

Minutes of the Synchrotron Subcommittee

March 12, 2008

Peter Lee, Chairman

(1) The meeting was opened with the appointment of R. Harlow as secretary and with a review of the 2007 minutes to which there were no objections.

(2) There was no Board of Directors' Liaison Report.

(3) Peter Lee gave a short presentation entitled "Synchrotron Powder Facilities Update".

(a) Diamond plans to build a high-resolution multichannel analyzer-detector system and a 1-D detector system to be placed on one of the undulator beamlines.

(b) NSLS II is proposing to build a dedicated powder diffraction beamline as one of the first experimental stations. John Parise is the main contact and is looking for user support.

(c) The multidetector powder system at 11-BM (APS) is now up and running and includes a rapid access mail-in service for easy submission of samples and fast turn-around. A robot is now being used to automatically change samples.

(4) Peter Lee has suggested that the powder community and ICDD would benefit from a pattern submission and automated verification program similar to that used by the protein databank. A motion was put forward by Cyrus Crowder and seconded by Scott Mixture.

Motion 1: The Synchrotron Subcommittee recommends to the Technical Committee that the ICDD develop a powder pattern submission and verification Program.

The discussion revolved around what to check: crystal structure against the pattern and unit-cell (indexing) against the pattern were the most commonly mentioned. It was further suggested that the Powder Diffraction Journal require such verification before accepting a pattern for publication. A vote on the motion was taken with the following results:

Vote: Yes, 10 No, 0 Abs, 0

(5) As high-resolution synchrotron patterns are becoming more readily available, especially since the advent of mail-in services, it was recommended that the Grants-in-Aid be informed of their availability and encouraged to use the services for complicated patterns or patterns which could suffer from preferred orientation or other deleterious effects. Cyrus Crowder agreed to inform the grants-in-aid of the mail-in service.

(6) With no other business being raised, the meeting was adjourned --- R. Harlow, Secretary, March 12, 2008.