

## 8th UK-Japan Catalysis Meeting

25 September, 2024 – Obaku Plaza Kihada Hall, Uji Campus, Kyoto University

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09:45-10:30 Reception

10:30-10:45 Welcome – Prof. Takashi Ooi

Chair – Prof. Takashi Ooi

10:45-11:10 **Lecture 1 (L1: Prof. Darren Dixon)**  
"Catalyst Control in Complex Molecule Synthesis"

11:10-11:35 **Lecture 2 (L2: Prof. Hirohisa Ohmiya)**  
"Radical Catalysis"

11:35-12:00 **Lecture 3 (L3: Prof. Martin Smith)**  
"New Directions in Energy Transfer Photocatalysis"

12:00-13:15 Lunch break

Chair – Prof. Darren Dixon

13:15-13:30 **Lecture Y1 (Y1: Prof. Naoki Shida)**  
"The Electrolyte is a Catalyst: Electrochemical Multielectron Oxidation of Thiophene-derivatives via Anion-Coordination"

13:30-13:45 **Lecture Y2 (Y2: Prof. Koji Kubota)**  
"Mechanoredox: Force-Induced Charge Transfer Catalysis"

13:45-14:10 **Lecture 4 (L4: Prof. Masahiro Terada)**  
"Computational Molecular Refinement to Enhance Enantioselectivity by Reinforcing Hydrogen Bonds"

14:10-14:35 **Lecture 5 (L5: Prof. Allan Watson)**  
"A polarity mis-matched photocatalytic cross-coupling"

14:35 Group photo

14:35-15:50 Coffee break and Poster session

Chair – Prof. Masahiro Terada

15:50-16:15    **Lecture 6 (L6: Prof. Keiji Maruoka)**

“Design of HAT Catalysts for Late-Stage Functionalization”

16:15-16:40    **Lecture 7 (L7: Prof. John Bower)**

“Heterocyclizations and Cross-Couplings Enabled by Stereocontrolled Alkene Functionalization”

16:40-17:05    **Lecture 8 (L8: Prof. Motomu Kanai)**

“Catalytic Asymmetric Synthesis of 1,3-Polyols from Scratch”

17:05-17:30    **Lecture 9 (L9: Prof. Jonathan Burton)**

“Are Allyl Oxonium Ions Plausible Biosynthetic Intermediates? Oxonium Ions, Total Synthesis and Structure Determination”

18:00-           Mixer (@Cafe restaurant Kihada)

Chair – Prof. Michael Willis

- 9:30-9:55      **Lecture 10 (L10: Prof. Shigeki Matsunaga)**  
“Development of Chiral Catalysts for Asymmetric C-H Functionalization”
- 9:55-10:20    **Lecture 11 (L11: Prof. Jonathan Clayden)**  
“Biocatalytic Reaction Networks for Dynamic Deracemization and Directional Rotation”
- 10:20-10:40    Coffee break

Chair – Prof. Motomu Kanai

- 10:40-11:05    **Lecture 12 (L12: Prof. Mio Kondo)**  
“Development of Artificial Catalytic Systems Inspired by Natural Photosynthesis”
- 11:05-11:30    **Lecture 13 (L13: Prof. Susannah Coote)**  
“Photocyclizations as Enabling Atom-Economical Synthetic Transformations”
- 11:30-11:55    **Lecture 14 (L14: Prof. Jun Takaya)**  
“Unveiling the Photoreactivity of Frustrated Lewis Pairs”
- 11:55-13:25    Lunch break

Chair – Prof. Martin Smith

- 13:25-13:40    **Lecture Y3 (Y3: Prof. Takuya Kodama)**  
“Syntheses and Reactivities of Metallylenes Bearing a Phenalenyl-Based Bidentate Ligand”
- 13:40-13:55    **Lecture Y4 (Y4: Prof. Yuki Nagashima)**  
“Organic Photoreactions Utilizing Electropositive Elements”
- 13:55-14:20    **Lecture 15 (L15: Prof. Rebecca Goss)**  
“PRrecision Molecule EDiting (PRIMED for Diversification)”
- 14:20-14:45    **Lecture 16 (L16: Prof. Naoki Ishida)**  
“Dehydrogenative Coupling with Liberation of H<sub>2</sub>”

14:45-15:15 Coffee break

Chair – Prof. Hirohisa Ohmiya

15:15-15:40 **Lecture 17 (L17: Prof. Kei Murakami)**

“Harnessing catalytic synthesis of nitrogen-containing molecules and plant chemical biology”

15:40-16:05 **Lecture 18 (L18: Prof. Michael Willis)**

“New catalytic reactions for and with sulfur functional groups”

16:05-16:30 **Lecture 19 (L19: Prof. Takashi Ooi)**

“Development of Multifunctional Photocatalysts”

16:30-16:50 Close (Prof. Darren Dixon)