



PROGRAM



International Congress

NANOTECHNOLOGY IN MEDICINE & BIOLOGY

26 - 27 JANUARY 2009, KREMS/AUSTRIA



Information

Conference Language

English

Important Deadlines

Poster contributions: Submission deadline 19 January 2009, limited spots

Registration closing date: 22 January 2009

Congress Fees

Registration: € 280

Graduate students: € 110

Undergraduate Students: € 15 (for congress documentation)

Congress Dinner: € 25 for all participants (Prices incl. VAT)

Participation for Students

The congress fee can be waived for a limited number of undergraduate students.

A valid student ID must be presented at the registration desk by **all** students.

Registration

Register online at www.bionanomed.at

Please note: Registration is required for **all** congress participants!

Credit - (CME/DFP) Points

For attending the BioNanoMed 2009 - Congress participants will get Credit - (CME/DFP) points which are just processed.

Congress Dinner & Discussion

An optional Congress Dinner will take place at a „Wachauer Heurigen“ on 26 January 2009. Transport will be available for guests to and from the dinner venue. For this event we will charge € 25,- per person from all participants, also students.

Join the Speaker's Round Table

Participants can choose to join speakers/professors at their round table during dinner as an open forum for people to establish communication and collaborations in an informal environment.

Danube University Student Poster Awards

Danube University Poster Awards 2009 are intended to recognize outstanding research presented by students and are granted to the best three poster contributions (€ 300 for the first, € 200 for the second and € 100 for the third place).

Accommodation

Participants are requested to book their accommodation by themselves. Information on accommodation you can find on our congress-website www.bionanomed.at.

BioNanoMed 2009

26 - 27 January, Krems/Austria

Invitation

BioNanoMed 2009 will provide a forum for national as well as international students, researchers, technologists, entrepreneurs as well as decision maker of health care organisations and public organisations to interact the current, emerging and future trends in the converging fields of Nanotechnology, Biotechnology and Medicine.

Exciting lectures, by leading international scientists and invited talks, contributed oral and poster presentations will offer delegates a good opportunity to get informed and to discuss new and pioneering developments and to initiate cooperation projects.

BioNanoMed2009 will focus on the following topics:

Nanotechnology: New Frontiers in Medicine & Biology

Topics related to tissue engineering & cell therapies; the application of nanostructured surfaces in medicine; nanobased drug delivery systems; and novel diagnostic methods & analytical tools will be adressed.

Special Session I

Environmental, Health and Safety Implications and Regulatory Aspects of Nanotechnology

Panel discussion: risk governance, regulation, legislation, code of conduct, public attitude and stakeholder inclusion.

Special Session II

Hot Topics in Medical Imaging Technology

Discussion on imaging strategies

BioNanoMed 2009 will be held at the **Danube University Krems** in Krems/Austria, from 26 - 27 January 2009. **BioNanoMed 2009** is jointly organised by the Danube University Krems and Techkonnex – High-Tech Promotion in association with the Austrian Academy of Sciences, Institute of Technology Assessment, Vienna.

Program - 26 January 2009

8.00 Registration

8.45 Opening and Welcome

9.05 Resources for Clinical Translation of Nanomedicines

Anil K. Patri, *Deputy Director Nanotechnology Characterization Laboratory SAIC-Frederick, Inc., National Cancer Institute at Frederick (USA)*

9.40 Nanoproducts in Medical Application: Risks on the Cellular

Level, **Jörg Vienken**, *Fresenius Medical Care Deutschland GmbH, Bad Homburg (Germany)*

10.05 Nanoparticles and Nanopatterned Surfaces as Array

Platforms, **Erhan Piskin**, *Hacettepe University (Turkey)*

10.30 Coffee Break

11.00 Characterization and Use of Nanoparticles in Drug Delivery

and in Blood Coagulation Management, **Werner Mäntele**, *Institute of Biophysics, Johann Wolfgang Goethe-University, Frankfurt am Main (Germany)*

11.25 Nanotoxicodynamics of Metallic Nanoparticles

Peter Ertl, *Nano-System-Technologies, Austrian Research Centers GmbH - ARC, Vienna (Austria)*

