SHUG (SNS HFIR User Group), http://neutrons.ornl.gov/users/shug/

SHUG executive committee minutes.

Teleconference held August 10, 2010.

Attendees:

Executive Committee: Cora Lind, Matthew Stone, Peter Khalifa, Eugenia

Kharlampieva, Mike Crawford, Ursula Perez-Salas, Antonella Longo, Malcolm Guthrie, Greg

Beaucage

Guests: Al Ekkebus

Minutes submitted for review August 17, 2010 by M. B. Stone.

ACTION ITEMS:

Third Tuesday of September will be the next meeting. This is due to the user meeting being held during the regular conference call time.

ATTACHMENTS and WEBSITES of interest from the teleconference:

1. ORNL/NScD update

The neutron sciences progress report was circulated prior to the executive meeting. HFIR is currently running, and SNS will be coming up again in approximately 3 weeks. NOMAD is continuing its commissioning, in anticipation of being in the user program in early 2011. TOPAZ has presented its first single crystal diffraction pattern at the ACA meeting.

The SHUG executive committee encourages the division management to continue installing detectors for the POWGEN powder diffractometer. The SHUG executive committee believes that there will be a proportional increase of users and sample throughput for this instrument as further detectors are installed. This is consistent with feedback by multiple commissioning and potential future users at the ACA meeting.

2. Encouraging user feedback/interactions (Cora/all)

Collected ideas via email.

- Distribute a flyer to users (or at least 1st time users) along with the other paperwork they
 receive. This could advertise the existence of SHUG...also a questionnaire might be
 helpful to solicit input.
- o Alternatively, have a folder of flyers prominently available in each instrument area.

- A final alternative would be to have an automatic email shot to users upon completion of their beamtime. (something uber quick/easy would definitely be best to encourage participation.)
- Generally, SHUG could benefit from an increased profile (and some kind of ad campaign should be discussed too).
- This sounds like something to arrange during user meetings. An alternative idea would be to have the management have an open lunch once a week during neutron production which is advertised to users who are on site. Perhaps an open table at lunch in both the SNS cafeteria and the HFIR break room. Or an announced coffee hour.
- O SHUG members do not have a good way to represent the users other than as users ourselves. The most direct way would be for us to walk around the facilities and speak with users directly, while they are performing their experiments, so perhaps some mechanism to bring some SHUG members to ORNL for this purpose a couple of times a year would be worth trying. Of course, this puts a time burden on us but the use of surveys only provides a limited view of the users, and those who are most dissatisfied may be more motivated to respond.
- O Invite users to also share a presentation with the division prior to, during or after their measurement. The incentive at other facilities is giving away a free mug to the speaker. This is done at the APS. The talks could also be posted to instrument home-pages if the presented research was done at SNS or HFIR.
- o These suggestions will be discussed with Ian, Dean, and Ken, during a future conference call.

3. SHUG election of officers result (Cora)

Greg Beaucage was nominated as vice-chair to the SHUG executive committee and has accepted this nomination.

4. National User Facility Organization activities (Al)

The DOE memorandum helping to accelerate the process to host foreign visits and assignments is currently being drafted. Judy Trimble from the user office can discuss the implications of this at a future meeting of the executive committee.

Benchmarking studies of many different user facilities is available at www.nufo.org.

A major part of the NUFO annual meeting discussed outreach and outreach mechanisms.

5. SNUG (Al) (synchrotron neutron users group)

Al will send a website update regarding SNUG. Along with AAAS meeting in February, there will be a meeting of representatives of user facilities at the capital in Washington D.C. More detail will be forthcoming. http://www.snugroups.org

6. Update on User Meeting plans (Al)

Monday September 13 is science day, Tuesday September 14 is applied science day and solar energy day, Wednesday September 15 was supposed to focus on solar energy research (the organizers of this session decided not to have the session because of a conflicting event), Thursday and Friday will focus on catalysis. The workshop "Neutrons and Catalysis" will be held. There is a website sign-up available for this workshop is at http://neutrons.ornl.gov/conf/NandC2010/

7. Plans for 2010/2011 outreach /education activities (all)

What has been done in the past (Al's recollection):

The following is a brief summary of our current activities and my opinion of what has worked and not worked. My definition of an activity not working is that the results (attracting potential users not familiar with our neutron techniques or neutron scattering instruments) are not commensurate with the expenditure of time/money.

