

A 21st Century View of Disordered Matter

An ISIS Disordered Materials Group Science Meeting with a thematic programme shaped by the research interests and enduring scientific vision of Prof. Alan Soper FRS

7th May 2018 – 9th May 2018

Milton Hill House Hotel and Conference Centre, Abingdon, Oxfordshire, UK

Monday 7th May 2017		
Arrival at venue at participant's convenience		
19:00 – 22:00	Dinner	Main Restaurant
Tuesday 8th May 2018		
09:00 – 09:10	Welcome	Daniel Bowron (STFC)
Pair Distribution Methods in Disordered Materials		
09:10 – 09:50	3D-PDF: Spin Liquids and Frustrated Solids	Andrew Goodwin (Oxford)
09:50 – 10:30	Disorder in network structures: from silicates to metal-organic frameworks	David Keen (STFC)
10:30 – 11:00	Tea/Coffee	
11:00 – 11:40	The structure of bioactive phosphate glasses using diffraction techniques and EPSR modelling	Emma Barney (Nottingham)
Applications of Neutron Scattering to Systems of High Complexity		
11:40 – 12:20	Water and biology: structural studies on the atomic scale	Sylvia McLain (Oxford)
12:20 – 13:20	Lunch	Restaurant Buffet
13:20 – 14:00	The putative liquid-liquid transition in confined water is a liquid-ice transition	Maria-Antonietta Ricci (Roma Tre)
14:00 – 14:40	Surfactants, Solvents & Silica: Probing self-assembly in solution	Karen Edler (Bath)
14:40 – 15:20	The structure of clay-water interfaces and the electric double layer	Neal Skipper (UCL)
15:20 – 15:50	Tea/Coffee	
15:50 – 16:30	Neutron scattering to study liquid phase heterogeneous catalysis	Chris Hardacre (Manchester)
The Shape and Direction of Neutron Scattering Instrumentation and Methods for Disordered Systems		
16:30 – 17:10	Structural Studies of Disordered Systems – Where we are and where we might like to go	Daniel Bowron (STFC)
17:10 – 17:50	Classical & Quantum Disorder – A Spectroscopic Perspective	Felix Fernandez-Alonso (STFC)
17:50 – 19:30	Free time	
19:30 – 22:00	Meeting Dinner	Main Restaurant
Wednesday 9th May 2018		
New Insights into Water and Aqueous Systems		
09:00 – 09:40	Phase transitions in aqueous aerosols	Thomas Koop (Bielefeld)
09:40 – 10:20	Molecular Recognition of Ice by Proteins: From Ice Nucleation to Antifreeze	Valeria Molinero (Utah)
10:20 – 10:50	Tea/Coffee	
10:50 – 11:30	Real-space molecular dynamics in water and aqueous solution of salt	Takeshi Egami (Tennessee)
11:30 – 12:10	Recent progress in atomistic simulations of water	Roberto Car (Princeton)
12:10 – 12:30	Closing remarks	Alan Soper (STFC)
12:30 – 14:00	Lunch	Restaurant Buffet
14:00	Close of meeting & departure	