

PANACEA 4th Annual Users Meeting PROGRAM
Saturday June 27, Göteborg, Sweden
Venue: Quality Hotel 11, Teater Lärlingen, Maskingatan 11

08:40 - 09:00 Welcome and registration

09:00 - 09:10 Introductory remarks and PANACEA highlights

09:10 - 10:30 **I. Methods and software developments**

Marina Carravetta, University of Southampton, UK

Applications of quantum optimal control for solid-state NMR

Daniel Topgaard, Lund University, Sweden

Phosphorous in plant seeds

Kersten Ulrich, University of Würzburg, Germany

Compartment-selective DNP-NMR for the analysis of drug-loaded polymer micelles

10:30 - 10:50 Coffee break

10:50 - 12:10 **II. Solid-state NMR for materials**

Carla Torres, Institute of Materials Science of Barcelona, Spain

In-situ multinuclear MAS NMR measurements during the formation of BaZrO₃ nanoparticles: insights into the H₂S₂ synthetic mechanism

Filipe Natalio, University of Porto, Portugal

Solid-state NMR signatures of thermal alteration in 400 ka archaeological bones

Anika Mael, University of Bayreuth, Germany

Life in plastic, it's fantastic? Following the degradation of additivated microplastic with DNP-enhanced solid-state NMR spectroscopy

Elisa Della Latta, University of Pisa, Italy

Investigating lead halide perovskite surfaces using single crystal solid-state NMR

12:10 - 12:30 **PANACEA user assembly**

12:30 - 13:30 Lunch

13:30 - 14:30 **III. Fluorine solid-state NMR**

Staffan Schantz, AstraZeneca, Sweden

Fluorine solid-state NMR for pharmaceutical application

Alons Lends, Latvian Institute of Organic Synthesis, Latvia

Probing fungal cells using ¹⁹F detected DNP MAS NMR

Edward Benson, University of Rostock, Germany

¹⁹F cross relaxation under dynamic nuclear polarization

14:30 - 15:00 **Stakeholder and policy maker round table discussion**

On the future of European solid-state NMR research infrastructures

15:00 - 15:30 Coffee break

15:30 - 16:30 **IV. Solid-state NMR for inorganic and hybrid materials**

Dominik Kubicki, University of Birmingham, UK

New approaches to determining the atomic-level structure of advanced materials

Daniel Lee, The University of Manchester, UK

DNP-enabled structure determination of covalent organic frameworks and inorganic semiconductor nanocrystals

Pedro Groszewics, Delft University of Technology, Netherlands

Unraveling structural disorder and oxide ion dynamics for La₂Mo₂O₉ (LAMOX) with high-temperature ¹⁷O NMR and DFT

16:30 - 16:45 Short recess

16:45 - 17:30 **V. Solid-state NMR for biological applications**

Mei Hong, Massachusetts Institute of Technology, USA

Structure, mechanism and drug binding of the SARS E cation channel from solid-state NMR

Tiago Mendes Ferreira, University of Santiago de Compostela, Spain

Using solid-state NMR to explore the chaotropic behaviour of boron particles and their effect on lipid membranes

17:30 - 18:00 **TBSSNMRGYWEPIYL**

18:30 - 21:30 Dinner cruise in the archipelago