

## **Minutes of ESS Instrumentation Task Group meeting, 16.02.2001, London-Heathrow, Posthouse Premier Hotel**

### Participants:

P. Allenspach, K. Andersen, S. Bennington, R. Bewley, H.-J. Bleif, K. Clausen, B. Cubitt, M. Daymond (left after lunch), R. Eccleston, B. Fak, C. Fermon, T. Gutberlet, R. Heenan, W. Jauch, O. Kirstein, R. Lechner, K. Lefmann, K. Lieutenant, F. Mezei, R. McGreevy, G. McIntyre, M. Monkenbusch, H. Mutka, D. Myles, C. Pappas, P. Radaelli, D. Schwahn, A.K. Soper, U. Steigenberger, J. Webster, A. Wiedenmann, C. Wilson, M. Zoppi, G. Zsigmond

### Agenda:

- Current status of ESS project and next steps for instrumentation task
- Report of instrumentation task groups
- Working tasks and time schedule

### **Current status of ESS project and next steps for instrumentation task**

F. Mezei introduced the current agenda of the ESS workplan. The upcoming tasks focus on i) the choice of target stations for the ESS reference design till May 2001, ii) choice of moderators till Dec. 2001 and iii) the optimisation of generic instruments till May 2002.

A preliminary report of results of the ESS instrumentation task group with reference to task i) has to be given at the ESS-SAC meeting, March 7.-8. in San Sebastian, Spain, by the ESS Instrumentation Task Group leaders. The final report will be presented at the ESS-SAC meeting, May 3.-5. in Wildhaus, Switzerland. Further activities to follow are the moderator workshop, March 12.-14. in Berlin, Germany, the next ESS Council meeting, June 15. in Abingdon, England, the detector workshop, June 28.-30. in Berlin, Germany and the 7<sup>th</sup> ESS General Meeting, Sept. 26.-29. in Seggau, Austria. According to this agenda the most immediate work to be done by the instrumentation task group is to provide input for the choice of the ESS target stations.

### **Report of instrumentation task groups**

Detailed reports on the work by the several ESS Instrumentation Task Groups to identify the best and most desired options for instruments for the three possible target stations at ESS

- 5 MW with 50 Hz rep. rate and short pulses  $< 1 \mu\text{sec}$
- 5 MW with 16.6 Hz rep. rate and long pulses 2-2.5 msec
- 1 MW with 10 Hz rep. rate and short pulses  $< 1 \mu\text{sec}$

were given by the ESS Instrumentation Task Group convenors for the following instrument groups:

- Direct Geometry Spectrometers (R. Eccleston)
- Indirect Geometry Instruments (K. Andersen)

- Neutron Spin Echo (M. Monkenbusch)
- Engineering (M. Daymond)
- Powder Diffraction (P. Radaelli)
- Small Angle Scattering (R. Heenan)
- Reflectometry (J. Webster, C. Fermon)
- Single Crystal Diffraction and Protein Crystallography (C. Wilson)
- Disordered Materials Diffraction (A. Soper)
- Simulation (K. Lefmann, G. Zsigmond)

Summary of each presentation are added in the Appendix 1.

The presentations clearly stated the massive interest in a 50 Hz target station at a high intensity neutron spallation source for a broad spectrum of instruments. The demand by methods using long wavelength applications favours the 16.6 Hz target station in comparison with the demand of instruments best at a 10 Hz station. A great variety is present in the requirement for moderators. Due to the limited possible number of moderators on a target station, optimised target-moderator configurations with respect to the instruments housed on specific target stations will have to be developed in the second half of 2001. A summary of options and choices for the instruments considered is given in the Appendix 2.

### **Working tasks and time schedule**

The following work-plan was agreed upon:

Mar. 7-8 2001 ESS SAC Meeting, San Sebastian, Spain  
preliminary presentation of effort and results of ESS-ITG

Mar. 12-14 2001 Moderator workshop/ACoM V Meeting, HMI, Berlin, Germany

Apr. 20 2001 Final comparative results of ESS ITG efforts compiled

May 2-6 2001 ESS SAC workshop, Wildhaus, Switzerland

June 15 2001 ESS Council Meeting, Abingdon, England

June 28-30 2001 Detector workshop, HMI, Berlin

Sept. 26-29 2001 7<sup>th</sup> ESS General Meeting, Seggau, Austria

Any changes, additions or corrections, inquiries, new participants on the effort etc. should be sent to the ESS Instrumentation Task Assistant T. Gutberlet (gutberlet@hmi.de) for distribution to all group members.