11.45 Electrostatic characterization and manipulation of

nanoparticles and viruses, **Wladyslaw W. Szymanski**, *Faculty of Physics, University of Vienna, (Austria)*

12.05 Lunch Break

13.00 Potential Applications of Nanotechnology in an IVD System,

Ulrich Kanter, *Roche Diagnostics Graz GmbH (Austria)*

13.25 Protein Biomarker Chip for Diagnosis of Sepsis based on Nanostructured Surfaces and Integrated Microoptical elements

Claudia Preininger, *Department of Bioresources, Austrian Research Centers GmbH - ARC, Seibersdorf (Austria)*

13.45 Towards Nano-biochips using Scanning Probe Microscopy-based approaches

Levi A. Gheber, *Department of Biotechnology Engineering, Ben-Gurion University of the Negev, Beer-Sheva [Israel]*

14.05 Nanohybrid for Sensor and Actuator Applications

Gerald Urban, *IMTEK-Sensors, FRIAS Freiburg Institute for Advanced Studies, Freiburg [Germany]*

14.30 Coffee Break Poster Session I

15.30 Special Session I

Environmental, Health and Safety Implications and Regulatory Aspects of Nanotechnology

Chair: André Gzásó, *Austrian Academy of Sciences, ITA, Vienna [A]*

Aspects of Nanotoxicology, **Myrtil Simkó**, *Austrian Academy of Sciences, Institute of Technology Assessment, Vienna [Austria]*

Euro-NanoTox: Austrian Hub for Nano-Safety, **Eva Roblegg**, *University of Graz, BioNanoNet GmbH, Graz [Austria]*

Nanotechnologies and Food Safety – The Point of View of a Regulator, **Alexander Zilberszac**, *Austrian Ministry for Health, BM:GFJ, Vienna [Austria]*

Production and Application of Nano-Bio-Particles – the Cross-road of Nanotechnology, Biotechnology and Medicines Regulations, **Ursula Jenal**, *Swiss Federal Office for the Environment, Bern, Jenal & Partners Biosafety Consulting, Rheinfelden [Switzerland]*

16.50 Panel Discussion:

Are Nanotechnologies dangerous?

Moderation: *Birgit Dalheimer, Ö1 Austrian Radio 1, Science Program*

Ursula Jenal, *Swiss Federal Office for the Environment, Jenal & Partners Biosafety Consulting, Rheinfelden [CH]*

Michael Nentwich, *Austrian Academy of Sciences, Institute of Technology Assessment [Director, Project nanoTrust], Vienna [A]*

Michael Nerlich, *Regensburg University Medical Center [D]*

Anil K. Patri, *Deputy Director Nanotechnology Characterization Laboratory SAIC-Frederick, Inc., National Cancer Institute at Frederick [USA]*

Jörg Vienken, *Fresenius Medical Care Deutschland GmbH, Bad Homburg [D]*

17.45 Lab Tour Center for Biomedical Technology - Danube University Krems Poster Session II (optional)

18.40 Departure to the “Wachauer Heurigen”

Program - 27 January 2009

9.00 Nanostructured Materials for Tissue Engineering in Musculo-Skeletal Therapy

Michael Nerlich, Department of Trauma Surgery, Orthopaedic Surgery, Sportsmedicine, *Regensburg University Medical Center (Germany)*

9.35 Importance of Nanostructured Pore-size Distribution for Selected Adsorption-Therapy of Sepsis and Acute Liver Failure

Dieter Falkenhagen, *Center for Biomedical Technology, Danube University Krems (Austria)*

10.00 S-Layer – Lipid Structure as Functional Biomimetic Model Membrane

Bernhard Schuster, *Center for Nanobiotechnology, University of Natural Resources and Applied Life Sciences Vienna (Austria)*

10.20 Coffee Break

10.50 In-vivo Population of Electrospun Small-diameter Polyurethane Conduits

Helga Bergmeister, *Center for Biomedical Engineering and Physics, Medical University Vienna (Austria)*

