

Australasian Soft Matter Scattering Workshop

Thursday 11 February 2016 - Friday 12 February 2016

RMIT University, City Campus, Melbourne

Book of Abstracts

This workshop was designed to introduce researchers to a range of scattering techniques, with emphasis on their application to research in soft matter.

The workshop is suitable for experience researchers, ECRs and post-docs and PhD/Honours students.

The themes of the workshop are:

- Introduction to scattering formalism (applied to pulsed field gradient NMR, neutron, X-ray and light scattering techniques).
- Research seminars highlighting how these techniques have been applied to soft matter research.
- Data reduction, analysis and interpretation.
- The practicalities of accessing instrumentation, both laboratory based and at major facilities.

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Introduction to Scattering

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High-throughput SAXS characterisation and data analysis of lipid self-assembly materials

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SAXS analysis of nanopores collapse across polystyrene membranes during water evaporation

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Liquid nanostructure of ionic liquids from small angle X-ray scattering

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Advanced Light Scattering Techniques

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Introduction to Light Scattering: Getting the most out of DLS and SLS

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An introduction transmission SAXS.

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Introduction to Reflectivity

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Time of Flight and Maxwell's Demon

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Small and Wide Angle X-ray Scattering as a Complimentary Technique for the Determination of Amyloid Fibril Morphology

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Resonant soft X-ray scattering

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Pulsed field gradient spin-echo (PGSE) NMR

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Grazing incidence X-ray scattering

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Quantitative analysis of nano-structures by ASAXS

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X-ray scattering imaging and tomography of soft tissue

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TBC

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Deuterated Bacterial Cellulose nanofilms for Bio-macromolecules adsorption

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Combined Rheological Methods – Rheo-SANS and Rheo-SALS

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Supercooled Liquids: Determining the Role of Dynamics and Symmetry in Molecular Ordering

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Reflectivity, a tool for studying functionalised nanoemulsions

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