

# SETCOR International Nanotechnology conference 2013 NANOTECH DUBAI 2013

**Location, date:** Dubai, United Arab Emirates, October 28 – 30, 2013 http://www.setcor.org/conferences/NANOTECH-DUBAI-2013/1

### Introduction:

NANOTECH DUBAI 2013 brings together leading scientists, researchers, engineers, practitioners, technology developers and policy makers in nanotechnology to exchange information on their latest research progress and innovation. Participants from the top international academic, government and private industry labs of different disciplines participate in NANOTECH DUBAI 2013 to identify new technology trends, development tools, product opportunities, R&D collaborations, and commercialization partners. It is an excellent event for students to meet and discuss with lead researchers. The conference provides an unprecedented opportunity to discover innovation in the area of nanotechnology and new business opportunities. It's among the most important events in terms of international regulatory policies and it's opened to the participation of private companies. It's a unique venue for companies to promote equipment and technology.

The conference covers all frontier topics in nanotechnology including:

#### Advanced Materials

- Nanoparticle Synthesis and applications
- Nanocomposite/ Bionanocomposite Materials
- Nanofuids
- Nanostructured/nanoporous Materials and devices
- Nanostructured coatings, surfaces and membranes
- Carbon Nanostructures and devices
- Graphene
- Polymer Nanotechnology
- Soft Nanotechnology and Colloids

### **Fabrication, Characterization and Tools**

- Synthesis of Nanomaterials
- Sustainable Nanomanufacturing
- Nanoscale Materials Characterization
- Modeling and Simulation at the Nanoscale

#### **Nanoscale Electronics**

- Nano Electronics and Photonics
- Organic and flexible Electronics
- Green Electronics
- MEMS and NEMS Devices and Applications
- Sensors and Systems



Micro and Nanofluidics

#### Nanotech in Life Sciences and Medicine

- Bio Nano Materials and Tissue Engineering
- Bio Sensors, Diagnostics and Imaging
- Materials for Drug and Gene Delivery
- Biomarkers and Nanoparticles
- Cancer Diagnostics, Imaging and Treatment
- Drug Delivery and Therapeutics
- Cancer Nanotechnology
- Nano robots
- DNA nanotechnology
- Nanotoxicity

## **Energy and Environment**

- Nanomatrials for Clean and Sustainable Technology
- Nanotechnology for Solar Energy Collection and Conversion
- Energy Storage and Novel Generation
- · Nanotech for Oil and Gas
- NanoNuclear Materials, Fuels Applications
- Renewable Energy Technologies
- Bio Sources for Materials and Fuels
- Green Chemistry and Materials
- Water Technologies
- Smart Grid

# Nanotechnology safety

- Nanotoxicology
- Risk assessment and management
- Measurement of health risk
- Exposure scenarios
- Regulation and ethical impacts

## **Nano Applications**

- Medical and Pharmaceutical
- Electronics and communication
- Food Technology
- Catalysis
- Military and Defence
- Aeropspace and vehicle manufacturers
- Energy and Environment
- Manufacturing
- Construction
- Textiles



# **Keynote Speakers**



Pr. Andrea C. Ferrari

Director of the Cambridge Graphene Centre, Engineering Department, University of Cambridge- UK.

Prof. Andrea Ferrari is Professor of Nanotechnology and Royal Society Wolfson Research Merit Award Holder. He is the Director of the Cambridge Graphene Centre and Head of the Nanomaterials and Spectroscopy Group at the University of Cambridge Engineering Department and Nanoscience Centre. He is Professorial Fellow of Pembroke College.



Dr. Bouzid Menaa

Research Program Director, Fluorotronics, Inc, San Diego, CA- USA

Dr. Bouzid Menaa is an experienced Nanotechnology Expert with worldwide reputation in the area; he is a senior research scientist, R&D consultant in nanotechnology and biotechnology and is currently Chief Nanotechnologist, Program Director and Principal Investigator at Fluorotronics, Inc, San Diego, CA, USA. He is the founder and Editor-in-Chief of a new launched scientific journal devoted to the development of bio-inspired nanomaterials and biomaterials.



Pr. Erich Sackmann

Institute of Molecular and Cellular Biophysics, Technische Universität München- Germany

Prof Erich Sackmann is considered to be the founder of biophysics in Germany. In the German Physical Society, he initiated and established a work group for biophysics. His working area is influenced by numerous interdisciplinary and international co-operations, which also led to three Collaborate Research Centres in the German Research Foundation. In recognition of the groundbreaking results of his research on understanding the dynamics of membranes and biopolymer networks, the mechanical properties of cells as well as cell surface interaction, Erich Sackmann received the Stern-Gerlach Prize of the Germany Physical Society in 2006. Since 2007, he is involved with his current research project "Fundamental Physics" in the Technische Universität München's Institute for Advanced Study





Pr. Farzaneh Arefi-Khonsari

Laboratoire de Génie des procédés plasmas et traitements de surface, University of Pierre & Marie Curie, Paris-France

Prof. Farzaneh Arefi-Khonsari is currently a full professor in Chemical Engineering at the University of Pierre & Marie Curie and has been working in the field of plasma chemistry and plasma processing of polymers and plasma assisted CVD since 1981. She is on the editorial board of Plasmas Processes & Polymers and Journal of Adhesion Science and Technology She has been a member of the Plasma Science and Technique Division (PSTD) of IUVSTA (International Union of Vacuum Science Techniques and Applications). She is also an elected member of the board of directors of the Plasma Chemistry Society.



