

Synchrotron Special Interest Group 2008 Activities

All the session topics put forward in the 2007 Synchrotron SIG planning meeting (Salt Lake City, Utah) were represented in the 2008 program. A full-day Joint session with the Neutron SIG entitled “Emerging Opportunities for X-ray and Neutron Scattering: New Sources & Techniques” gave attendees a glimpse of the many new capabilities that promise to be available to crystallographers in this unprecedented era of new source development. This session was well attended and well received. Speakers from many major synchrotron and neutron sources presented status and future plans.

The Synchrotron SIG also jointly sponsored a session devoted to micro-crystallography, a field of increasing importance. Another technique that is rapidly gaining popularity among protein crystallographers who use synchrotron sources is small-angle x-ray solution scattering (SAXS). The SIG cosponsored a session “Biological Applications of SAXS and SANS”. In addition to cosponsored sessions, the Synchrotron SIG also contributed to the transactions session on “Complementary methods for structure/function studies of biomolecules (SAXS + crystallography)”. Finally, a session originally proposed in the 2007 SIG meeting was converted to a popular full-day workshop “Wise Use of Dose: Structure Solvability vs. Structure Integrity”.

At the 2008 SIG meeting, members proposed the following sessions and workshops for the 2009 ACA meeting in Toronto: - “Instrumentation: Sources, Optics, Detectors”. Members particularly expressed interest in hearing about progress in desktop synchrotron and related sources.

- “Experiment Management and Standardization” (Workshop).
- “Complementary methods” (co-sponsored with SAS) - primarily BioSAXS
- “Diagnostics during Data Collection” (cosponsored with BioMac).
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Finally, nominations for the next chair for SIG Synchrotron for Chicago 2010 were solicited. The present chair (Richard E. Gillilan) sincerely thanks all those involved with bringing these activities to a successful conclusion.

Richard E. Gillilan, chair
Ernst Bergmann, chair-elect
James Holton, past-chair