**Functional Dense Metal-Organic Frameworks (FunDeMOF)**

**Oral Presentations**

**Tuesday 16th April 2024**

**Session 1 1-3:05 pm**

Chris Bowen “Design and manufacture of porous piezoelectric and pyroelectric materials and structures for energy harvesting”

Hamish Yeung “Phase behaviour and driving forces behind ferroelectricity in MDABCO-based perovskites”

Thomas Hitchings “Using Neutrons to Clarify the Ferroelectric Phases of Coordination Frameworks”

Paul Hodgkinson “Elucidating the origins of relaxor ferroelectricity in a dense MOF using solid-state NMR and neutron diffraction”

Subhajit Pal “Opto-electronic control domain manipulation in ferroelectric oxides”

**Session 2 3:50-5:50 pm**

Alexander Forse “Understanding Energy Storage in Layered Conducting Metal-Organic Frameworks”

Jiangtian Tan “Metal-organic nanosheet gel for differential cargo release”

Jamie Gittins “Tuning MOF-Electrolyte Interactions to Improve Energy Storage Performances”

Jem Pitcairn “Modulating magnetic dimensionality in metal-organic frameworks”

Chloe Balhatchet “Revealing Ion Adsorption and Charging Mechanisms in Layered Metal-Organic Framework Supercapacitors with Solid-State NMR”

**Poster Session and Dinner 6 pm**

**Session 3 9-10:20 am**

Xavier Moya “Caloric materials for sustainable heating and cooling”

Anthony Phillips “Origins and consequences of vibrational entropy in molecular perovskites”

Paul Saines “Optimising Magnetocaloric Frameworks through Targeted Magnetic Interactions”

**Session 4 10:50 am-12:30 pm**

Robert Armstrong “Rapid Synthesis and Electrode Optimisation of Organic Anodes for Sodium-Ion Batteries”

Tony Keene “Layered oxalate coordination polymers as precursors for battery cathode materials”

Quentin Gueroult “Thermal diffuse scattering of framework materials: a coarse-grained approach”

Sanjit Nayak “Metal-organic Frameworks and Their Biodegradable Polymer Composites for Controlled and Sustainable Delivery of Herbicides”

**Lunch and Departure 12:30 pm**

**Poster Presentations**

Andrew Cairns “Ferroelastic frameworks as a route to new multiferroics”

Celia Chen “Stabilising the active perovskite phase within a coordination polymer matrix”

Yin Chen “Coordination frameworks with random layer lattice structure”

Elizabeth Evans “S = $^{1}/\_{2}$ Kagome Magnets in the Two-Dimensional Limit”

Hebin Jang “Thermal effect of Metal-Organic Frameworks liquid intrusion”

Jordan James “Greener pathways for tetraoxolene metal-organic framework synthesis”

Rinku Kushwaha “Made to Measure Squaramide COF Cathode for Zinc Dual-Ion Battery with Enriched Storage via Redox Electrolyte”

Arad Lang “Thermal and Optical Properties of Meltable Two-Dimensional Hybrid Perovskite Blends”

Jem Pitcairn “Controlling noncollinear ferromagnetism in van der Waals metal-organic magnets”

Teedhat Trisukhon “Degradation of Conductive Layered Metal-Organic Frameworks Electrodes in Electrochemical Supercapacitors”