Pr. Adnane Abdelghani

Head of Nanotechnology Laboratory, National Institute of Applied Science and Technology, Tunis-Tunisia

Prof.Dr.A.Abdelghani is a Full Professor in the National Institute of Applied Science and Technology (INSAT, Tunisia). He obtained the master degrees in "Microelectronics Devices" at the INSA of Lyon in 1994, then a Ph.D from Ecole Centrale of Lyon (France) in 1997. He was a post-doc researcher in Germany in the field of biophysics (1997-2000). He obtained a Habilitation in Physics in 2004 (Tunisia) and a Habilitation in 2009 at the Ecole Normale Supérieure de Cachan (France). He organized in Tunisia two International Conferences in the Field of Nanotechnology (2009 and 2012) with the Alexander Von Humboldt Foundation (Germany). He is now the leader of research group working mainly on gas sensors based on Functionalized carbon nanotubes (metallic oxides, polymers) and on the development of interdigitated gold microelectrodes integrated in microfluidic cell for bacteria analysis in biologic medium. He published more than 75 papers in International Journals. He edited two chapters book in the field of sensors.



**Prof. Dr. Axel Lorke** 

Faculty of Physics and CeNIDE, University of Duisburg-Essen-Germany

Axel Lorke received his PhD in Experimental Physics in 1991 from the Ludwig-Maximilians-Universität (LMU) Munich. He worked as a PostDoc at the University of Tokyo, the University of California, Santa Barbara, and the LMU Munich, where he also received his 'Habilitation'. Since the year 2000 he has been a Full Professor (C4) for Experimental Physics at the University of Duisburg-Essen. His work focuses on the electronic and optical properties nano-structures and low-dimensional semiconductors.



Starting in 2004 he has been coordinator of the Collaborative Research Centre 'Nanoparticles from the Gas Phase',funded by the German Research Foundation. He is co-founder and presently Director of the 'Center for NanoIntegration Duisburg-Essen' (CeNIDE), which represents about 35 research groups working in the nanosciences with a total of about 200 scientists. Lorke is author and co-author of 4 patents and 125 refereed publications with a total of about 4000 citations.



**Prof. Jackie Ying** 

Executive Director, Institute of Bioengineering and Nanotechnology

Jackie Y. Ying received her Ph.D. from Princeton University, and was a NSF-NATO Postdoctoral Fellow and Humboldt Research Fellow at the Institute for New Materials, Germany. She was Professor of Chemical Engineering at Massachusetts Institute of Technology. She is Executive Director of the Institute of Bioengineering and Nanotechnology (IBN), Singapore. Her interdisciplinary research is focused on the synthesis of nanostructured materials for catalytic and biomaterial applications. She has authored over 300 articles, and presented over 330 invited lectures at international conferences. She has over 120 patents issued or pending, and has served on the Advisory Boards of 6 start-up companies and 1 venture capital fund. She serves on the editorial board of 25 journals, and is the Editor-in-Chief of Nano Today.



**Dr Vasco Teixeira** 

Associate Professor in Materials Physics, University of Minho.

Vasco Teixeira has a PhD degree from University of Minho, Braga-Portugal in Applied Physics. He's Professor, Entrepreneur and Researcher in the field of nanotechnology, nanomaterials, surface engineering, smart materials, layered nanocomposite functional thin films and nanostructured surfaces.

He is Editor-in-chief of Journal of Nano Research, JNanoR ((Honorary Editor is Nobel Prize Sir Harry Kroto). He is author or co-author of more than 110 international scientific papers (ISI), 3 ISI journal volumes, 5 book chapters, 3 awarded industry projects in national industrial innovation contests and he gave 25 invited lectures at international conferences.

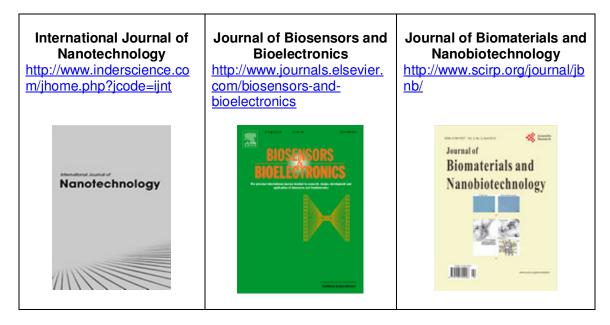
He is Vice-President of the SOPORVAC-Portuguese Vacuum Society. He is member of the Executive Committee of the SNN-Society of Nanoscience and Nanotechnology. He is the Chair for the European Advisory Scientific Committee of the SNN. He is member of the Executive Council (Councillor-2004-2007) and



2007-2010 Triennium of IUVSTA-International Union for Vacuum Science, Technique, and Applications. He is member of Directive Council of the Portuguese Materials Society. He is Coordinator of TTES-Surface Engineering and Heat Treatment Division of the SPM-Portuguese Materials Society and Technical Advisory Member of Tribological and Decorative Coatings of the SVC-American Society of Vacuum Coaters.

# **Journal Papers**

Depending on their importance, originality, quality, relevance and other editorial considerations, eligible research papers will be published in one of the following journals:



# **Conference proceedings**

Short conference papers (2 pages maximum including the references list) will be published online in the SETCOR conference Proceedings.