

# Activities of the Small Angle Scattering Special Interest Group (2008)

At the 2008 Knoxville ACA meeting the SAS SIG sponsored 6 sessions, including the Transaction Symposium on Complementary Methods for Structure/Function Studies of Biomolecules co-sponsored with BioMAC and Synchrotron SIGs. The sessions on “Understanding the Nanoscale” and “Biological Applications of SAXS and SANS” sponsored by SAS-SIG continue to large attendance; based on the positive experience during the past 3 ACA meetings, there is a strong consensus within the SAS SIG to keep these two themes in the future meetings for continuity and growth of the community. The other three sessions, “Catalysis using SAXS and High energy scattering with PDF”, “Macromolecular Dynamics” and “Time resolved Scattering” were co-sponsored with Materials, Neutron/Synchrotron, and BioMAC SIGs respectively. Karen Mulfort of Northwestern University won the Margaret Etter Student Award from the SAS-SIG for her talk presented in the Catalysis session. This approach of having SAS oriented sessions and joint sessions with other SIGs enriches the scientific program of the ACA.

The steadily increasing interest of protein crystallographers in SAS for the study of biomacromolecular complexes provides strong motivation for both SIGs to continue to co-sponsor joint sessions. Furthermore, improvements in the SAS technologies including instrumentation and new algorithms that enable the measurement of better data and the retrieval of structural information of high confidence have increased the interest of structural biologists in learning the SAS technique. This was quite apparent by the attendance of over 30 participants, mostly structural biologists, at the Workshop #4, “Structural biology without crystals: SAS Methods”. These attendees expressed strong interest in having a “real” workshop to teach the SAS techniques hands-on with data good and bad in coming ACA meetings.

SAS-SIG is grateful for the services of Susan Krueger, Volker Urban, Carrie Wilmot, Vukica Srajer, P. Thiyagarajan, Ken Littrell, Greg Beaucage, Peter Chupas, Randall Winans, William Heller and Greg Hura in organizing the workshop and the SAS-SIG sponsored sessions that included 38 talks with speakers from US, Europe, Australia and Japan. We wish to thank P. Thiyagarajan (Chair 2008) for his leadership and service.

Twenty participants attended the 2008 SAS SIG meeting, where it was proposed to sponsor six sessions and one workshop for the 2009 ACA Meeting. It was agreed that SAS SIG will sponsor/co sponsor 6 sessions: “Characterization of surfaces and interfaces”, “Bio-macromolecular assemblies”, “Nanostructures”, “Modeling and simulation”, “Complementary techniques in biology” and “Membranes and associated proteins” along with a workshop on SAS applications in structural biology and nanomaterials, where experts will teach fundamentals of the techniques, data reduction, theory, applications and modeling of SAS data. An application will be made to the ACA educational committee for approval and funding. At the SIG meeting, Hiro Tsuruta and Francois Boue were nominated for the 2009 Chair Elect. Later Steven Weigand, Northwestern University was also nominated for the position. Thomas Weiss and Alec Sandy will continue to serve as Secretary/Treasurer and Member at Large, respectively, for 2007-2009. Nominees will be confirmed after a formal election later in the year by the full membership.

P. Thiyagarajan, 2008 Chair

Kenneth C. Littrell, 2009 Chair

(June 4, 2008)