

# Contemporary Catalysis for a Sustainable World

## 7<sup>th</sup> UK-Japan Catalysis Meeting

Department of Chemistry, University of Oxford

**Monday 17<sup>th</sup> April** – PTCL Lecture theatre, Department of Chemistry

8.50 Welcome – Prof. Darren Dixon (Chair)

9.00 **Prof. Keiji Maruoka**, Kyoto University

“Asymmetric Three-Component Radical Coupling Reaction of Vinylarenes by Chiral Cu(I)/BN-BOX Hybrid Catalysis”

9.35 **Prof. Martin Smith**, University of Oxford

“Controlling Axial Chirality”

10.10 **Prof. Yoshiji Takemoto**, Kyoto University

“Chemical Modification of Peptides via *N*-Chloroamide”

10.45 – 11.15 Coffee

Chair - Prof. Motomu Kanai

11.15 **Prof. Stephen Fletcher**, University of Oxford

“Additions to Racemates: A Strategy for Developing Asymmetric Cross-Coupling Reactions”

11.50 **Prof. Takashi Ooi**, Nagoya University

“Organic Zwitterions for Hydrogen Atom Transfer Catalysis”

12.25 **Prof. Ian Fairlamb**, University of York

“Why Understanding Mechanisms in Cross-Coupling Catalysis is Important: Going off the Beaten Track”

1.00 – 2.00 Lunch

Chair - Prof. Michael Willis

2.00 **Prof. Hirohisa Ohmiya**, Kyoto University

“Radical Catalysis”

2.35 **Prof. Sarah Lovelock**, University of Manchester

“Biocatalytic Approaches to Nucleic Acid Therapeutics Manufacturing”

3.10 – 3.40 Tea

Chair - Prof. Masahiro Terada

3.40 **Prof. Michael Willis**, University of Oxford

“New Catalytic Reactions and Functional Groups for Discovery Chemistry”

4.15 **Prof. Yoshiaki Nakao**, Kyoto University

“C–H Functionalization by Cooperative Metal Catalysis”

5.00 – 6.00 Poster session (CRL)

**Tuesday 18<sup>th</sup> April** – PTCL Lecture theatre, Department of Chemistry

Chair - Prof. Yoshiaki Nakao

9.00 **Prof. Robert Phipps**, University of Cambridge  
“Using Chiral Cations to Exert Control in Transition Metal Catalysis”

9.35 **Prof. Motomu Kanai**, University of Tokyo  
“Catalytic Activation and Functionalization of Hydrocarbons”

10.10 **Prof. James Bull**, Imperial College London  
“Catalytic Synthesis of Heterocycles”

10.45 – 11.15 Coffee

Chair - Prof. Ed Anderson

11.15 **Prof. Kei Ohkubo**, Osaka University  
“Selective Aerobic Oxygenation of Hydrocarbons using Photoredox Catalysts with Molecular Oxygen”

11.50 **Prof. Peter Knipe**, Queen’s University, Belfast  
“Catalytic Asymmetric Synthesis of C-N Atropisomers”

12.25 **Prof. Ryoichi Kuwano**, Kyushu University  
“Enantioselective Hydrogenation of Carbocyclic Arenes”

1.00 – 2.00 Lunch

Chair - Prof. Jonathan Burton

2.00 **Prof. Rebecca Melen**, Cardiff University  
“Lewis Acidic Boranes as Catalysts for Carbene Transfer Reactions”

2.35 **Prof. Jun Takaya**, Tokyo Institute of Technology  
“Merging Two Transition Metals/Two Reactions for Transformation of Unreactive Bonds and Molecules”

3.10 – 3.40 Tea

Chair - Prof. Keiji Maruoka

3.40 **Prof. Masahiro Terada**, Tohoku University  
“Enantioselective Catalysis by Higher Order Organosuperbase”

4.15 **Prof. Darren Dixon**, University of Oxford  
“New Catalytic Approaches for Simplifying Complex Molecule Synthesis”

Close - Prof. Keiji Maruoka/Prof. Hirohisa Ohmiya