

Transdisciplinary cooperation and applications of nanoscience

Agenda

21.02.2013

Applications of magnetic nanodevices

- 09.30-10.00 **Registration, coffee break**
- 10:00-10:10 **Welcome address**
- 10:10-11:10 **Invited lecture, Prof. Dr. Günter Reiss**
Nanoscale magnetic devices for sensors and memories
- 11:10-12:10 **Invited lecture, Dr Paola Luches,**
Reducible oxide nanostructures for application in catalysis and energy
- 12.10 – 13.10 **Lunch**
- 13:30-15:30 **Contributed talks** (participants)
- 15:30-15:50 **Coffee break**
- 15.50-17.50 **Contributed talks and discussion with experts** (Dr hab. Adam Georg Balogh, Dr Paola Luches, Prof. Dr Günter Reiss)

22.02.2013

Nanosystems, nanoparticles, thin films, and biological systems at the nanoscale

- 08.45-09.00 **Registration, coffee break**
- 9:00-10:00 **Invited lecture Dr hab. Adam Georg Balogh**
Engineering of nanostructured materials by heavy ion irradiation: the role of defects
- 10:00-11:00 **Invited lecture, Prof. Seiji Akimoto**
Application of time-resolved fluorescence spectroscopy to studies on light adaptation of photosynthetic organisms



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- 11:00-12:20 **Contributed talks** (participants)
- 12:20-13:20 **Lunch**
- 13:20-15:40 **Contributed talks** (participants)
- 15.40-16.00 **Coffee break**
- 16.00-17.20 **Contributed talks and discussion with experts** (Prof. Seiji Akimoto, Dr hab. Adam Georg Balogh, Dr Paola Luches, Prof. Dr. Günter Reiss)

Short notes on the experts:

Prof. Seiji Akimoto is an associate professor in Molecular Photoscience Research Center, Kobe University, Kobe, Japan. Prof. Akimoto specializes in Physical Inorganic Chemistry and the research interests of the expert cover application and development of ultrafast time-resolved spectroscopy, energy transfer and electron transfer in photosynthetic pigment-protein complexes, excitation relaxation dynamics of molecules related to biological functions, excitation relaxation dynamics in solution. The expert has co-authored over 22 articles on these topics since 2007.

Dr hab. Adam Georg Balogh is the head of the Research Group of Ion Beam Techniques in the Institute of Materials Science at the Darmstadt University of Technology, Germany. The expert was the leader of many international projects related to ion beam analysis for material characterization and ion beam modification of materials. His main activities comprise irradiation effects, atomic transport, diffusion, phase transformation and phase stability in nanostructured materials and advanced thin films and is author of about 140 publications.

Dr. Paola Luches is a researcher at Istituto di Nanoscienze, Consiglio Nazionale delle Ricerche, S3 Center, Modena, Italy (since 2003), co-author of over 60 scientific papers, 2 book chapters, 4 synchrotron radiation highlights. The experts activities and research interests cover fundamental understanding of the properties of oxides in the form of ultrathin films and nanostructures for application in catalysis and energy, interaction between metal nanoparticles and oxides, nanostructured materials for magnetic recording and spintronics.

Prof. Dr. Günter Reiss holds a chair for Thin Films and Nanostructures group at Bielefeld University, Germany. The main activities comprise ultrathin magnetic film systems, development of optimized magneto- and spin electronic devices and new methods for the creation of magnetic nanopatterns and device prototyping for sensor- and data storage- technologies. He is an author and co-author of more than 200 scientific articles.



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