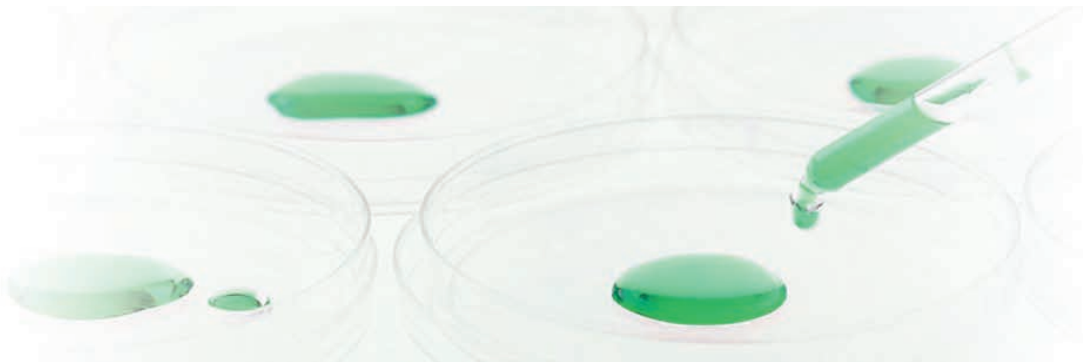
11.10 The Tethered Bimolecular Lipid Membrane as a Novel Model Membrane Platform

Knoll Wolfgang, *Scientific Managing Director, Austrian Research Centers GmbH – ARC (Austria)*

11.35 Nanostructured Polymer-based Shape-Memory Materials

Andreas Lendlein, *Center for Biomaterial Development, GKSS Research Center Geesthacht GmbH, Teltow (Germany)*

12.00 Lunch Break



13.00 Modification of the Nano-Tissue-Interface, Frank Kloss, *Department of Cranio-Maxillofacial and Oral Surgery, University Hospital Innsbruck (Austria)*

13.25 Different Approaches and Nano-Tools for Tissue Engineering of Human Tissues, Rui L. Reis, *University of Minho, Braga (Portugal)*

13.50 New Nanostructured Polymer Films for Reduced Protein and Bacterial Adhesion, Eyas Dayyoub, *Department of Pharmaceutical Technology and Biopharmaceutics, University of Marburg (Germany)*

14.10 Coffee Break Poster Session III

Special Session II

Hot Topics in Medical Imaging Technology

Chair: Günter Lepperdinger, *Biomedical Aging Research, Austrian Academy of Sciences, Innsbruck (Austria)*

15.10 Molecular Recognition Force Microscopy

Peter Hinterdorfer, *Institute for Biophysics, University of Linz (Austria)*

15.35 Long-term Life Cell Imaging on Nanoparticulate Growth Supports

Thomas Seppi, *Department of Therapeutic Radiology and Oncology, Innsbruck Medical University (Austria)*

16.00 Nanoscale MRI Contrast Agents

Arne Hengerer, *Healthcare Sector - Business Development, Siemens AG, Erlangen (Germany)*

16.25 Investigating Depression Gene Effects with MRI Technologies

Lukas Pezawas, *Head of EEG-Labor & Clinical Neuroimaging, Medical University Vienna (Austria)*

16.50 Concluding Discussion: Imaging Strategies

Danube University Poster Award Ceremony

End of the Congress!

BioNanoMed 2009

26 - 27 January, Krems/Austria

Venue

Danube University Krems
Section A, Audimax

Dr. Karl Dorrek Str. 30

3500 Krems/Austria

Information and Registration

I www.bionanomed.at

E office@bionanomed.at

F +43 (0)2732 8934600

Organiser

Danube University Krems
Department for Clinical Medicine and Biotechnology
Dieter Falkenhagen (Head)
A-3500 Krems/Austria
www.donau-uni.ac.at

Techkonnex - High-Tech Promotion
Margit Malatschnig
Auhofstrasse 70/5
A-1130 Vienna/Austria
www.techkonnex.at

www.bionanomed.at

This congress is

funded by



sponsored by



The Technopol Program of Lower Austria is co-financed by the European Regional Development Fund (ERDF).



Fresenius Medical Care



supported by

