

4<sup>th</sup> Annual UK Porous Materials  
Conference  
**UKPorMat 2019**

Cardiff University  
1<sup>st</sup> – 2<sup>nd</sup> July



# UKPorMat 2019 Programme

Day 1 – Monday, 1<sup>st</sup> July 2019

Time	Event
09:00 - 09:50	Conference Registration in the Viriamu Jones Gallery, Main Building, Cardiff University
09:50 - 10:00	<b>Timothy Easun</b> , Cardiff University <i>Welcome and opening remarks</i>
<b>Session 1</b>	Chair: Timothy Easun
10:00 - 10:40	<b>Caroline Mellot-Draznieks</b> , Collège de France <i>Functionalizing Metal-Organic Frameworks towards photocatalysis and molecular recognition</i>
10:40 - 11:00	<b>Miguel Jorge</b> , University of Strathclyde <i>Understanding the mechanism of formation of porous silica materials through multi scale modelling</i>
11:00 - 11:30	Coffee – VJ Gallery
<b>Session 2</b>	Chair: Thomas Bennett
11:30 - 11:50	<b>Dominic Bara</b> , University of Glasgow <i>Investigating the Synthesis and Flexibility of Trivalent MOFs</i>
11:50 - 12:10	<b>Pu Zhao</b> , University of Oxford <i>Structural dynamics of a metal-organic framework induced by CO<sub>2</sub> migration in its non-uniform porous structure</i>
12:10 - 12:30	<b>Lauren Macreadie</b> , Massey University <i>Hydrocarbon Adsorption within MOFs Containing a Contoured, Aliphatic Pore Environment</i>
12:30 - 12:50	<b>Sven Rogge</b> , Ghent University <i>Unravelling the Thermodynamic Criteria for Size-Dependent Spontaneous Phase Separation in Soft Porous Crystals</i>
12:50 - 13:00	<b>Thomas Bennett</b> , University of Cambridge <i>Message from RSC Porous Materials Interest Group Chair</i>
13:00 - 14:00	Lunch and RSC Porous Materials Interest Group Annual Meeting
<b>Session 3</b>	Chair: Andrea Laybourn
14:00 - 14:40	<b>Xiaodong Zou</b> , Stockholm University <i>Ab Initio Structure Determination and Phase Analysis of Porous Materials by 3D Electron Diffraction</i>
14:40 - 15:00	<b>Ronny Pini</b> , Imperial College London <i>Digital adsorption: 3D imaging of adsorption equilibria and dynamics in technical microporous solids</i>
15:00 - 15:20	<b>Francesca Firth</b> , University of Cambridge <i>Using Defect Engineering in Synthesis to create New Phases of UiO Family MOFs</i>
15:20 - 15:30	<b>Sheena Hindocha</b> , Knowledge Transfer Network <i>Introduction to KTN and the UK innovation support landscape</i>
15:30 - 16:00	Coffee
<b>Session 4</b>	Chair: Tina Düren
16:00 - 16:20	<b>Qilei Song</b> , Imperial College London <i>Microporous Polymer Membranes for Energy Conversion and Storage</i>
16:20 - 16:40	<b>Alex James</b> , University of Sheffield <i>Synthesis of solvent dispersible porous polymeric particles via RAFT-mediated PISA</i>
16:40 - 17:20	<b>Neil McKeown</b> , University of Edinburgh <i>Porous Materials without a Framework</i>
17:30 - 19:00	Poster Session – VJ Gallery
19:30 -	<b>Conference Dinner</b> ZERODEGREES, 27 Westgate Street Cardiff, CF10 1DD (close to Principality stadium and Central train station)

