



Small-angle Scattering Seminar Series

Organized by SAXS-SIG, Advanced Photon Source

A monthly seminar series, organized by Small Angle X-ray Scattering Special Interest Group (SAXS-SIG) at Advanced Photon Source, is focused on discussing, celebrating, and learning from new frontiers of science, research, and development based on small-angle scattering (SAS). This is a monthly seminar organized virtually over ZOOM where the speaker will be invited by SAXS-SIG. In order to join the seminar please subscribe to the small-angle mailing list here: <https://mailman.aps.anl.gov/mailman/listinfo/small-angle>

Upcoming Seminar

Date: May 25, 2022

Time: Wed, 11:00 AM (CST)

Speakers: Robert Dalglish, Najet Mahmoudi, Gregory Smith

Institution: ISIS Pulsed Neutron and Muon Source, Rutherford Appleton Laboratory, UK

Title: Small-Angle Scattering at the ISIS Neutron Source



Robert Dalglish, Najet Mahmoudi, and Gregory Smith
(ISIS Pulsed Neutron and Muon Source, RAL, UK)

Abstract: The ISIS Pulsed Neutron & Muon Source, located about an hour to the west of London, United Kingdom, is home to one of the largest and most productive collections of Small-Angle Neutron Scattering (SANS) instruments anywhere in the world. But ISIS is also a spallation neutron source, not unlike the SNS or J-PARC, meaning that SANS is performed using time-of-flight techniques. These confer a number of experimental advantages over SANS at traditional reactor-based sources, such as providing a very wide dynamic range in Q ($Q_{\max}/Q_{\min} > 300$), excellent wavelength resolution (typically 3 - 8%), better Q -resolution over more of the Q -range and, usefully, allows trade-offs between statistics

and Q-resolution to be made post-experiment. In this presentation we shall give an overview of ISIS, our SANS instrument suite, and our capabilities, illustrated by some scientific examples.

<https://www.isis.stfc.ac.uk/Pages/SANSgroup.aspx>