

SHUG (SNS HFIR User Group), <http://neutrons.ornl.gov/shug/index.shtml>

SHUG executive committee minutes.

Teleconference held January 5, 2009.

Attendees:

Executive Committee: Mike Crawford, Seung-Hun Lee, Matthew Stone, Ursula Perez-Salas, Patrick Woodward, Mark Dadmun, Stephen Wilson, Cora Lind.

Guests: Al Ekkebus, Ken Herwig, Greg Smith

Minutes Submitted to Mike Crawford and Al Ekkebus January 6, 2010 by M. B. Stone.

ACTION ITEMS:

- Al Ekkebus and Patrick Woodward— Regarding Item 2 below. Determine appropriate funding mechanisms for student fellowships for SHUG meeting discussed below. Sources of funding include NSF, ORAU, EPSCOR, and JINS.
- Al Ekkebus – Regarding item 2 below. Begin planning advertising mechanisms for SHUG meeting discussed below.
- SHUG EC: Please suggest possible workshops for the joint meeting of ORNL users to Al Ekkebus.
- Al Ekkebus – Regarding item 6 below. Examine bullet item 4 in the “Responsibilities of Users” for suggested wording as discussed in item 6 below. (COMPLETE)
- Al Ekkebus and Matt Stone – look up previous documentation of how the nominations for the SHUG executive committee was performed previously. (COMPLETE)
- Mike Crawford and Stephen Wilson will perform as a nominating committee for the next SHUG executive committee election.
- All committee members – please provide informal nominations to the nominating committee (Mike Crawford and Stephen Wilson) for the SHUG executive committee.

PRIOR ACTION ITEMS NOT COMPLETED or REPORTED TO EXECUTIVE COMMITTEE

- Ken Herwig -The SHUG executive committee asked that the software overview document described in Minutes from April 2009 be presented to the SHUG for input and comments.

I. HFIR/SNS updates from Ken Herwig:

Sample Environment - 30T pulsed magnet test performed on SEQUOIA (single crystal diffraction sample). Andy Church witnessed commissioning of 16 T magnet at PSI. Magnet has been run up to 15.5 Tesla, and will be delivered to SNS for further commissioning. Currently looking into purchase of an 8 Tesla magnet for the HFIR. This magnet would likely be delivered between 12 to 18 months after the order is made. Successfully commissioned the automatic sample changer for the powder diffractometer with 12 samples.

POWGEN detectors are still being reevaluated to improve signal-noise ratio and eliminate “ghosting”.

SNS/HFIR proposal call sent out yesterday to distribution list. Call will close Wednesday March 3rd.

HFIR will start up on Wednesday January 6, 2010. SNS will start up with neutron production in late February.

DOE will return April 27-28 for a review of the division's plans of delivering science and bringing instruments into the user program.

Safety review to examine the current safety operations of the SNS will occur April 19-23 .

2. 2010 SNS/HFIR User Meeting (AI)

There is a great deal of interest among ORNL user facilities to have a joint meeting of users in September 2010. Potential focus areas are applications across user facilities, including a focus on solar energy and energy storage challenges and opportunities. AI outlined goals of this meeting and other facilities which can be included in this meeting. A tentative agenda was also presented. Document is attached.

Discussion included examining ways of including student fellowships (EPSCOR funding, JINS funding, ORAU funding etc.). AI also mentioned that advertising needs to be started as soon as possible. Please see attached documentation -

3. Call for additional Science Review Committee (SRC) members (Judy, AI)

Additional committee members are needed for the science review of proposals. The SHUG committee is requested to nominate additional committee members. Documentation is attached to these minutes. Currently looking for established (past the post-doctoral level) researchers in North America; however, nomination of international members is also possible

4. Other SNS business (new cafeteria, JINS, user housing, new second floor labs, etc.) (AI)

Cafeteria is open and serving breakfast and lunch

ORNL guest house construction contract has been approved for 47 rooms. Location is on Chestnut Ridge next to JINS.

Outreach events:

Had a successful Spin-Echo workshop in November at the SNS.

There will be an IDT meeting of the VULCAN instrument in January 2010.

Network of Industrial Liaisons – is being developed by AI Ekkebus

MARCH APS meeting – there will be a booth at the APS meeting, and Mike Crawford organized a session on industrial applications of neutron scattering.

SER-CAT -SouthEast Regional Collaborative Action Team meeting at Oak Ridge on March 19-20. They manage an AOPS beamline and the annual meeting here will provide some information on neutron scattering activities proposed for the future MaNDi instrument and others at ORNL.

MRS spring 2010 meeting – there will be a booth at this meeting and a special session on “Diagnostics and Characterization of Energy Materials with Synchrotron and Neutron Radiation”. (Session W)

Hydrogen and Helium in materials – meeting will be at ORNL in April 2010. Jim Browning is coordinating this event.

Neutrons and Catalysis meeting is proposed for late April 2010

National School on neutron and x-ray scattering will be at ORNL June 19-26

5. Survey of APS and NSLS users (Lynn Kszos)

Lynn is absent, but AI provided an update on this survey. Thank you for your response, comments and participation in pre-survey. Revised survey would likely be sent out within two weeks.

