light illumination**
Valérie KELLER, University of Strasbourg, France

Track 5: Nanotech in Life science and Medicine

Session Chair: Hari Shanker Sharma, Uppsala University, Sweden

Session Co-Chair: Hussein O Ammar, Future University, Egypt

- 11:55-12:15 **Title: New trends in nanotechnology-based targeted drug delivery systems**
Hussein O Ammar, Future University, Egypt

Lunch Break 12:15-13:00 @ Restaurant

- 13:00-13:20 **Title: Multiplex targeted disease biomarker detection using SERS probes**
Nekane Guarrotxena, Institute of polymer science and technology, Spain
- 13:20-13:40 **Title: Magnetophoretic circuits for digital cells on chip**
CheolGi Kim, DGIST, Republic of Korea
- 13:40-14:00 **Title: Ligand-free alloy nanoparticles for applications in nano-toxicological assays**
Christoph Rehbock, University of Duisburg, Germany
- 14:00-14:20 **Title: New routes in treating brain disorders**
Sylvia Wagner, Fraunhofer Institute for Biomedical Engineering (IBMT), Germany
- 14:20-14:40 **Title: Functionalized polymeric electrospun nanoscaffolds for bone regeneration and tissue healing**
Anand Gadre, University of California, USA
- 14:40-15:00 **Title: SERS-based femto-sensitive nanosensor for protein detection**
Nekane Guarrotxena, Institute of polymer science and technology, Spain

Networking & Refreshment Break 15:00-15:15 @ Foyer

- 15:15-15:35 **Title: Cytotoxicity of silver nanoparticles synthesized by catharanthus roseus aqueous extract on jurkat and HT29 cancer cell lines**
Nor Hazwani Ahmad, Universiti Sains Malaysia, Malaysia
- 15:35-15:55 **Title: nano carbon onions cross blood brain barrier with potential to entrap and release alzheimer drug**
Sabyasachi Sarkar, Indian Institute of Engineering Science and Technology, India
- 15:55-16:05 **Title: preparation and characterization of dexketoprofen tromethamol loaded eudragit® Rs 100 nanoparticles**
Ahmet Alper Ozturk, Anadolu University, Turkey

Poster Presentation Session (15:45-16:30) @ Foyer

- NT-01** Title: **Nanoparticles exacerbate sleep deprivation induced brain pathology and functional disturbances. Neuroprotective effects of TiO₂ nanowired delivery of 5-HT₃ receptor antagonist ondansetron**
Aruna Sharma, Uppsala University, Sweden
- NT-02** Title: **Lattice boltzmann modeling of random nano-transport phenomena in highly disordered carbon felt composite layers**
Sukkee Um, Hanyang University, S. Korea
- NT-03** Title: **Novel Pd/CaSn(OH)₆ nanocomposite prepared by modified sonochemical method for photocatalytic degradation of methylene blue dye**
E S Baeissa, King Abdulaziz University, Saudi Arabia
- NT-04** Title: **Fixed-dose combination of a nanodrug and a quinoline moiety-containing compound**
G Linden, Teva Pharmaceutical Industries Ltd., Israel
- NT-05** Title: **Surface and porous properties of polynaphthylamine/Fe₃O₄ composite and the arsenic adsorption capacity in wastewater**
Tran Minh Thi, Hanoi National University of Education, Vietnam
- NT-06** Title: **Functionalised dextran nanoparticles for drug delivery to the brain**
Daniel Ibegbu, University of Portsmouth, UK
- NT-07** Title: **Fabrication and characterization of chromium-iron oxide (Cr₂Fe₆O₁₂) nanoparticles by thermal treatment method**
Mahmoud Goodarz Naseri, Malayer University, Iran
- NT-08** Title: **On the correct form of the nonlinear optical susceptibility in strongly-driven semiconductor quantum dots**
John Boviatsis, Technological and Educational Institute of Western Greece, Greece
- NT-09** Title: **Ion-synthesized of porous silicon with silver nanoparticles.**
Andrey Stepanov, Kazan Physical-Technical Institute of Russian Academy of Sciences, Russian Federation
- NT-10** Title: **Catalytic decolorization of Acid blue 29 dye by H₂O₂ and a heterogeneous catalyst**
Ibrahim A Salem, Tanta University, Egypt
- NT-11** Title: **Defect-induced plating of lithium metal within porous graphene networks**
Osman Eksik, Istanbul Technical University, Turkey

Day 3 August 13, 2015

Raume/Room-5

10:00-10:45 Workshop on “New understandings on the physical and mechanical properties of materials using computational and experimental nanotechnology”
S. Joseph Antony, University of Leeds, UK

Networking & Refreshment Break 10:45-11:00 @ Foyer

Track 8: Terahertz Nanoscience

Session Chair: Masayoshi Tonouchi, Osaka University, Japan

Session Co-Chair: Iwao Kawayama, Osaka University, Japan

Session Introduction

- 11:00-11:20** Title: **Introduction to terahertz nanoscience**
Masayoshi Tonouchi, Osaka University, Japan
- 11:20-11:40** Title: **Absorption and desorption dynamics of gas molecules on 2D nanomaterials observed by terahertz spectroscopy**
Iwao Kawayama, Osaka University, Japan
- 11:40-12:00** Title: **Plasmon-resonant terahertz emitters and detectors and their system applications**
S Boubanga Tombet, Tohoku University, Japan
- 12:00-12:20** Title: **Terahertz interactions in graphene: consequences for ultra-high- speed electronics**
Dmitry Turchinovich, Max Planck Institute for Polymer Research, Germany
- 12:20-12:40** Title: **Field-resolved multi-terahertz nano-spectroscopy**
Max Eisele, University of Regensburg, Germany

Lunch Break - 12:40-13:25 @ Restaurant

Track 6: Nanotechnology safety

Track 7: Nano Applications

Session Chair: Valérie KELLER, University of Strasbourg, France

Session Co-Chair: S Joseph Antony, University of Leeds, UK

- 13:25-13:45 **Title: Growth of silicon nano-structures at low temperature and their application in electronic and energy related devices**
Shashi Paul, De Montfort University, UK
- 13:45-14:05 **Title: ZnO nanoparticles toxicity studied on isolated heart model nanotechnology safety, nanotoxicology**
Tamara Milivojević, University of Ljubljana, Slovenia
- 14:05-14:25 **Title: Daily used nanoparticles increases the incidence of cancer**
Hanan Ramadan Hamad Mohamad, Cairo University, Egypt
- 14:25-14:45 **Title: Amphiphilic polymeric nanoparticles for drug delivery**
AmanUllah, University of Alberta, Canada
- 14:45-14:55 **Title: Design and characterisation of a novel T-shaped nano-antenna on diamond like carbon material**
Ahmad Bahar, De Montfort University, UK

**Networking & Refreshment Break 14:55-15:10 @ Foyer
Award & Closing Ceremony**

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