

SCOPE

BioMaN is aimed at introducing neutron scattering to the Biomaterials Community.

PROGRAMME

8:00-8:20 - Neutron Scattering Tutorial

J.K. Zhao

Spallation Neutron Source, Oak Ridge National Laboratory.

8:20-9:00 - Compositional Depth Profiles of Biomaterial Interfaces by Specular Neutron Reflection.

Chuck Majkrzak

National Institute of Standards and Technology.

9:00-9:20 - Towards a Deeper Understanding of Protein Resistance: Characterizing Water/Surface and Protein/Surface Interactions by In Situ Neutron Reflectometry.

Rainer Dahint - Heidelberg University, Germany

9:20-10:00 - Soft Interfaces on the Nanometer Scale: how neutrons contribute to a deeper understanding on the supramolecular level.

Roland Steitz - Hahn Meitner Institut

10:20-11:00 - Design & Structural Characterization of Amphiphilic 4-Helix Bundle Peptides Vectorially-Oriented at Soft Interfaces.

J. Kent Blasie University of Pennsylvania, USA

11:00-11:40 - Neutron scattering and diffraction for molecular-scale characterization of biomimetic membranes.

Mathias Lösche - Johns Hopkins University.

1:20-2:00 - Structural Analysis of Phospholipid Membranes and Toxin Assault

Tonya Kuhl University of California, Davis.

2:00-2:40 - Effective Protein-Protein Interaction and Clustering Phenomenon in Solution Studied by Small-Angle Neutron Scattering.

Sow-Hsin Chen - Massachusetts Institute of Technology.

2:40-3:20 - Small-angle neutron scattering: a high resolution, non-destructive probe of biomacromolecular structure.

Olwyn Byron - University of Glasgow, UK.

3:40-4:20 - Determining the Structures of Peptides in Membranes Using Diffraction and MD Simulations.

Steve White - University of California, Irvine.

4:20-5:00 - Exploring the collective dynamics of lipid membranes with inelastic neutron scattering.

Maikel Rheinstaedter Institute Laue-Langevin, France.

5:00-5:40 - Meeting the future challenges in Bio-Materials Research using neutrons.

Ian Anderson - Spallation Neutron Source, Oak Ridge National Laboratory.

ORGANIZERS

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Symposium Chair: Michael Grunze, University of Heidelberg.

SPONSORS

Integrated Infrastructure Initiative for Neutron Scattering and Muon Spectroscopy (NMI3).

Joint Institute for Neutron Sciences (JINS).

The Spallation Neutron Source (SNS).