**Day 2 – Tuesday, 2<sup>nd</sup> July 2018**

Time	Event
<b>Session 5</b>	Chair: Darren Bradshaw
09:00 - 09:40	<b>**Sponsored by Chemical Science**</b> <b>Paolo Falcaro</b> , Graz University of Technology <i>Porous Biocomposites Prepared via Biomimetic Mineralization of MOFs</i>
09:40 - 10:00	<b>Ifty Ahmed</b> , University of Nottingham <i>Manufacturing Highly Porous Phosphate Glass Microspheres for Bone Regenerative Orthobiologic Applications</i>
10:00 - 10:20	<b>Shichun Li</b> , University of Cambridge <i>Chemical Stability and Thermo-Mechanical Property of Bulk Metal-Organic Framework Glasses and Crystal-Glass Composites</i>
10:20 - 10:50	Coffee – VJ Gallery
<b>Session 6</b>	Chair: Ross Forgan
10:50 - 11:30	<b>**Sponsored by Communications Chemistry**</b> <b>Camille Petit</b> , Imperial College London <i>Approaches to Materials Development to Address Separation Challenges</i>
11:30 - 11:50	<b>Shane Telfer</b> , Massey University <i>Gas Separations using Sustainable and Robust Metal-Organic Frameworks</i>
11:50 - 12:10	<b>Lydia Briggs</b> , University of Manchester <i>A bimetallic Metal organic framework balancing the requirements between enhanced gas uptake and maintaining selectivity</i>
12:10 - 12:30	<b>Hamish Yeung</b> , University of Oxford <i>Control of Metal–Organic Framework Crystallization by Metastable Intermediate Pre-equilibrium Species</i>
12:30 - 13:30	Lunch – VJ Gallery
<b>Session 7</b>	Chair: Thomas Bennett
13:30 - 13:50	<b>Rachel Kearsey</b> , University of Liverpool <i>Accelerating the discovery of Type II porous liquids using high-throughput automation</i>
13:50 - 14:10	<b>Jonathan Foster</b> , University of Sheffield <i>Programmable Two-dimensional Materials for Sensing, Catalysis and Solar Cells</i>
14:10 - 14:30	<b>Shaojun Xu</b> , University of Manchester <i>Sustaining metal-organic frameworks for water-gas shift catalysis by non-thermal plasma</i>
14:30 - 14:50	<b>Alex Forse</b> , U. C. Berkeley <i>NMR Studies of Adsorption and Diffusion in New Materials for CO<sub>2</sub> Capture</i>
14:50 - 15:20	Coffee – VJ Gallery
<b>Session 8</b>	Chair: Andrea Laybourn
15:20 - 15:40	<b>Jenny Vitillo</b> , University of Insubria <i>Single Fe(II) sites in MIL-type metal organic frameworks for the oxidation of light alkanes to alcohols</i>
15:40 - 16:00	<b>Alex Katsoulidis</b> , University of Liverpool <i>Chemical control of structure and guest uptake by a conformationally mobile porous material</i>
16:00 - 16:40	<b>Lee Brammer</b> , University of Sheffield <i>MOF Flexibility and Guest Response</i>
16:40 - 16:50	Poster Prizes and Close

UKPorMat 2019 is kindly sponsored by:



*The Science and Technology of Small Particles™*



**NETZSCH**



**Surface Measurement Systems**  
World Leader in Sorption Science

fluor**ochem**



**SciMED**



*materials*

an Open Access Journal by MDPI



*inorganics*

an open access journal by MDPI



*crystals*

an Open Access Journal by MDPI

# Chem



**Rigaku**

oxford diffraction



COMMUNICATIONS  
**CHEMISTRY**

**CrystEngComm**

**Materials  
Horizons**

Editorial Board Chair  
Seth Marder

\*2018 Journal Citation Reports based on 2017 Web of Science data. © Clarivate Analytics, 2018

IMPACT  
FACTOR  
13.183\*

**Chemical  
Science**

Editor-in-chief  
Andrew Cooper

\*2018 Journal Citation Reports based on 2017 Web of Science data. © Clarivate Analytics, 2018

OPEN ACCESS

IMPACT  
FACTOR  
9.063\*

**ChemComm**

Editorial Board Chair  
Véronique Gouverneur

\*2018 Journal Citation Reports based on 2017 Web of Science data. © Clarivate Analytics, 2018

IMPACT  
FACTOR  
6.290\*

**CARDIFF  
UNIVERSITY**

**PRIFYSGOL  
CAERDYDD**

Cardiff Materials  
Research Network

Rhwydwaith Ymchwil  
Deunyddiau Caerdydd