

SHUG EC Conference call

Meeting Minutes

January 9, 2015

EC Members (at SNS and on call) Claire White, Boris Khaykovich, Yang Zhang, Yang Ren, Morten Eskildsen, Eugenia Kharlampieva, Tyrel McQueen, Brad O' Dell, Brad Lokitz, Souleymane Diallo, Jen Niedziela (minutes)

Other NScD Staff Present: Jaime Fernandez-Baca (QCMD), Crystal Schrof (NScD Science and Program Services Manager), Volker Urban (BSMD), Laura Morris-Edwards (User Office), Thomas Proffen (CEMD/NDAV), Rob McQueeney (NScD Deputy ALD)

Next meeting: Teleconference Feb. 6, 2015 at 1PM

I. Previous minutes and agenda

Minutes from the November and December meetings were approved without changes; agenda approved without changes.

II. Updates from NScD management

- Paul Langan has been announced as the new Associate Lab Director (ALD) for the Neutron Sciences Directorate (NScD), effective January 1, 2015. Ron Crone has taken a position at Idaho National Laboratory in the Materials and Fuels Complex.
- An advertisement has been made for the position of director of (Biology and Soft Matter Division) BSMD; Volker Urban has agreed to serve in the interim director position.
- The SHUG is recognized as a useful resource to identify potential candidates for such positions. The ad has been distributed to the neutron mailing list, but a more focused mailing from the SHUG EC to the community may be effective in helping identify a candidate.
- Richard Ibberson has been announced as the Chemical and Engineering Materials Division (CEMD) director, and will start at ORNL on March 2, 2015. Richard had been responsible for the second guide hall update at the NCNR at NIST, and had previously been an instrument scientist in the diffraction group at ISIS.
- HFIR startup slated for January 13th, SNS startup January 19th-24th.
- Target updates:
 - o Leak investigations ongoing and extensive.
 - o Failure points identified for failed targets; post mortem analysis aided substantially by the removable water shroud design.
 - o There are several active working groups aiming to identify issues with target failures.
 - o There will be an on-site technical review of the target failure information to date including updates from the working groups and technical representatives from other spallation facilities (J-PARC and ESS).
 - Objective is to allow a review of information and subject findings to external observers.
 - Review was called by Basic Energy Sciences (BES, DOE) and is seen as an opportunity for due diligence on ongoing target analysis and development, as well as forming collaborations with target design and operation at other high-powered spallation sources.
- Quantum Condensed Matter Division (QCMD) updates:

- An enhancement of the magnetism reflectometer provides a variable aperture to reduce background.
- CEMD updates:
 - Conical collimators for VISION have been fabricated using 3-D printing
 - Early prototypes were promising, so larger construction was attempted.
 - Construction is piecemeal, but large pieces can be assembled.
 - Active R&D effort to determine ability to produce neutron-absorbing materials on demand.
 - Lots of interest with advanced manufacturing group at ORNL.
 - Gas handling system on POWGEN continues development.
- BSMD updates:
 - New capillary mounting apparatus optimized in collaboration with instrument team. Design is more flexible and allows improved accuracy with sample positioning.
- Science Highlights:
 - MANDI ran first general user proposal – studying the crystal structure of antibiotics and looking at drug resistance; instrument is fast enough to collect comprehensive dataset within 5 days.
 - Work led by Souleymane Diallo published in PRL demonstrating Bose-Einstein Condensation present where fluctuations related to superfluidity are also present. Work conducted at ARCS instrument at the SNS; notes that this kind of experiment may now be performed in a week’s timeframe where before these measurements would take weeks.
 - NOMAD was used to investigate glass formation in bulk metallic glass. Demonstrates the ability of NOMAD to perform time-resolved measurements.
 - POWGEN used to characterize a standard reference material. Along with experiment at HB2A allows a constant wavelength/time-of-flight comparison for the new SRM quantification.
 - GP-SANS had seventh anniversary.
 - VULCAN has successfully commissioned high temperature holders for use with the load frame apparatus.
 - The Neutron Data Analysis and Visualization Division (NDAV) reported that single crystal data normalization routines are now producing reliable and high-quality intensity data.
 - Effort to develop library of SANS reduction algorithms ongoing – NDAV personnel working closely with team from GP-SANS to ensure routines are propagated to MANTID and are robust.
- User office updates:
 - Acceptance rates at HFIR normal
 - SNS high a lower acceptance rate than normal; this is due to the high carryover and high subscription rate.
 - Just under 200 unique users through January.
 - 38 High impact publications have been recorded.
 - User community seems understanding of recent failures.
 - Discussion ongoing on how to normalize access for user groups that submit many proposals per proposal call.

