

**NSFChemBio and SENSE Workshops
September 23-26, 2003
Turnbull Conference Center, Florida State University
Tallahassee, Florida**

Sponsors

**National Science Foundation
University of Tennessee / Joint Institute for Neutron Sciences
Florida State University
Oak Ridge National Laboratory / Spallation Neutron Source
Oak Ridge National Laboratory / Center for Nanophase Materials Sciences
Oak Ridge Associated Universities**

Tuesday, September 23, 2003

7:00 am	Registration opens Vendor Exhibit Set-up
8:15	Session N-I - Opening Session Room 122
8:15	Welcoming Remarks Lee Magid, JINS Acting Director Jack Crow, NHMFL Director Art Ellis, NSF Chemistry Division Director
8:30	Neutrons 101a: What Can Be Measured Using Neutrons , John Root, NRC Canada
9:45	Break, Fireside Lounge
10:00	Neutrons 101b: Instrumentation for Elastic and Inelastic Scattering Studies , Kent Crawford, ORNL
11:00	The European D-Lab Network , Dean Myles, ORNL
11:30	CNMS Facilities for Chemistry and Biology , Mike Simonson, ORNL
12:00 pm	A Neutron Scatterer's Dream: the Ideal Support Environment , TBD
12:30	Lunch, Room 121

Note: Sessions beginning with N refer to NSFChemBio Workshop
Sessions beginning with S refer to SENSE Workshop

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Tuesday, September 23, 2003 afternoon

1:30 pm	Session N-2: Condensed Phases Room 123a Chair: J. Martin	Session N-3: Thin Films/Confinement Room 122 , Chair: J. Lal
1:30	Water and Ice , Alan Soper, ISIS	Studying surfactant adsorption at interfaces by neutron reflectivity: the current 'state of the art' and future prospects , Jeff Penfold, ISIS
2:00	Unraveling Polymer Dynamics , Michael Monkenbusch, Juelich	Confined Complex Fluids , Tonya Kuhl, University of California-Davis
2:30	New Opportunities In Neutron Scattering: Local Sources and Novel Instrumentation , David Baxter, Indiana	Nanoporous Thin Films , Shenda Baker, Harvey Mudd College
3:00	Break, Fireside Lounge	Break, Fireside Lounge
3:30	Novel In-situ Studies , TBD	The Dynamics of Confined Quantum Tops , Dan Neumann, NIST
4:00	Dynamics of Materials , Franz Trouw, Los Alamos	Surface Adsorbed Films , John Larese, University of Tennessee/Oak Ridge
4:30	Discussion/Break	Discussion/Break
5:00	Session N-4, room 123a	Session N-5, Room 122
5:00	Advanced Isotopic Labeling Center and Facilities (Dean Myles, Jeff Penfold)	Educational Requirements and Opportunities (Shenda Baker, Jim Martin, Joe Zwanziger)
6:30	Session ends Buses Depart for Hotel	Session ends Buses Depart for Hotel

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Wednesday, September 24, 2003

7:00 am	Registration opens		
8:05	Vendor Exhibit Opens		Session S-1 - Room 122 Science Drivers for Neutron Scattering: Impact of Enhanced Sample Environment Welcoming Remarks Lee Magid, JINS Acting Director J. E. Crow, NHMFL Director
8:15			Purpose and Goals of the SENSE Workshop , Ian Anderson, Oak Ridge
8:30	Session N-6, Room 123b Biological/Polymer Topics Chair: J. Martin 3D Structure and Composites , Ulrich Wiesner, Cornell	Session N-7, Room 123a Catalysis/Vibrational Spectroscopy Chair: J. Turner Catalysis Studies Using TOSCA , John Tomkinson, ISIS	Nanomagnetism and Neutron Scattering , Ivan Schuller, University of California – San Diego
9:00			Quantum Liquids and Solids , Paul Sokol, Penn State
9:15	SANS Bio-polymer Studies , Joanna Krueger, UNC-Charlotte	The application of inelastic neutron scattering spectroscopy to advance the development of reaction mechanisms in heterogeneous catalysis , David Lennon, Glasgow	
9:30			Frontiers in High Pressure Science , Russ Hemley, Carnegie Institution of Washington
10:00	Break, Fireside Lounge	Break, Fireside Lounge	Break, Fireside Lounge
10:30	Organic-Inorganic Composites , Josef Zwanziger, Dalhousie	Novel Studies Using FANS , Craig Brown, NIST	Highly Correlated Electron Systems , Zach Fisk, Florida State
11:00	Polymer Patterned Surfaces , Jan Genzer, NCSU	Novel Studies Using FDS , Luc Daemen, Los Alamos	Materials Science and Engineering Studies Using Neutron Diffraction , D. W. Brown, Los Alamos
11:30	Neutron Spectroscopy and Molecular Dynamics Simulation Studies of Protein Dynamics , Doug Tobias, UC-Irvine	Nanocomposites for electronic and biomedical applications , Chris Durning, Columbia	Three-Dimensional Neutron Microscopy for Structural Dynamics Investigations , Ben Larson, Oak Ridge