6. Discussion of User Charter: Rights and Responsibilities of Neutron Sciences Users (see attached document).

Rework bullet four to say something to the effect of “Users are expected to make effective use of awarded beam-time”

7. Election of new SHUG EC members

Four members and one post-doc representative are ending their term in June 2010. A nominating committee consisting of Mike Crawford and Stephen Wilson will solicit nominations from SHUG. It was decided that eight nominees for regular members and two nominees for post-doc representative, including choices representing the range of science performed at SNS and HFIR, would constitute an appropriate slate for the election. The final vote would then occur in April 2010.

From: Al Ekkebus

Regarding: SHUG meeting 2010

A meeting on **Solar Energy and Energy Storage Challenges and Opportunities** will be held at Oak Ridge National Laboratory's Spallation Neutron Source on Monday-Tuesday, September 13-14, 2010, with a focus on current ORNL research activities and how ORNL user facilities can support research in these areas. Tutorials will be held on Wednesday, September 15, 2010.

The goals of this meeting are to:

- Highlight opportunities for collaboration with ORNL researchers in the areas of Solar Energy and Energy Storage,
- Identify ORNL user facilities that can support research in these areas, and
- Receive feedback from users on new experimental capabilities required to support future research needs.

This meeting will focus on two research areas, solar energy and energy storage, that have been identified by the U.S. Department of Energy as important to our nation's energy future. The ORNL research community is extensively involved in these areas and is interested in collaborating with colleagues from other institutions.

ORNL is home to highly sophisticated user facilities research designed to serve scientists and engineers from national laboratories, universities, industries, and foreign institutions. Among ORNL's user facilities are the Center for Nanophase Materials Sciences, High Temperature Materials Laboratory, High Flux Isotope Reactor, Spallation Neutron Source, and the Shared Research Equipment facility. As part of this meeting, descriptions and operational characteristics of these user facilities will be provided. An additional important element is the opportunity to provide feedback about new experimental capabilities at ORNL user facilities that are needed to respond to the current research challenges.

A tentative agenda follows

Monday - Descriptions of Ongoing Research

- Solar Energy research
- Energy Storage research
- Evening reception and poster session on ORNL research and user facility capabilities

Tuesday - Identification of Research Resources and Capabilities

- Solar Energy
- Energy Storage
- Feedback on additional resource requirements
- Tours of ORNL facilities
 - Center for Advanced Thin-film Solar cells (CATS)

- Buildings Technology Center (BTC)
- High Temperature Materials Lab (HTML)
- Center for Nanophase Materials Sciences (CNMS)
- High Flux Isotope Reactor (HFIR)
- Spallation Neutron Source(SNS)
- Shared Research Equipment (SHaRE)

Wednesday Tutorials (limited enrollment, 10-15 maximum per session)

- Thin films
- Fuel cells
- Etc.



User Charter

Rights and Responsibilities of Neutron Sciences Users

► Rights of Users:

- Be treated with respect and courtesy.
- Have details of experiment proposals kept confidential.
- Have consultations with instrument staff before proposal submission, during experiment planning, and while evaluating results and analyzing data.
- Receive beam time on the basis of external peer evaluation of submitted proposals. Users can appeal denial of beam time.
- Expect facilities to operate predictably and reliably. Support is available around the clock to assist users. If an experiment cannot be conducted because of instrument or facility problems, the experiment will be rescheduled.
- Receive training on safe and effective operation of instruments.
- Receive reasonable consumable experimental supplies from ORNL.
- Ability to use own equipment for an experiment after an ORNL safety review is successfully completed.

► Responsibilities of Users:

- Treat facility staff with respect and courtesy.
- Conduct activities with the highest scientific, professional, and ethical standards.
- Reach agreement with instrument staff on the extent of collaboration expected by users and ORNL staff, including coauthorship of resulting publications.
- Bring an experimental team that can effectively function on its own after initial training. ORNL staff can't perform experiments for users.
- Work with instrument staff while planning experiments and confirm all the details, including team members, samples, laboratory needs, and equipment.
- Complete required training, have a valid user agreement, and follow safety and security rules.
- Submit full citations of all publications resulting from research.
- Appropriately acknowledge DOE, ORNL, and the specific instrument in the research results submitted for publication.
- Respond to surveys after the experiment and submit an end-of-experiment report in a timely manner.
- Participate as a reviewer of experimental proposals as requested.



ORNL Neutron Scattering Science Division Science Review Committee Member Roles and Responsibilities Description

This role is analogous to an editor at a peer-reviewed science journal in its role in establishing and preserving the integrity of the proposal selection process.

Qualifications

1. Recognized as an expert in one or more science topic areas and has successfully employed neutron scattering technique(s).
2. Not a member of the ORNL staff.

Duties

1. Acts as “adjudicator” primarily for a defined area of science within an instrument group (responsible for about 25 proposals) when review results are received.
 - a. Are the reviews consistent? (Are some artificially low or high?)
 - b. Are the reviews fair?
 - c. Are the numeric evaluations complete enough to rank the proposals by instrument in a strict order based on the science and the team’s ability?
2. Recommends number of beam days for experiments.
3. Participates in a meeting where all Science Review Committee Members discuss the results of their sub-section in the context of others.
4. Provides feedback to NSSD management on the quality of the proposals, effectiveness of the review process, and related topics. Ranks proposals based on scientific merit, forming the basis upon which beam time will be allocated. Provides comments that may be shared with PIs where ranking deviates from the review results and when comments may assist PIs in preparing future proposals.
5. Reviews rapid access proposals for scientific merit and impact.

Term of Service

Guideline: Likely 2 – 3 years. (4 to 6 proposal cycles)

August 27, 2008