

ISIS User Committee

Friday 13 December 2013, 10:00

The Cosener's House
Abingdon, Seminar 1

Attendance:

Jon Goff (Chair, Excitations)
Anthony Powel (Crystallography)
John Holbrey (Disordered Materials)
Phil Salmon (Excitations)
Sylvia McLain (Molecular Spectroscopy)
Don Paul (Muons)
Alan Drew (Muons)
Hongbiao Dong (Engineering)

Robert McGreevy (Director, ISIS)
Philip King (Spectroscopy and Support Division Head)
Zoë Bowden (Experiment Operations Division Head)
Sean Langridge (Diffraction and Materials Division Head)
Steve Wakefield (Instrumentation Operations Group Leader)
Andrew Kaye (User Programme Manager)

Apologies:

Peter Slater (Crystallography)
Beau Webber (Disordered Materials)
Jeremy Lakey (Large Scale Structures)
Ali Zarbakhsh (Large Scale Structures)
Christoph Salzmann (Molecular Spectroscopy)
David Dye (Engineering)
Michael Preuss (Engineering)

Debbie Greenfield (Instrumentation Division Head)

Welcome

The chairman welcomed the ISIS User Committee (IUC) to the meeting. He welcomed Hongbiao Dong to his first meeting, representing the Engineering user community.

Minutes of IUC June 2013 Meeting and Matters Arising

ITEM: Uschi Steigenberger had been asked to report to the committee on the IOP Large Facilities Forum. The Forum is due to meet in January. The membership has been expanded to include particle physics representation.

ITEM: A website allowing user feedback is permanently available, but a request wasn't explicitly sent for this meeting and no feedback had been received.

ACTION 1: Andrew Kaye to prompt users to enter feedback once a year.

ACTION 2: Andrew Kaye to add a link to the feedback site to the user office web page and to the IUC web page

ACTION 3: Link to feedback site to be emailed to users after every experiment (Andrew Kaye)

ITEM: Material now available for users to use in talks related to ISIS – see <http://www.isis.stfc.ac.uk/user-office/things-to-help-you-talk-about-isis14668.html>

ACTION 4: Further pictures to be added (Philip King)

Chairman's Report

Jon Goff

The Chair confirmed that a response to his letter had been received from the Chair of the Large Facilities Steering group.

The Chair confirmed that he had been called to give verbal evidence to the House of Lords Science and Technology Select Committee inquiry into Scientific Infrastructures. A written response had also been sent on behalf of the IUC. The Committee's final report had highlighted the issue of facility operating costs.

It was noted that the 2013 ICNS meeting in Edinburgh was a success. It was the largest IOP Meeting in 2013 with over 800 delegates.

An STFC town meeting had just been held even though the STFC Programmatic Review was still to be published. The Programmatic Review process was discussed – details of Review committee membership can be [found on the STFC website](#).

The role of the European Neutron Scattering Association (ENSA) was discussed; the future of the Neutron and Muon Integrated Infrastructure Initiative in Horizon 2020 was also discussed.

Reports from User Groups

1. Engineering : Hongbiao Dong

The ISIS Collaborative Research and Development scheme has been a great success, but Engin-X is utilized heavily by this scheme. This is a cause of concern for normal academic access to the instrument (RLM noted that this may lead to plans for a further engineering instrument). Engin-X is a unique instrument and the only one that can do in-situ heat treatment studies of large or complex objects.

Hongbiao is a partner in the recently-awarded Doctoral Training Centre (DTC) on innovative metal processing which Hongbiao is responsible for and which will start in April 2014.

It was noted that there had been a lot of good user feedback from the engineering community, including requests for sofas in the instrument cabins!

2. Muons: Alan Drew

Muons continue to deliver high impact science, with good papers covering a wide range of topics. The upgrade to the muon beamlines during the long shutdown should provide a gain factor of 2 or 3 in muon flux.

Alan Drew is upgrading the HiFi instrument with a laser for looking at excited molecules using the Pump Probe technique where muons are the probe. EMU, MUSR and HiFi have now got a higher data rates due to new data acquisition cards. A dilution fridge has been bought for MuSR and EMU and is in commissioning.

A Muon Training School will be run May 2014. It was noted that both the MTC and Neutron Training School are both considered an ISIS successes.

3. Molecular Spectroscopy: Sylvia Mclain

An external review of MAPS, MARI and TOSCA has been undertaken. All three instruments were recommend for upgrades, and discussions are now taking place over how these are taken forward.

There is a meeting in January about VESUVIO and high-eV spectroscopy, to map out future work in this area.

The group newsletter 'Good Vibrations' is published periodically. The group are looking to add more computation support for future experiments and would like to develop further theoretical support.

4. Excitations: Jon Goff

It was noted that the delayed installation of high angle detectors for LET is now on track and the detectors should be in use before long shut down. This combined with the success of rep rate multiplication extends the dynamical range and count rate of the instrument.

MERLIN is now being configured to use rep rate multiplication as well and a new fast sample changer will also be ready soon for MERLIN Express.

