## Nanofair 2012 - Program

**Tuesday, 12 June**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Chair:</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00</td>
<td>Registration</td>
<td>Room: Saal 4</td>
<td></td>
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<tr>
<td>9:00</td>
<td>Andreas Leson</td>
<td>Institute of Surface and Manufacturing Technology, Dresden, Germany</td>
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### Plenary Session

<table>
<thead>
<tr>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>9:30</td>
<td>Developments in Nanoscience-Nanotechnologies: a European perspective and innovation strategy</td>
<td>European Commission, Brussels, Belgium</td>
<td>Andreas Leson</td>
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<tr>
<td>10:15</td>
<td>The challenges in successfully commercializing nanomaterials - a small company perspective</td>
<td>Swiss Technologies, Ohio, USA</td>
<td>Lance Criscuolo</td>
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### Coffee Break with technical exhibition

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<tbody>
<tr>
<td>11:00</td>
<td>Materials / Composites</td>
<td>Room: Saal 4</td>
<td>V. Hilarius</td>
</tr>
<tr>
<td>12:00</td>
<td>Carbon Based Materials I</td>
<td>Room: Saal 5</td>
<td>R. Baptist</td>
</tr>
<tr>
<td>13:00</td>
<td>Coffee break with technical exhibition</td>
<td>Room: Saal 4</td>
<td>G. Bachmann</td>
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### Poster Session

<table>
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<tbody>
<tr>
<td>19:15</td>
<td>Short walk together to evening reception (Starting in front of congress center)</td>
<td>Zwinger Dresden, Nymphenbad</td>
<td></td>
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<tr>
<td>19:30</td>
<td>Evening reception with buffet</td>
<td>Location: Zwinger Dresden, Nymphenbad</td>
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### Awards

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### Keynote Speakers

- **Mady Elbahri**
  - Christian-Albrechts-University, Kiel, Germany
  - "Nanoelectronic nanocomposites: from transparent conductor to perfect absorber"

- **Christian Albrechts-University, Kiel, Germany**
  - "An eco-friendly nanotechnology for improving material functionality"

- **Mary Chan-Park**
  - National University of Singapore, Singapore, Republic of Singapore
  - "Artificial cell membranes - Application in nanomedicine"

- **Bettina Lotsch**
  - Ludwig-Maximilians-University, Munich, Germany
  - "Bioinspired Nanostructures, Systems and Manufacturing II"

- **Susanne Dörfler et. al.**
  - Fraunhofer Institute for Material and Beam Technology (IWLS), Dresden, Germany
  - "Transparent titanium dioxide colloids for medical applications"

- **Lance Criscuolo**
  - Swiss Technologies, Ohio, USA
  - "Coffee break with technical exhibition"
Wednesday, 13 June 2012

Room: Saal 4

Plenary Session

Chair: A. Leson

9:00
Relevancy of nanotechnologies and nananalysis 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 nananalysis - Recent development and application
Michael Kopnarski
Institute for Surface and Thin Film Analysis GmbH, Kaiserslautern, Germany

10:30
Coffee break with technical exhibition

Room: Saal 4 Room: Saal 5

Electronics Chair: M. Werner Analytics & 4D Microscopy I Chair: E. Zschech

11:00
Innovative 3D Patterning
Peter Gnauck

Joachim Stumpe et. al.
Fraunhofer Institute for Applied Polymer Research (IAP), Potsdam, Germany

Jörg Schuster et. al.
Fraunhofer Institute for Electronic Nanosystems ENAS, Chemnitz, Germany

New instrument for sizing nanoparticles suspended in liquids
Thomas Krinke et. al.
TSG Incorporated, Shoreview, USA

Nanostructured Si/C composites as anodes for Li-ion batteries of enhanced capacity
Krzysztof Kierzek et. al.
Wrocław University of Technology, Wrocław, Poland

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

Synthesis and characteristics of carbon nanofibers and their application as a conducting additive of supercapacitor electrode
Agata Siwick et. al.
Wrocław University of Technology, Wrocław, Poland

Monoiodopenta-2′6′′-naphtotriyl 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

Nanoparticle surface modifications of screen-printed sensors for enhanced sensitivity
Thomas Rabbow et. al.
Fraunhofer Institute for Ceramic Technologies and Systems (IKTS), Dresden, Germany

Synthesis and characteristics of carbon nanofibers and their application as a conducting additive of supercapacitor electrode
Agata Siwick et. al.
Wrocław University of Technology, Wrocław, Poland

Microstructure of spray-processed mesoporous carbon by quantitative imaging
Krzyszton Kierzek et. al.
University College London, Great Britain

Multi-Scale Imaging of Multi-Phase Flow in Porous Media
Agata Slíwak et. al.
Wroclaw University of Technology, Wroclaw, Poland

Development and Characterisation of a Multilayer X-ray Mirrors for Hard X-Rays
Jörg Schuster et. al.
Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, Berlin, 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

Transmission electron microscopy of nanoscale multilayer materials
Wolfgang Sager
Christian-Albrechts-University, Kiel, Germany

11:50
Photonic and diffractive elements by holographic patterning of organo-inorganic nanocomposites

The Emergence of 3D X-Ray Microscopy in 4D and in situ Studies of Materials

Arno Merkle
Xradia Inc., Pleasanton, USA

Nanoscope X-ray tomography and spectroscopy with the HZB TXM
Gerd Schneider et. al.
Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, Berlin, Germany

Nanometer multilayer mirrors - Powerful tools to monochromate, collimate or focus x-rays
Markus Krämer et. al.
AXO GmbH, Dresden, Germany

12:10
Nanostrucutred Si/C composites as anodes for Li-ion batteries of enhanced capacity
Krzysztof Kierzek et. al.
Wrocław University of Technology, Wrocław, Poland

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12:30
Lunch break with technical exhibition

Room: Saal 4

Energy Applications Chair: G. Bachmann

Room: Saal 5

Analytics & 4D Microscopy II Chair: E. Zschech

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Transmission electron microscopy of nanoscale multilayer materials
Wolfgang Sager
Christian-Albrechts-University, Kiel, Germany

14:00
4D characterisation of Li-ion Battery Materials
Paul R. Shearing et. al.
University College London, Great Britain

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

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

XPS chemical imaging of fuel cell membranes
Andrey Lyapin et. al.
Physical Electronics GmbH, Ismaning, Germany

14:40
Lunch break with technical exhibition

Room: Saal 4

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 Rickerry
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

Event Location: MARITIM International Congress Center Ostra-Ufer 2, 01067 Dresden