

POWDER DIFFRACTION SIG REPORT 2011

The Powder Diffraction SIG elected Gregory Halder from Argonne National Laboratory as Chair for 2012. Gregory Halder and Ashfia Huq, Oak Ridge National Lab, volunteered to seek out nominees for the upcoming ACA elections.

In planning for the 2011 ACA meeting, the Powder SIG supported the organization of a Symmetry-Mode Analysis workshop, and jointly sponsored seven half-day sessions and one whole-day session:

- 08.01: In situ Diffraction Studies (Materials & Neutron, Small Mol)
- 08.03: Crystallography and the Search for New Materials (Materials & Neutron)
- 08.07: Materials for a Sustainable Future I & II (Materials & Neutron) – Full Day
- 08.08: The Devil is in the Details: Local Structure and Diffuse Scattering (Materials & Neutron)
- 08.11: Diffraction Studies of Industrial Materials (Materials & Neutron, Industrial)
- 08.13: Evolution of Powder Diffraction Software: In Honor of Lachlan Cranswick (Mat., Neutron, Canada)
- 08.14: Diffraction Studies of Magnetic Materials (Materials & Neutron)
- 08.16: Earth Materials (Materials & Neutron)

Sessions were very well attended, particularly on Sunday and Monday when the room was constantly at full capacity with many people forced to stand at the sides and some people unable to enter the room at all (it was noted that this was the smallest room in use at the meeting).

The Powder Diffraction SIG awarded their 2010 Margaret C. Etter Student Lecturer Award to Kevin Rhodes, Univ. of Tennessee (Presentation: 08.07.10).

As in previous years, the SIG meeting was held jointly with the Neutron and Materials SIGs (Wed June 1st at noon). Gregory Halder was in attendance to represent the Powder SIG. Approximately 30 members were in attendance, and the meeting was chaired by Jim Kaduk, Chair of the Materials SIG. The combined Neutron, Powder and Materials SIGs decided on 10 sessions and 2 workshops to propose for the 2012 ACA Annual Meeting in Boston, all with confirmed session Chairs. The proposed workshops were: *Structural solution from Powder* (Andrey Yakovenko and Peter Stephens were mentioned as potential organizers) and a *K-12 School Teachers Workshop* (Potential Organizers: Cora Lind & Claudia Rawn, whom ran a similar workshop at the recent Chicago meeting). No formal applications had been prepared for these workshops at the time of the SIG meeting.

Gregory Halder represented the Powder SIG at the Friday planning meeting for the 2012 Annual Meeting. The following tentative program was assembled during the meeting with close collaboration with Jim Kaduk (Materials SIG) and Clarina Dela Cruz (Neutron SIG):

- Sun AM: Magnetic Materials (M/P/N) (Organizer: Ashfia Huq)
- Mon (full-day): Materials for a Sustainable Future (M/P/N, SAS) (Gregory Halder & Andrey Yakovenko)
- Tues AM: Local Structure (M/P/N) (Organizer: Thomas Proffen)
- Tues PM: In situ Studies (M/P/N) (Organizer: Antonio Dos Santos)
- Wed AM: Emerging Materials/Functional Materials (M/P/N) (Organizer: Xiaoping Wang)
- Wed PM: Phase-transitions in Inorganic Materials (M/P/N) (Organizer: Branton Campbell)

Gregory Halder
Powder Diffraction SIG Chair-Elect, 2011.