

4th September

Industrial Catalysis

Chair: Mike Bowker [TBC]

13:00	Registration opens / coffee
13:30	Introduction from Prof Justin Hargreaves
13:35	Plenary 1: <i>Gordon Kelly (Johnson Matthey)</i> <i>Fischer-Tropsch Catalysis – Exciting New Opportunities for a Venerable Reaction</i>
14:20	Talk 1 <i>Simon Beaumont (University of Durham)</i> <i>Understanding the role of promoters in enabling deactivation of cobalt catalysts by water oxidation using Near Ambient Pressure XPS</i>
14:40	Talk 2 <i>Cathy Dwyer (Drochaid Research Services)</i> <i>The Greening of Industry through Catalysis</i>
15:00	Talk 3 <i>David Jackson (University of Glasgow)</i> Career overview
15:20	Coffee break

Chair: Lynn Gladden [TBC]

15:50	Keynote 1: <i>Keith Whiston (Koch Energy Solutions)</i> <i>Catalyst Coordination studies in the p-Xylene Oxidation Process</i>
16:20	Talk 4 <i>Ian Silverwood (STFC ISIS Facility)</i> <i>Polarisation Analysis: Improved Measurement of Diffusion with Quasielastic Neutron Scattering</i>
16:40	Talk 5 <i>Mick Mantle (University of Cambridge)</i> <i>A new PFG-NMR based method to determine gas phase molecular intra-crystalline self-diffusivities in micro-porous materials</i>
17:00	Talk 6 <i>Andy York (Johnson Matthey)</i> <i>Spaci-MS for Investigating Emissions Control Catalysts: An Industrial Perspective</i>
17:20	Poster session 1

5th September - morning

Mechanism

Chair: Michael Stockenhuber [TBC]

9:00	Plenary 4: Lynn Gladden (University of Cambridge) <i>Operando Magnetic Resonance Studies of Heterogeneous Catalysis and Reactor Characteristics at the Pellet Scale</i>
9:45	Talk 19 Maria Golubeva (Russian Academy of Sciences) <i>In situ formation of transition metal phosphide and oxide catalysts for hydrodeoxygenation reaction</i>
10:05	Talk 20 Xiaodong Wang (Lancaster University) <i>Heterogeneous catalysis mediated cofactor regeneration for biosynthesis</i>
10:25	Talk 21 Jordon Ward-Williams (University of Cambridge) <i>Exploring the Solvent Effect on the Heterogeneous Hydrogenation of Citral Through the use of NMR Relaxometry</i>
10:45	Coffee break
Chair: Simon Beaumont [TBC]	
11:15	Keynote 4: Chris Mitchell (SABIC) <i>Light alkane dehydrogenation in an industrially important process.</i>
11:45	Talk 22 Angela Daisley (University of Glasgow) <i>Experimental and Theoretical Investigations on the Anti-Perovskite Nitrides Co₃CuN, Ni₃CuN and Co₃MoN for Ammonia Synthesis</i>
12:05	Talk 23 Dave Willock (Cardiff University) <i>The coverage of hydrogen on Pd (111) and (100) surfaces as a function of partial pressure and temperature.</i>
12:25	Talk 24 Russell Howe (University of Aberdeen) <i>Low Temperature Alkene Oligomerisation in Single Crystals of ZSM-5 Studied by Synchrotron Infrared Micro-spectroscopy</i>
12:45	Wrap up
12:50	Lunch

5th September - afternoon

Reaction Testing

Chair: Simon Kondrat [TBC]

13:45	Plenary 3: <i>Alan Algeier (University of Kansas)</i> <i>Sustainable monomers for a circular economy: ring-opening hydrogenolysis of furanic compounds.</i>
14:30	Talk 13 <i>James McGregor (University of Sheffield)</i> <i>Catalytic Hydrothermal Conversion of Carbon Dioxide and Organic Waste under Sub-Critical Conditions</i>
14:50	Talk 14 <i>Nicola Rouse (University of Aberdeen)</i> <i>Transfer hydrogenation of carbon dioxide with bio-derived glycerol over zeolite-based catalysts</i>
15:10	Talk 15 <i>Graham Hutchings (Cardiff University)</i> <i>Catalysis using gold containing materials</i>
15:30	Coffee break
Chair: Gordon Kelly [TBC]	
16:00	Keynote 3: <i>Alan McCue (University of Aberdeen)</i> <i>Insights into catalyst design for selective alkyne hydrogenation</i>
16:30	Talk 16 <i>Annelouise McCullagh (University of Glasgow)</i> <i>Application of alumina supported Pd catalysts for nitrobenzene hydrogenation to aniline: Site-selective chemistry</i>
16:50	Talk 17 <i>Yuji Ma (University of Manchester)</i> <i>Plasma-Assisted Catalysis in Metal-Organic Frameworks Incorporating Efficient Active Sites</i>
17:10	Talk 18 <i>Phil Davies (Cardiff University)</i> <i>The photocatalytic activity of spin coated Cu doped films studied by XPS and PiFM</i>
17:30	Poster session - no drinks
19:30	Conference dinner, 1 The Square, University Main Building

6th September

Deactivation

Chair: Russell Howe [TBC]

9:05	<i>Plenary 2: Martin Lok (Catalok Consultancy) Trends in Hydrogenation Catalysis?</i>
9:50	<i>Talk 7 Pauline Glen (Johnson Matthey) Reducing deactivation in CuZnAl methanol synthesis catalysis via use of a silicon-based promoter</i>
10:10	<i>Talk 8 Maurice Mourad (Avantium) High-throughput testing to accelerate research on the conversion of CO₂ to methanol</i>
10:30	<i>Talk 9 John Birtill (University of Glasgow) Determination of the axial catalyst decay profile from parallel micro-reactor tests</i>
10:50	Coffee break

Chair: Alan Algeier [TBC]

11:20	<i>Keynote 2: Michael Stockenhuber (University of Newcastle, Australia) New catalyst development aided by understanding deactivation in redox catalysis</i>
11:40	<i>Talk 10 Simon Kondrat (Loughborough University) Studying Alkali Species in Catalysis & Beyond: Potassium K-edge XAS</i>
12:00	<i>Talk 11 Lucy Costley-Wood (University of Glasgow) Palladium on ceria zirconia: a thousand-hour diffraction experiment</i>
12:20	<i>Talk 12 Mike Bowker (Cardiff University) Ethene disproportionation, C segregation and dissolution in Pd catalysts</i>
12:40	Lunch