



UK Catalysis Hub Summer Conference 1st – 2nd July 2025

Harwell Campus, Pickavance Theatre, Rutherford Appleton Laboratory, Harwell Campus

Day One: 1/7/25

Session 1	<u>Digital Chemistry</u>	Pickavance Lecture Theatre (R22)
Chair:	Prof. Adrian Mulholland, Bristol	
12.00 -12.05	Welcome - Introduction	Prof Charlotte Williams, Oxford
12.05 -12.45	Keynote Speaker: Dr. German Sastre, ITQ	Computational insights into mxenes and zeolites as catalysts
12.45 -13:05	ECR Speaker: Dr. Becky Greenaway, Imperial	High-Throughput Approaches for the Discovery of Molecular Organic Materials
13.05 -13:45	Dr. Carlos M. Fonte, Johnson Matthey	From Electrons to Reactors: ab initio multi-scale simulation of methane oxidation over palladium oxide
13:45 -14:05	ECR Speaker: Dr. Filip Szczypinski, Durham	Data-driven discovery in supramolecular chemistry

14:05 -14:55 BUFFET LUNCH – COFFEE LOUNGE (R22)

Session 2	<u>Sustainability</u>	Pickavance Lecture Theatre (R22)
Chair:	Prof. Charlotte Williams, Oxford	
14:55-15:00	Introduction	
15:00-15:40	Keynote Speaker: Prof. Donna Blackmond, Scripps	Non-classical Nonlinear Effects in Asymmetric Catalysis
15:40-16:20	Prof. Michael Neidig, Oxford	Down the Rabbit Hole: Illuminating the Organoiron Species Central to Chemical Synthesis
16:20- 16:40	ECR Speaker: Dr. Kris Altus, York	Room Temperature Ethene to Propene (ETP) using a Cascade of Solid-State Molecular Organometallic Catalysts
16:40-17:00	ECR Speaker: Frederica Butler, Oxford	Uncovering Structure-Activity Relationships in Sustainable Polymerisation Catalysis
17:00 -18.00	Poster Session, Diamond Light Source Atrium	
18:00	Coach to The Crown & Thistle (pre-booked for 53pp)	
19.30	Dinner Invitation only: The Crown & Thistle, Abingdon	

40 min keynote talks (35 mins talk + 5 mins Q&A)

20 min PDRA talks (15 mins talk + 5 mins Q&A)

8:30 -9:00	Tea and Coffee	Coffee Lounge (R22)
Session 3	Advanced Characterization	Pickavance Lecture Theatre (R22)
Chair:	Prof. Richard Catlow, Cardiff/ UCL	
9:10-09:15	Introduction	
9.15 -9.55	Keynote Speaker: Prof. Annemie Bogaerts, Antwerp - <i>virtually</i>	Plasma catalysis: Knowledge gaps towards creating real synergy
9.55 -10.15	ECR Speaker: Dr. Ines Lezcano Gonzalez, Manchester	Exploring the Impact of Cage Size and Framework Topology on Methanol-to-Olefins using Operando Spectroscopy
10.15 -10.35	ECR Speaker: Dr. Linqun Kang, Max Planck Institute for Chemical Energy Conversion	Operando AP-XPS/NEXAFS Investigation of Surface Nitrogen Dynamics in Fe-Co Ammonia Decomposition Catalysts
10.35 -11.15	Q&A on Equipment with Prof. Andrew Beale, UCL/Finden Ltd.	
11.15 -11.35	Break: Tea and Coffee, Coffee Lounge (R22)	
Session 4	Net Zero	Pickavance Lecture Theatre (R22)
Chair:	Dr. Amanda Jarvis, Edinburgh	
11.35 -11.40	Introduction	
11.40 -12.20	Keynote Speaker: Prof. Ian Metcalfe, Newcastle	Engineering chemical reactor technologies for a low-carbon energy future
12:20 -12:40	ECR Speaker: Dr. Josh Makepeace, Birmingham	Probing Li-N-H catalysts for ammonia synthesis and decomposition
12.40 -13.20	Prof. Stephen Wallace, Edinburgh	Microbial Metabolites for Catalytic Hydrogenation
13.20 -13.40	ECR Speaker: Dr. Rich Wingad, Cardiff	Conversion of renewable feedstocks to advanced synthetic fuels by homogeneous Guerbet catalysis
13:40-13.45	<i>Closing Remarks</i>	
14:00 -14:45	Buffet Lunch, Coffee Lounge (R22)	
15:30	Close	