5. Large Scale Structures: No representative present

6. Disordered Materials: John Holbrey

The development of the sample environment capabilities and expanding user base was noted. Data analysis facilities for NIMROD are now progressing well, with the first publications are starting to appear.

The support of the Gudrun code was highlighted, particularly development and support once Alan leaves.

The new signage around the ISIS target halls was noted and appreciated.

7. Diffraction: Anthony Powell

A successful Diffraction User Group meeting was held at The Cosener's House in November. A broad range of topics were discussed, and the attendance was the largest ever, with over 80 people. There was a lot of discussion and emphasis on complementarity.

The use of Rietveld analysis software was discussed. Some of the new capabilities of POLARIS were also highlighted.

Update from the ISIS Director

Robert McGreevy

The Director gave a brief overview of the activities at ISIS since the last meeting. Of particular significance was the ISIS International Review which had taken place on the 6th-9th November. All STFC facilities will undergo this type of review and ISIS was the first. The Review highlighted the culture of innovation at ISIS and was impressed by the facility's development and performance. The Director also described the development of a 20-year strategy for ISIS and the various stages within this.

Update on ISIS Operations

Machine

Steve Wakefield

Steve presented an overview of the machine performance over the past 6 months. Over all beam availability had been reasonably good at 90-91%. He presented photos of repair work which had been required in the accelerator due to water leaks and high voltage electrical failure.

TS2 instruments LAMOR and CHIPIR are approaching commissioning – they are due to take first beam early in 2014. Work on IMAT is also progressing well. The ZOOM tank has now been installed.

Synchrotron power supplies are being continuously updated. There is lots of investment in the power distribution substations, some of which are now 40 years old.

The Oxford deuteration facility is in the process of being relocated to ISIS. The second phase of the TS1 Hall recladding is now underway.

Programme

Philip King

The 2014-1 Proposal deadline has been and gone and the ISIS FAPs have just finished their deliberations. This round had the most proposals ever submitted, probably due to the upcoming long shutdown. Because of the shutdown, there will be no proposal round in June 2014.

The [ISIS 2013 Annual Review](#) is now available from the ISIS website. Philip gave an update on the Industrial Collaborative R&D Scheme, upcoming neutron and muon training courses, and the Maps, Mari and Tosca instrument review which had recently taken place.

A 9 month study is being undertaken in early 2014 looking at the social and economic impact of long-term investment in a large scale facility like ISIS.

Research Fish is the system that STFC is using to capture outputs from STFC grants and ISIS is looking at employing this system as well.

Update on Centres for Doctoral Training

Sean Langridge / Jon Goff

Sean Langridge presented an overview of the current Doctoral Training Centre situation from the ISIS perspective. It was noted that ISIS had involvement in 25 of the second round proposals, and is a partner in 10 that have now been funded. ISIS is exploring with Diamond a joint summer school for CDT students to introduce neutrons and x-rays.

General Discussion

Consumables funding

The total amount being requested for consumables for experiment support is rising rapidly and we need to constrain these costs. Should we cap this in some way? It was suggested that adding a tick-box to the consumables request form to say confirm that no other support is available would be a good idea.

Expenses for UK users:

Claims for user expenses are also increasing, with these currently running at about £350k per year. We need suggestions on ways to get this down e.g. no longer 4 people per experiment down to 3?

The committee agreed that it is suggested that 3 people per experiment is reasonable with the chance for a special case option for a 4th person.

It was suggested that users catch the bus from Didcot during the normal working day e.g. 9 till 5. Out of those hours then taxi would be provided.

Publication of proposal information

Accountability for publicly-funded research means that Research Councils now publish summaries of awards made. ISIS should also make available information about successfully funded proposals:

- PI's and Co-I's names and institutions
- Instrument
- time awarded
- and short public summary of the experiment.

The online proposal system will need to make it obvious which parts of the proposal will be published.

A short 'public summary' was preferred rather than publication of the proposal abstract – as the latter wouldn't be publicly accessible and may contain experiment details which should not be made public.

Open Access policy

There are two RCUK approved routes for Open Access Publication. Gold route make articles available immediately but normally incurs a cost. Green route is free but there is normally an embargo period of 6 months or a year. ISIS policy on Open Access is now available on the ISIS website. ISIS has no additional funds to support the Gold route and encourages use of the Green route and the STFC ePubs system.

Other comments

Put the user feedback form on the main user system where you book accommodation travel and enter proposals etc.

2014 is the UN Year of Crystallography; it is also 30 years since first neutrons at ISIS, although 2015 – 30 years of ISIS operations – may be the thing to mark.

It was suggested that the NMUM 2014 breakout sessions could map onto user groups.

A request was made to reinstate the change machine in the TS1 vending area.
[Note added after the meeting: the change machine should be back in place shortly!]

AOB and Date of next meeting

Date of next meeting to be announced. This may be a joint meeting with ISIS Facility Access Panel chairs to discuss access mechanisms.