

Notes on HYSPEC Status as of June 16th

The design for the detector vessel is complete and is out for bids right now, for a contract that will be only fabrication, assembly and some testing. We are requesting delivery by December 2010. We are now preparing specifications for the remaining, smaller procurements. The focusing crystal assemblies and translation mechanism have arrived and will be tested this summer. The drum shield sections are being filled with concrete and lead now, a functional test at the vendor is planned for July, and delivery is still expected in August 2010. The secondary shutter and most of the guide is now installed and aligned. The disk chopper box and Fermi chopper box will be mounted on the beamline soon. The second disk chopper and the Fermi chopper are due for Factory Acceptance testing by the SNS chopper group at SKF on June 21st. They'll then be sent to SNS and installed on HYSPEC in September. The rest of the beamline shielding (15-33m and chopper box B) is either on-site for final painting, or will be on-site in about a month. This shielding should be installed around the guide, extending out to the drum shield location in the external building, in July. The detector tubes are all here at SNS, along with the electronics and relevant 8-pack components. They will be assembled in time for installation on the detector vessel.

We have made an offer to a well-qualified candidate, for an instrument associate position for HYSPEC. Instrument Associate is the new name for Scientific Associate (SA) in case you are confused. We expect that she will come on board in July or August and can start helping with beamline related work.

We plan to complete the CD4 and the Instrument Readiness Review in early 2011 and to open the shutter for the first time when the SNS restarts in March 2011. During this cycle we will initially run a series of tests, commissioning component-by-component and working on background etc. In late May or June 2011, if all goes well, we hope to be ready for the first "commissioning experiments" with unpolarized neutrons.

There is a new process at ORNL called the Extended Commissioning Plan, which ensures that new instruments are science ready before they are released into the user program. For this review we need the sign-off of 'super-users', who have performed real experiments on HYSPEC. The IDT Executive Committee might like to suggest names for the super-users, or endorse the instrument scientist suggested list, at the upcoming meeting. We need 4 super-users and we suggest, Igor Zaliznyak, John Tranquada, Rob McQueeney and Jim Rhyne. If Steve Shapiro wants to be a "super-user" that's okay with us, but we were trying not to have 3 BNL folks. It is required that the super-users "sign-off" that they think the beamline is ready for general users.

So we hope to start running commissioning (or super-user) experiments in late May/June and then continue them from September to November 2011. We hope to start using HYSPEC's polarization capability during this latter time. There will need to be a "peer review" of the commissioning (super-user) experiments, which can be done by the IDT executive via e-mail, and by the relevant Group Leader (i.e. Mark) to ensure that commissioning experiments don't undermine experiments on other beamlines in the user program. We don't expect this to be an arduous process.

For the 2011B request for user proposals (so this is the call that will go out early March or April 2011), we plan to include HYSPEC for general users, but only with the phrase 'limited availability'. We'd only be anticipating user experiments for the final month or so of the 2011B period (so mid-November to mid-December). This also means there will be time for one IDT experiment in this latter period.