

Programme

SUNDAY, SEPTEMBER 16, 2012

14:00 – 19:00 Registration
19:00 – 22:00 Welcome mixer

MONDAY, SEPTEMBER 17, 2012

9:15 – 9:30 Opening

14th Central and Eastern European Bruker Users' Meeting

9:30 – 17:00 Bruker users meeting

The Bruker Users' Meeting is a Meeting for Bruker Users to inform them on general news and latest developments at Bruker BioSpin and to discuss with them specific topics and practical aspects of the wide range of Bruker BioSpin's products and applications portfolio. The meeting is composed of talks on different topics covering hardware and software developments, such as developments in console and probe technology as well as software tools. Both high-resolution as well as solid state NMR applications are covered, in addition to Diffusion NMR and micro-Imaging. We are looking forward to welcoming our customers to present to them and to discuss with them not only our products and applications, but also our customers' research and analytical requirements as well as their specific questions.

14:15 – 14:30 *Address of Welcome by Prof. Sergei Ignatov Minister of Education, Youth and Science presented by Mrs. Petya Evtimova, Deputy Minister of Education, Youth and Science*

18:00 – 20:00 *Bruker hospitality suite*

20:00 – 22:00 *Trip to Aladja Monastery and Audio-visual performance "Legend of Aladja Monastery"*

TUESDAY, SEPTEMBER 18, 2012

14th Central and Eastern European NMR Symposium

Session 1 Diffusion NMR

Chair Prof. Rudolph Willem

9:00 – 9:45 **José Martins**
The Diffusion Dimension in High-Resolution NMR
From Principles to Applications

9:45 – 10:30 **Marc-André Delsuc**
Measuring molecular interactions using NMR spectroscopy

10:30 – 11:00 *Coffee break*

- 11:00 – 11:45** **Stéphane Viel**
Liquid state and High Resolution Magic Angle Spinning applications of Diffusion Ordered NMR Spectroscopy
- 11:45 – 12:10** **Luk Van Lokeren**
PGSE NMR on Functionalized Nanoclusters
- 12:10 – 12:35** **Neli Koseva**
Diffusion NMR Characterization of Polymer Conjugates of Platinum Coordination Compounds
- 12:35 – 14.00** *Lunch*

Session 2 NMR in Life Sciences

Chair Dr. Dino Iuga

- 14:00 – 14:45** **Katalin Kövér**
Protein-ligand interactions as seen by NMR spectroscopy
- 14:45 – 15:30** **Janez Plavec**
Structures of G-quadruplexes with unique features
- 15:30 – 16:00** *Coffee break*
- 16:00 – 16:45** **Tatyana Polenova**
Magic Angle Spinning NMR Spectroscopy to Probe Structure and Dynamics in Protein Assemblies
- 16:45 – 17:05** **Boris Fürtig**
Bi-stable RNAs and the regulation of gene expression
- 17:05 – 17:25** **Saurabh Saxena**
Multidimensional NMR experiments for the sequential analysis of intrinsically disordered proteins
- 17:25 – 17:45** **Calin Deleanu**
Diagnosing metabolic disorders by NMR spectroscopy
- 17:45 – 18:05** **Anna Lysova**
NMR imaging as a method to study catalysts and catalytic processes
- 18:05 – 19.30** **Poster session**
- 19:45** *Symposium Dinner*

WEDNESDAY, SEPTEMBER 19, 2012

Session 3 HRMAS and Solid state NMR

Chair Prof. Tatyana Polenova

- 9:00 – 9:45** **Dinu Iuga**
Solid State NMR @ 850 MHz; Probing Into the Structure of Advanced Materials, Pharmaceuticals and Proteins
- 9:45 – 10:30** **Rudolph Willem**
HR-MAS NMR: a powerful tool for the investigation of conformationally mobile species at solution-solid interfaces. Case study: double network hydrogels
- 10:30 – 11:00** *Coffee break*

- 11:00 – 11:45** **Pieter Magusin**
Materials for heterogeneous catalysis and hydrogen storage. What can we learn from solid-state NMR?
- 11:45 – 12:10** **Mallory Gobet**
Pulse field gradient NMR at high temperature: self-diffusion coefficients measurements in solid and molten inorganic materials up to 1500K
- 12:10 – 12:30** **Flaviu Turcu**
Tools for In situ High Pressure MAS NMR
- 12:30 – 12:50** **Radostina Stoyanova**
⁷Li NMR with High MAS Spinning Rates and Mn⁴⁺ High-Frequency EPR: Methods for Local Structure Analysis of LiCo₁₋₂Ni_xMn_xO₂ Electrode Materials for Lithium Ion Batteries
- 12:50 – 14:00** *Lunch*

Session 4 NMR Perspectives in Phytochemistry

Chair Prof. Vassya Bankova

- 14:00 – 14:15** **Vassya Bankova**
Presentation of South-East European Phytochemistry Network (SEE PhytoChemNet)
- 14:15 – 15:00** **Csaba Szantay**
The concept and practice of "anthropic alertness" in small-molecule structure elucidation
- 15:00 – 15:45** **Bernd Schneider**
NMR-Based Micrometabolic Profiling of Special Plant Cell Types
- 15:45 – 16:15** *Coffee break*
- 16:15 – 17:00** **Isabelle Pianet**
A molecular interpretation of the multiple faces of astringency perception. A study by NMR and Molecular Modeling
- 17:00 – 17:20** **Milen Georgiev**
Nmr-based metabolomics of mulleins
- 17:20 – 17:40** **Ivan Vuckovich**
A novel chalcone dimer from endemic Helichrysum zivojini
- 17:40 – 18:00** **Pavleta Tzvetkova**
Conformations and configurations of substituted pyrrolidines via ³J and RDCs
- 18:00 – 18:30** **Closing lecture**
Stefan Berger
NMR Hyperpolarization by the Haupt-Effect
- 19:00** *Farewell Cocktail*