- · Special neutron sessions at meetings like APS: few attendees at these sessions. This does not work because these attract only those with neutron experience..
- Neutrons integrated with other techniques at meetings like ACA: this worked especially if we can prepare handouts that are subject or discipline-specific for the event that we can use for another year or so.
- Neutron x-ray school: 63 potential users trained out of 211 applicants. Hands-on training is very time-intensive and the students gain much from these schools. However, these also remove the instruments from other users performing their experiments during this time and inhibits scientific productivity.
- · Topical meetings, like neutron spin-echo, engineering diffraction: they work and attract 100-150 attendees to Oak Ridge.
- · Selected meetings have been used to develop topics for books in the Springer Series on Neutron Scattering Applications and Techniques on topics such as "dynamics of soft matter" and "imaging and neutrons." Being an editor of a book is difficult but these meetings are very good as they identify paths forward to develop new techniques or new instrumentation.
- · User meetings that are strictly facility-specific are not a success in my opinion. At the SHUG meeting two years ago, half of the attendees were ORNL staff, and we paid half of the others to attend. We need to link the meeting to some other activity as in this year, solar energy and energy storage. An appropriate training session might be good. This

year we are also having a neutrons and catalysis workshop to identify future directions for this research.

- · If we have a booth at a big society meeting, we need neutron scatterers to staff it in addition to Al. I can ship the booth or display and I can set it up, but I can't answer detailed, subject-specific questions to the extent needed by the booth visitors.
- The AAAS2011 meeting in Washington, D.C. has an opportunity for a free vendor session for an hour-long event. APS is interested in participating with us to develop a science program in which a few users talk about using x-rays and neutrons as complementary tools for their experiments.
- Additional ideas brought up by committee members prior to the meeting:

Outreach makes good sense at national meetings (ACS, APS, Materials Research Society, Denver conference, etc.). It might be useful also to include the possibility of NSSD sponsoring or hosting smaller conferences, such as a Gordon conference, devoted to neutron scattering (has there been one before?). These are very good conferences for grad students and really provide a convenient, one-on-one format for discussion over meals and other activities in the afternoons. We could include a wide range of topics, including highlighting the new neutron sources and what capabilities they bring. Should we think about proposing one?

It is important that the beamline scientists participate in visiting scientific meetings/conferences that are small enough to allow for good interactions. E.g., GRCs, Transatlantic Frontiers in Chemistry, maybe even some regional meetings where there is potential for interactions with a lot of potential users. The beamline scientists can both "work the crowd" at the conference expositions using the NSSD booth, as well as hosting evening or morning or preconference sessions describing capabilities of the facilities.

Teaching/outreach workshops are wonderful - but the problem is always funding. The Neutron-X-ray (NX) school is unique in that it costs accepted students (and their advisors) nothing. "I believe the NX school is a great success (I attended one myself, and several people from my year still use neutrons), but mainly targets students who are already working for people in the field." A crash course school (maybe 5 days) for postdocs and junior faculty would be wonderful - these are the people who are deciding where to take their research, and whether to get into these techniques, and they often don't have the same access to people who could teach them as grad students applying to the NX school. However, it would definitely need to be CHEAP (or better: free), as these groups generally don't have a lot of money! (Even at no workshop cost, there would be travel and lodging.)

To allow education without the associated costs: Webcast workshops would be a wonderful opportunity for many researchers. This could include lectures, and videos of how to do experiments and/or data analysis. My students and I would definitely make use of such offers.

I've been really impressed by the interactions that arise when beamline people visit Gordon conferences, where the users are only mildly familiar with the technique of interest. My suggestion would be to ask all the beamline staff if there are GRC or equivalent conferences where they would like to advertise their services / recruit users, and provide funding for them to do so. I see this being more likely to generate collaborations and interactions than in large national conferences.

• Additional ideas brought up by committee members during the meeting:

The neutron school has been quite successful. One possibility is to expand the attendance of the school. One could have two groups for two weeks; one group at Argonne the first week, while the other group is at ORNL, then switch the next week. This doubles throughput, but also ties up instruments for several extra days.

User meetings that are facility specific have lower attendance

Going to big society meetings requires scientists to go to the conference and work the NSSD booth.

Interactions with scientists from Oak Ridge at conferences and smaller meetings are very important.

Very large meetings are difficult to have a focused session during the conference due to the many parallel sessions, rather for the large meetings one could host a neutron scattering tutorial before the parallel sessions begin.

Send the instrument scientists to a meeting to discuss with potential users the technique and capabilities. This could be called a "Scattering Retreat" for example.

Best target audience is new faculty or junior faculty members, graduate students and postdocs. Unfortunately, these groups have historically the least funding. A 2 or 3 day crash-course in the techniques attracting these people is needed.

The most expensive part of traveling is the cost of housing.

Do the crash-course introduction immediately before or after a given meeting.

January break, Spring break, or summer would be best time to attract new users to such a course if it were held at Oak Ridge or during another conference.

Webcast workshops for specialized topics, or expanding upon the summer school notes and lectures on the web.

Need to encourage users to speak with instrument scientists even if they have never written a proposal before.

8. Other business