III. SHUG Business

- Election results:
 - o Boris Khaykovich elected Vice-Chair.
 - o Jen Niedziela elected Secretary.
- Onsite Visit
 - o Onsite Visit to be ~~January 29-30th 2015~~ **March 12-13, 2015**; most members can attend.
 - o Claire has issued the charge, and will work offline with the SHUG EC regarding expectation of the meeting, and what should be the result.
 - Ultimately a written report will be produced while the committee is on-site.
 - Once charge is finalized, Jen or Claire will email to the EC.
 - o Discussion regarding whether Thursday evening should be a poster session or additional closed door meeting.
 - Poster session ultimately decided upon.
 - Additional meetings with instrument scientists during the visit to get a direct assessment of the status of the user program.
 - Discussion of schedule specifics to be done off line via email – Claire will solicit feedback.
 - o Travel arrangements have been started – SHUG EC members needing assistance should contact Toni Sawyer in the NScD directorate office..
 - o Discussion about the availability of reports from recent workshops – it would be advantageous to the committee for these to be made available by NScD management to the SHUG EC in advance of the meeting. These include the SANS workshop, magnetic field workshop, Grand Challenges workshop, etc.
- SHUG EC term end dates
 - o SHUG EC terms are three years in length, with 4 new members elected each year.
 - o Laura to send out email with election cycle mapping out through 2023 to Jen; Jen will distribute to EC.
 - o Members who's terms will be up in 12/2015 are Claire, Morton, Brad Lokitz, and Yang Zhang. Claire will be Chair for 2015, and Past-Chair for 2016. Boris will be Vice chair for 2015, Chair for 2016, and Past-Chair for 2017.
 - o Reminder that bylaws state that less than half of the members of the SHUG EC may be NScD staff.
- SHUG Website Updates
 - o Website at: <http://neutrons.ornl.gov/users/shug/committee.shtml>
 - o Laura updating the SHUG EC website with research sketches and photos of the committee; please send her a synopsis of research interests and a photo ASAP. If she receives nothing, she will use what she can find on the internet.
 - o Information will be updated by the end of January; please check to see that info is updated properly.
 - o Bylaw changes will be posted to the website.
- 2015 User meeting
 - o CNMS holding user meeting from 8/31-9/4, and it seems this date can not be used for a joint facility user group meeting. A date needs to be selected soon – the second or third week of July was suggested.
 - o While the schedule is finalized, discussion about the framework, topics, and themes of the meeting can start now, see if this has any impact on the potential scheduled dates.

- Other constraints:
 - European Conference on Neutron Scattering (ECNS) 8/31-9/4 (Zaragoza)
 - BES review not scheduled (heavy NScD staff demand and conference room availability will be limited at the SNS)
 - Neutron Advisory Board (NAB) review in June (heavy NScD staff demand and conference room availability will be limited at the SNS).
 - Neutron School is the last 2 weeks of June (heavy NScD staff demand and conference room availability will be limited at the SNS).
 - Science workshops held by staff in summer are beginning to populate.
- Community email
 - Email to user community containing recent updates from SHUG EC should be sent to communicate changes in cabinet.
 - Laura to send list to Claire and Jen.
 - Claire, Boris, and Jen to draft language for the email.
 - Claire to meet with communications staff while on-site to discuss notes from the SHUG EC going to the Neutron News community newsletter.
- Next meeting:
 - ~~Onsite meeting at ORNL January 29-30th~~. **Teleconference on Feb. 6 at 1 PM.**
 - Reminder to contact Toni Sawyer for help with travel arrangements (sawyertk@ornl.gov)