UKPorMat 2024 Programme

Day 1 – Tuesday 4th June 2024

9:30 - 10:20	**Registration** *Central Teaching Hub, University of Liverpool, L69 7BX*
10:20 – 10:30	**Alexandros Katsoulidis,** *University of Liverpool* Opening remarks
Session 1	Chair: Alexandros Katsoulidis, *University of Liverpool*
10:30 – 11:10	**Omar Farha**, *Northwestern University* Myths versus Reality: Smart and Programmable Crystalline Sponges from Basic Science to Implementation and Commercialization *Sponsored by Verder Scientific*
11:10 – 11:30	**Russell Morris**, *University of St Andrews* MOF-polymer composites in extruded cardiovascular catheters to overcome complications in heart procedures
11:30 – 11:50	**Darina Francesca Picchi**, *Imdea Energy* Smart drug nanocarriers: harnessing the synergy of inorganic nanoparticles and metal-organic frameworks in nanocomposites
11:50 – 12:10	**Ikeda Trashi**, *University of Texas at Dallas* Whole-cell therapeutic and prophylactic vaccines against UTI using Metal-Organic Framework
12:10 – 12:20	**Joshua Morris**, *Rigaku* The XtaLAB Family: Single Crystal Diffractometers for all porous materials and crystal sizes
12:20 – 13:30	*Lunch break*
Session 2	Chair: Robert Dawson, *University of Sheffield*
13:30 – 13:50	**Emma Wolpert**, *Imperial College London* Interplay of shape and interactions for porous molecular cage crystals
13:50 – 14:10	**Arun Gopalan**, *University of Manchester* Advanced Characterization and Featurization of MOF Pores for Adsorption
14:10 – 14:30	**Corraine McCready**, *University of Strathclyde* Are Generic Force Fields Adequate for Modelling Gas Adsorption in MOFs?
14:30 – 14:50	**Krunoslav Uzarevic**, *Ruder Boskovic Institute* Green and rational synthesis of porous MOFs and their non-conventional forms via mechanochemistry
14:50 – 15:20	*Break*
Session 3	Chair: Lauren McHugh, *University of Liverpool*
15:20 – 15:40	**Qiang Zhu**, *University of Liverpool* Soft Hydrogen-Bonded Organic Framework Constructed Using a Flexible Organic Cage Hinge
15:40 – 16:00	**Abbie Scholes**, *University of Liverpool* Solid State Behaviour of Substituted Isotrianglimines
16:00 – 16:20	**James Bour**, *Wayne State University* Relationships between defectivity and porosity in microporous organic polymers
16:20 – 17:00	**Magda Titirici**, *Imperial College London* Porous carbon materials as Na ion battery anodes and electrocatalysts for the oxygen reduction reaction in fuel cells *Sponsored by Materials Advances*
17:00 – 18:30	**Poster session** *Sponsored by Leverhulme Research Centre for Functional Material Design*
18:30	Depart for conference dinner
19:00	Conference dinner, *Museum of Liverpool, L3 1DG*

Day 2 – Wednesday 5th June 2024

Session 4	Chair: Anna Slater, *University of Liverpool*
9:00 – 9:40	**Peter Budd**, *University of Manchester* Polymers of Intrinsic Microporosity (PIMs) and their Membrane Applications *Sponsored by Surface Measurements Systems*
9:40 – 10:00	**Sara Rojas**, *University of Granada* Metal-Organic Frameworks for Sustainable Agriculture
10:00 – 10:20	**Yu Wang**, *University of Oxford* Orientation-dependent gas sensing behaviour of Cu-HHTP MOF films
10:20 – 10:40	**Sanjit Nayak**, *University of Bristol* Metal-organic frameworks and their biodegradable polymer composites for controlled and sustainable delivery of herbicides
10:40 – 11:10	*Break*
Session 5	Chair: Tim Easun, *University of Birmingham*
11:10 – 11:30	**Yujie Ma**, *University of Manchester* Capture and Catalytic Conversion of Environmental Pollutants in Defective MOF Materials
11:30 – 11:50	**Till Schertenleib**, *EPFL* Defect Induced Anisotropic Node Distortion in Amorphous MOFs: Low-Valent Zr Sites as Catalytic Hotspots
11:50 – 12:10	**Francesca Nerli**, *Pisa University* Tuning of the CO_2 adsorption mechanism in flexible F4_MIL-140A by ligand engineering
12:10 – 12:30	**Mollie Trueman**, *University of Manchester* Mechanistic understanding of MIL-53 microstructure evolution during breathing transformations revealed by in-situ atomic force microscopy
12:30 – 13:40	*Lunch break*
Session 6	Chair: Andrea Laybourn, *University of Nottingham*
13:40 – 14:20	**Robert Mokaya,** *University of Nottingham* Rational routes to porous carbons for sustainable energy applications
14:20 – 14:40	**Lisa Sun**, *Surface Measurements Systems* Influence of humidity on the sorption of CO_2 in prototypical porous materials: insight and challenges
14:40 – 15:00	**Jeroen Van den Reijen**, *Avantium* Accelerated R&D for carbon capture and utilization – high throughput experimentation applied effectively to real world challenges
15:00 – 15:30	*Break*
Session 7	Chair: Ross Forgan, *University of Glasgow*
15:30 – 15:50	**Poster prizes**
15:50 – 16:10	**Iryna Protsak**, *University of Vienna* Selective extraction of critical elements by silica-based materials
16:10 – 16:30	**Ruomeng Huang**, *University of Southampton* Mesoporous silica diffusive memristors for neuromorphic computing
16:30 - 17:10	**Wendy Queen**, *EPFL* The design of highly porous materials for globally relevant gas and liquid separations *Sponsored by Avantium*
17:10	**Ross Forgan**, *University of Glasgow* Closing remarks