Science and Technology Facilities Council
ISIS Neutron and Muon Source

40 Years of ISIS Neutron and Muon Source

SCIENCE ROADSHOW - CARDIFF

9-10 MAY 2024

DAY 1, Thursday, 09th of May, 2024	
11:30 - 12:40	Registration, lunch, and coffee – VJ Gallery
12:40 - 13:00	**Intro – Dr Philip King – ISIS Neutron and Muon Source**
13:00 - 13:20	**Intro – Professor Roger Whitaker – Cardiff University** Pro Vice Chancellor for Research, Innovation and Enterprise
Chaired by Dr Iva Manasi	
13:20 – 13:55	**Professor Adrian Porch – Cardiff University** Simultaneous microwave dielectric and structural studies of materials
13:55 – 14:10	**Dr Michael Barter – Cardiff University** Simultaneous microwave dielectric and structural studies of sulphur dioxide absorption in metal-organic frameworks
14:10 – 14:25	**Miss Holly Stockdale – University of Bristol** Self-assembly of novel catechol-containing copolymers in a nonpolar solvent
14:25 – 14:40	**Mr Edward Stuckey – ISIS Neutron and Muon Source, Royal Holloway** Using Neutron Reflectometry to determine how aerosols affect the temperature of our planet with time: combining experiments and modelling
14:40 – 14:55	**Mr Zac Amato – The Open University / ISIS Neutron and Muon Source** Exploiting Neutrons to Unveil Star-Formation: Exploring Dynamical Amorphous Ice Systems
14:55 – 15:25	**Tea and coffee break**
Chaired by Professor Sean Giblin	
15:25 – 16:00	**Dr Shirin Alexander – Swansea University** Neutron Scattering, a Powerful Tool to Study Green, Low-Surface Energy Materials
16:00 – 16:15	**Mr Liam Nagle Cocco – University of Cambridge** Displacive Jahn-Teller transition in NaNiO2
16:15 – 16:30	**Dr Adam Squires – University of Bath** Probing dynamic changes in soft matter self-assembly exploiting contrast-matching and small-angle neutron scattering
16:30 – 16:45	**Professor Martin Owen Jones – ISIS Neutron and Muon Source** Catalytic Systems at the Cutting Edge
16:45 – 17:00	**Mr James Steele – University of Cambridge** Bulk and Local Structural Evolution During Electrochemical Cycling in NaNiO2
17:00 – 17:30	**Poster session at the VJ Gallery**
19:30 – 21:00	**Dinner at the Botanist Cardiff**

Science and Technology Facilities Council
ISIS Neutron and Muon Source

40 Years of ISIS Neutron and Muon Source

SCIENCE ROADSHOW - CARDIFF

9-10 MAY 2024

DAY 2, Friday, 10th of May, 2024	
Chaired by Dr Alison Paul	
09:00 – 09:35	**Sir Professor Richard Catlow – Cardiff University** Neutron Scattering as a Tool in Catalytic Science
09:35 – 09:50	**Dr Sanghamitra Mukhopadhyay - ISIS Neutron and Muon Source** Structure and Dynamics of Organic Ferroelectrics using Neutron Scattering and First-principles Simulations
09:50 – 10:05	**Dr Iva Manasi – University of Bath / University of Bristol** Nanostructure in Amphiphile-Based Deep Eutectic Solvents
10:05 – 10:20	**Mr Paul Davis – University of Oxford** Crystal Structure Determination of Novel Topochemically Reduced Niobium and Tantalum Oxides Utilising Neutron and X-Ray Powder Diffraction
10:20 – 10:35	**Alexander O'Malley – University of Bath** The rise of QENS in catalytic science
10:35 – 11:05	Tea and coffee break
Chaired by Professor Martin Owen Jones	
11:05 – 11:40	**Professor Stephen Hayden – University of Bristol** ISIS and Spin fluctuations in Cuprate Superconductors
11:40 – 11:55	**Dr Anthony Higgins - Swansea University** Mixing and interfacial-width in thin-films of polymer and small-molecule organic electronic materials
11:55 – 12:10	**Miss Jing Ming – Queen Mary University of London** Dopant Clustering and Vacancy Ordering in Neodymium Doped Ceria
12:10 – 12:25	**Mr Christopher Allen – University of Bristol** Multiaxial strain measurements for multiscale modelling validation
12:25 -12:40	**Dr Alison Paul – Cardiff University** Polymer scattering across length scales: past successes and future challenges.
12:40-12:45	**Professor Sean Langridge – ISIS Neutron and Muon Source** Closing
12:40 – 13:30	**Lunch, tea and coffee**