

SHUG-EC Conference Call: Tues. Dec. 17, 2019

Present at ORNL:

Crystal, Adam, Mathieu, Janell, Hans, Jaime, Ken, Gary

Online:

Olivier, Martin, Jarek, William, Stephen

Document approval:

- Minutes from Nov. 2019 conference call: approve
- Agenda for Dec. 2019 conference call: approve

1. NSD updates and associated discussion

- STS workshop:
 - Thanks to SHUG-EC, Ken, and Crystal for their roles in organizing a very successful STS workshop to identify STS science opportunities.
 - Ken et al are currently putting together a workshop report. Mostly focused on the science, as requested.
 - There was plenty of vigorous discussion at the workshop. Most working groups focused on 3-5 science opportunities, although the quantum materials group came up with 14. Breakout session chairs did an outstanding job.
 - Important instrument concepts that should be developed, in addition to what we already have: Cold imaging station, polarized reflectometer, more neutron spectrometers.
 - Next STS workshop will focus on instrument concepts and take place directly after the 2020 ACNS meeting.
- Janell Thompson is the new Group Leader for the user office
- HFIR is starting up today and will run until Jan. 10
- SNS is running until Dec. 23 and then will resume operations shortly after the holidays
- BES is likely to receive an FY20 increase of \$400M, but the final budget still needs to be signed by the president
- Users were frustrated with lack of available beamtime for new experiments in the 2020-A beam period. This shortage arose from several experiments that needed to be re-scheduled due to SNS and HFIR operational issues in CY19.
- We discussed the ORNL proposal system vs the APS proposal system. Some members of the SHUG-EC advocated for the APS system, but NScD management is not keen to change the ORNL process at this point. More discussion is needed before a final decision is made.

2. Scientific Computing and Software Engineering (SCSE) Group data reduction and analysis update

The new SANS data reduction platform (backend side) is working well and should be complete in the next couple weeks. The UI was just deployed this morning and it is being tested by SANS

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instrument scientists now. NSD anticipates meeting the Dec. 31 deadline to roll out the new SANS data reduction software in its entirety.

3. SHUG-EC selection results

Daniel Shoemaker and Danielle Yahne were clearly voted in to one of the general positions and the student/postdoc position respectively. Adrian Brugger, Geneva Laurita, and Shuo Qian received an equal number of votes for the last two general positions and therefore we needed to come up with some executive way to break this tie. We decided to select Adrian and Geneva since they are the two external candidates. Thanks to outgoing members Stephen Wilson, Michelle Dolgos, Marc Janoschek, and Sudipta Gupta, as well as outgoing chair Olivier Delaire.

4. Sample Environment Discussion

SHUG-EC is concerned that some GU proposals for 2020-A were impacted by both the lack of SE manpower and equipment in the area of low temperatures and magnets. NSD has not been able to keep up with the increasing user demand in this area.

Relevant updates:

- The 14 T SNS magnet should be delivered in early 2020 and the HFIR MAG-B replacement is also expected in 2020.
- We have hired one new person for the low T/high B team in an experimental physicist position (start date March 1, has a Ph.D.) and we are interviewing for another experimental physicist position now (Ph.D. also required).
- The SHUG-EC is very supportive of all efforts to increase the SE equipment and manpower in the long term so that approved GU proposals will not be deferred due to lack of SE resources. In particular, the SHUG-EC commends the initiative to hire more Ph.D. scientists into the SE group.
- There is a SE capacity argument to be made both in terms of equipment and manpower, but DOE will not increase our budget to prop up SE so we may need to find ways to free up resources in NSD to fix this problem.
- The SHUG-EC would like to revisit SE manpower and equipment issues at our 2020 on-site meeting.
- Soft matter SE – there is now an FTE who is partially paid for by CNMS and will work on the Liquids Reflectometer; this will help other instrument team members provide additional support for soft matter SEs. Also, an ORNL staff member has received a DOE early career award to develop soft matter SEs at SNS.

5. 2020 SHUG-EC on-site meeting topics and date

NScD has no control over some aspects of the user program, so it may be worthwhile for the SHUG-EC to engage with the relevant ORNL management of these areas during our future onsite meetings. We need to send out a Doodle Poll to establish possible meeting dates. We

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would like this meeting to take place sooner rather than later so the new SHUG-EC can meet face-to-face early on. William will need to participate remotely due to the lack of an appropriate MOU between ORNL and NIST for this activity.

6. Next conference call: Jan. 21, 2020, 3 PM