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Wednesday, September 24, 2003 Afternoon

Combined Session of NSFChemBio and SENSE	
1:00 pm	Sessions N-8 and S-2, Room 122 Beyond Traditional Neutron Science Biological and Chemical Science Opportunities at the Center for Nanophase Materials Science , Mike Simonson, Oak Ridge
1:30	Dynamic Structure of Membranes: The Concerted Use of Bi-layer Diffraction and Molecular Dynamics Simulations , Stephen H. White, University of California - Irvine
2:00	Synchrotron X-ray Studies of Liquid Surfaces , Peter Pershan, Harvard
2:30	Extreme Environments for Catalysis , John Turner, University of Tennessee
3:00	Break, Fireside Lounge
3:30	Environments for Biological Studies , John Katsaras, Chalk River
4:00	Polymers and Macromolecules , Tom Russell, University of Massachusetts
4:30	Investigation of Liquid Surfaces , Jarek Majewski, Los Alamos
5:00	Chemical Reaction Dynamics of Aerosols , Barbara Wyslouzil, Worcester Polytechnic Institute
5:45	Depart for National High Magnetic Field Laboratory Poster Session and Tour Buses Provided from Turnbull to the NHMFL and return to Turnbull and the hotels
8:30	Poster session and tour over Buses return to Turnbull and Hotels

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Thursday, September 25, 2003

7:00 am	Registration open		
8:30	Session N-9, Room 123a Future Opportunities and Needs: Support Facilities Needs for Soft Matter (Paul Butler, Joanna Krueger)	Session N-10, Room 123b Future Opportunities and Needs: Support Facilities Needs For Hard Matter (John Larese, John Turner)	Session S-3, Room 122 Present Status of Neutron Sample Environments at High Magnetic Fields and Low Temperatures, Michael Meissner, HMI, Berlin
9:00			Research Capabilities at High Pressure , Chris Tulk, Oak Ridge
9:30			High Temperature Capabilities , Trudy Kriven, University of Illinois, Urbana- Champaign
10:00	Break, Fireside Lounge	Break, Fireside Lounge	Break, Fireside Lounge

Combined NSFChemBio and SENSE Sessions

10:30 am	Sessions N-11 and S-4, Room 122 Funding Opportunities and New Program Initiatives
10:30	New Funding Programs for Mid-Scale Projects and International Cooperation , Tom Weber, National Science Foundation
11:00	What's New in DOE's Neutron Scattering Program Helen Kerch, DOE
11:30	Funding Opportunities at National Institutes of Health , Michael Marron, NIH
Noon	Lunch Registration closes
1:00 pm	Sessions N-12 and S-5, Room 122 Current Opportunities for Interfaces to Neutron Scattering Research and Education National Science Foundation International Materials Institutes (IMI) Program, Advanced Neutron Scattering netWork for Education and Research: with a Focus on Mechanical Behavior of Materials , P. K. Liaw, University of Tennessee
1:30	Sessions N-13 and S-6, Room 122 Current Neutron Scattering and Sample Environment Capabilities
1:30	Enabling 21st Century Science , Zoe Bowden, ISIS
2:00	Panel Discussion: Thoughts on Current Sample Environment Capabilities and Future Needs at U.S. Facilities High Flux Isotope Reactor , Oak Ridge, Greg Smith Intense Pulsed Neutron Source , Argonne, Ray Teller Los Alamos Neutron Scattering Center , Los Alamos, Alan Hurd NIST Center for Neutron Research , NIST, Jeff Lynn Spallation Neutron Source , Oak Ridge, Thom Mason
3:00	Break, Fireside Lounge

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