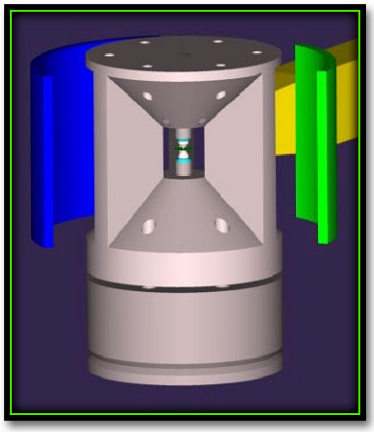
September 24-26, 2003, Florida State University, Tallahassee, Florida

SENSE Workshop

Sample Environments for Neutron Scattering Experiments

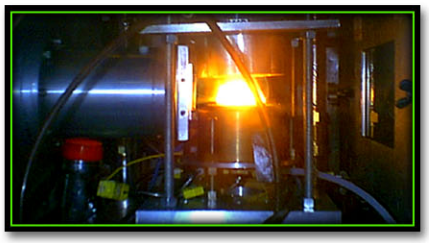
Using neutron scattering techniques increasingly calls for more advanced sample environments (temperature, magnetic field, pressure, chemical environment, etc.). Challenging research areas include in situ studies of catalysis, self-assembling nanostructures, pressure-induced phase transitions, dynamic mechanical stress, and high-field studies of magnetic excitations and structures. SENSE is an action-oriented workshop devoted to exploring the science drivers impacting sample environment issues, and developing a roadmap to address these needs:



- Leading scientists from several communities speak about hot research topics with strong sample environment implications
- Instrumentation experts give a worldwide overview of sample environment capabilities
- Discussion panels establish benchmarks for new sample environment development (all attendees encouraged to participate)

This workshop is held in conjunction with the NSFCHEMBIO Workshop - Neutron Scattering for Chemistry and the Chemistry/Biology Interface on September 23-25. Together, the workshops will

- Inform the chemistry and chem-bio communities of opportunities—instrumentation and supporting facilities—currently planned for the Spallation Neutron Source
- Solicit the community's ideas on the needs for instrumentation, detector development, and sample environment development to support neutron scattering experiments



- Identify the tools needed and outline a path to realization via the formation of concept teams to develop science cases and funding proposals for instrumentation, detectors, sample environment and related laboratory facilities
- Tour of the National High Magnetic Field Laboratory
- Poster session to share research and instrument ideas

Confirmed Speakers

Zoe Bowden, ISIS, UK
John Katsaras, Chalk River, Canada
Ben Larson, Oak Ridge
Michael Meissner, HMI, Germany
Peter Pershan, Harvard
Ivan Schuller, University of California, San Diego
John Turner, University of Tennessee
Steven White, University of California, Irvine

Special Discussion Panel
High Flux Isotope Reactor: Greg Smith
Intense Pulsed Neutron Source: Ray Teller
Los Alamos Neutron Science Center: Alan Hurd
National Institute of Standards and Technology: Jeff Lynn
Spallation Neutron Source: Thom Mason

Program Committee

Jack Crow, Co-chair, National High Magnetic Field Laboratory, Florida State University
Paul Sokol, Co-chair, Pennsylvania State University
Chris Benmore, Argonne National Laboratory
Peter Liaw, University of Tennessee
Mathias Lösche, Johns Hopkins University
John Parise, SUNY Stony Brook
Thomas Proffen, Los Alamos National Laboratory
Thomas Russell, University of Massachusetts
Ivan Schuller, University of California at San Diego
Barbara Wyslouzil, Worcester Polytechnic

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Sponsored by

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Florida State University
Oak Ridge National Laboratory/Center for Nanophase Materials Sciences and SNS
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Registration fee: $200, scholarships for students and faculty, register at
http://www.sns.gov/jins/tallahassee_workshops_2003/workshops.htm