

Materials' Days Rostock 2007

Functional Materials and Nanotechnology

May 3rd - 4th 2007

Location: Aula, Mainbuilding of the University of Rostock,
Universitätsplatz 1



Preliminary Programme

(status April 16th 2007, times subject to change)

Organizing Committee:

Prof. Eberhard Burkel
Prof. Joachim Rychly
Prof. Klaus-Peter Schmitz
Prof. Dieter G. Weiss
Prof. Gerhard Scharr
Prof. Hermann Seitz
Prof. Christoph Schick
Prof. Wolfram Mittelmeier

Schedule:

[Download this Schedule as pdf](#)

Thursday, May 3rd 2007

 **Session: Introduction**

Chairman:	Prof. Dr. Eberhard Burkel Institute of Physics, Rostock University Funktionale Materialien Rostock e.V.
-----------	--

8:30 Opening / Grußworte

Prof. Dr. Thomas Strothotte, Rector of the Rostock University

Henry Tesch, Minister of Education, Science and Culture of Mecklenburg-Vorpommern invited

Dr. Jürgen Seidel, Minister of Economics Affairs of Mecklenburg-Vorpommern invited

9:15 The ScanBalt Initiative confirmed
 Prof. Gustav Steinhoff,
 Clinic for Cardiac Surgery, University Rostock

9:30 Benefits and Risks from Nanotechnology or European Perspectives invited
 NN.,
 European Commision, Brussels, Belgium

10:00 Biotribology of Artifical Hip Joints confirmed
 Prof. Zhong Min Jin,
 School of Mechanical Engineering, University Leeds

10:45 Coffee Break

11:15 Hierarchical Structure and Mechanical Properties of Biological Materials confirmed
 Prof. Peter Fratzl ,
 Max-Planck-Institut für Grenzflächenforschung, Potsdam

12:00 Lunch Break

 **Session: Nanostructured Materials**

Chairman:	Prof. Alfred Leder Dept. of Fluid Mechanics Faculty for Mechanical and Marine Engineering, Rostock University
-----------	--

13:00 Ceramic Matrix Composites (CMC) for confirmed

Aerospace and Terrestrial Applications

Dr. Karin E. Handrick
MT Aerospace AG, Augsburg

- 13:30 The Heat is on - New Materials and Concepts for Thermal Management.** confirmed
Dr. Ludger Weber,
Ecole Polytechnique Federale de Lausanne
- 14:15 Non-Pneumatic Tire Design - A Nano Perspective** confirmed
Kundan Kumar (M.Sc.) ,
University Rostock
- 14:45 Coffee Break**

 **Session: Interface Functionality**

Chairman: Prof. Christoph Schick Institute of Physics, Rostock University
--

- 15:15 Plasma-Sintering** confirmed
Prof. Anselmi Tamburini,
University of Pavia, Italy
- 16:00 The Ceell Material Interaction** confirmed
P.D. Dr. Joachim Wegener,
University of Münster
- 16:45 Nanostructured Implant Surfaces** confirmed
Prof. Hans-Georg Neumann,
DOT GmbH, Rostock
- 17:30 Porous Ceramics - Learning from Clam Shells** confirmed
Prof. Monika Fritz,
Universität Bremen
- 18:30 Buffet Harbor Cruise**

Friday, May 4th 2007

 **Session: Nanoparticles**

Chairman: **Prof. Dieter G. Weiss**
Inst. of Biological Science,
Rostock University

- 8:30 Patterning and Functionalization for biological interfaces** confirmed
Dr. Hubert Rauscher,
European Commission-DG Joint Research Center,
Institute for Health and Consumer Protection Ispra,
Italy
- 9:15 ... (title to be defined)** invited
Dipl.Phys. Stefan Miltenyi,
Managing Director, Miltenyi Biotec GmbH,
Bergisch-Gladbach
- 9:45 Magnetic nanoparticles** confirmed
Karina Porath (MSc),
Rostock University Bergisch-Gladbach
- 10:15 Coffee Break**

Session: Nanotechnology through Biology

Chairman: **Prof. Joachim Rychly**
Clinical Research, Dept. of
Internal Medicine, Rostock
University

- 10:35 Genetically designed molecular materials for technology and medicine** confirmed
Prof. Mehmet Sarikaya,
University of Washington
- 11:20 Tissue Scaffolding: Design and Optimization** confirmed
Prof. Peter Ma,
University of Michigan
- 12:05 Lunch Break**

Session: New Frontiers in Material Science

Chairman: **Prof. Arndt Rolfs,**
Dept. of Neurology, Faculty of
Medicine
Rostock University and

Prof. Hermann Seitz, Research
Center Caesar in Bonn, Fluid
Mechanics

- | | | |
|--------------|--|-----------|
| 13:00 | Pharmaceutical Materials Science
Dr. James Elliot,
Pfizer Institute, University of Cambridge | confirmed |
| 13:45 | In-vivo electronmicroscopy of nanoparticles
Prof. Heinrich Hohenberg,
Heinrich Pette Institute for Experimental Virology
and Immunology, Hamburg | invited |
| 14:30 | Laser-Direct-Write Techniques for Printing
Complex Materials
Prof. Pere Serra,
University of Barcelona | confirmed |
| 15:15 | Closing Remarks | |

Afternoon

Possible Site Visits:

- Visit to the Research Center on Biosystems Technology and Biomaterials, Rostock-Warnemünde
- Visit to the Live Cell Imaging Center, University of Rostock, Inst. of Biological Sciences
- Visit to the Biomedical Research Center, Rostock

[GO BACK TO Highlights](#)

[GO BACK TO Overview Special Events](#)