

# Catalysis improving society

Monday 8 – Tuesday 9 June 2015

Organised by Professor Graham Hutchings FRS, Professor Richard Catlow FRS, Professor Christopher Hardacre and Professor Matthew Davidson

THE  
ROYAL  
SOCIETY

DAY 1				DAY 2			
SESSION 1: Catalyst design Chair: Richard Catlow FRS		SESSION 2: Catalysis and energy Chair: Christopher Hardacre		SESSION 3: Catalysis and the environment Chair: Graham Hutchings FRS		SESSION 4: Making materials for catalysis Chair: Matthew Davidson	
09:00	Welcome by Sir Martyn Poliakoff FRS & Graham Hutchings FRS						
09:05	<b>Avelino Corma</b> Catalysts from design to application	13:30	<b>Petra Cameron</b> Catalysis for biological fuel cells	09:00	<b>Walter Leitner</b> Catalysis and Green Chemistry	13:30	<b>Joachim Sauer</b> Micropore structure and catalytic activity of zeolites
09:30	Discussion	14:00	Discussion	09:30	Discussion	14:00	Discussion
09:45	<b>Fraser Armstrong FRS</b> Reversible electrocatalysis by enzymes of relevance to renewable energy conversions	14:15	<b>Matthew Rosseinsky FRS</b> Experiment and computation in the discovery of new catalysts	09:45	<b>Duncan Wass</b> Catalysis for in situ repairs of structural composites	14:15	<b>Charlotte Williams</b> Developing catalysts to prepare polymers from renewable sources
10:15	Discussion	14:45	Discussion	10:15	Discussion	14:45	Discussion
10:30	Coffee	15:00	Tea	10:30	Coffee	15:00	Tea
11:00	<b>Cynthia Friend</b> Surface reactions: Informing catalyst design through fundamental studies	15:30	<b>Karen Wilson</b> Designing heterogeneous catalysts for biorefining	11:00	<b>Louise Olsson</b> Emission control	15:30	<b>CNR Rao FRS</b> Artificial photosynthesis and the generation of hydrogen by water splitting
11:30	Discussion	16:00	Discussion	11:30	Discussion	16:00	Discussion
11:45	<b>Peijun Hu</b> Rational catalyst design using DFT calculations	16:15	<b>Poster session</b>	11:45	<b>Nicholas Turner</b> Design and evolution of biocatalysts for organic synthesis	16:15	<b>Panel discussion/overview (future directions)</b> <b>Sir John Meurig Thomas FRS</b>
12:15	Discussion			12:15	Discussion		
12:30	LUNCH	17:00	CLOSE	12:30	LUNCH	17:00	CLOSE

correct as of 3 June 2015 – subject to change