

**Catalysis Winter School 2012**  
**Oxford University / Imperial College London / University College London**  
**St Catherine's College, Oxford**

**Monday 17<sup>th</sup> December**

12.00 – 12.45	Arrival and check in at St Catherine's College, Oxford
1.00 – 1.45	Lunch (Hall)
1.55 – 2.00	Welcome
2.00 – 2.30	<b>Andrew Schwarz (Ox):</b> Titanium Hydrazido Complexes: Stoichiometric and Catalytic Reactions of the Ti=N-NR <sub>2</sub> Functional Group
2.30 – 3.00	<b>Alberto Roldan (UCL):</b> Insights on CO <sub>2</sub> Reduction On Bio-Inspired (Fe,Ni) <sub>S</sub> Catalyst
3.00 – 3.30	<b>Michaela Grau (IC):</b> Coordination Chemistry of Iron(II) Complexes With Pentadentate Ligands and Their Application in Oxidation Catalysis
3.30 – 4.00	Coffee/Tea (please put up posters)
4.00 – 4.30	<b>Suzannah Hexter (Ox):</b> A model of surface immobilised electrocatalysis: Using the complexity of enzymes to simplify general surface electrochemistry
4.30 – 5.00	<b>Deji Sasegbon (IC):</b> Flux Response Technology Applied in in-situ Sorption and Diffusion Measurements
5.00 – 6.00	<b>Plenary Lecture: Professor Richard Catlow (UCL):</b> Computer modelling as a tool in catalytic science
6.00 – 7.00	Posters (please see attached for titles). Beer and soft drinks provided.
7.00 – 8.00	Dinner (Hall)
8.00 – 9.00	Posters (7 from each institution) and further discussions (college bar).

**Tuesday 18<sup>th</sup> December**

8.00 – 9.00	Breakfast (Hall)
9.00 – 9.30	<b>Dr Nikos Dimitratos (UCL)</b> Catalysis at Harwell
9.30 – 10.00	<b>Clare Bakewell (IC):</b> Bis(quinolinolato)aluminium ethyl and yttrium phosphasalen complexes: New iso-selective initiators for rac-lactide ring-opening polymerization
10.00 – 10.30	<b>Paul Koovits (UCL):</b> The development of an enantioselective tandem reductive nitro-Mannich reaction using thiourea catalysis
10.30 – 11.00	Coffee/tea
11.00 – 11.30	<b>Craig Johnston (Ox):</b> Enantio- and Diastereoselective Synthesis of Indanes via Chiral Counterion Catalysis
11.30 – 12.00	<b>Noor Al-Rifah (UCL):</b> Heterogeneously catalysed selective oxidation of alcohols in microstructured reactors
12.00 – 1.00	<b>Plenary Lecture: Professor Ben Davis (Ox):</b> Sugars and Proteins
1.00 – 1.45	Lunch (Hall) then depart.
2.00 – 4.00	GTN Management meeting (invitees only)

**Confirmed poster titles:**

**Odd numbers present between 6.00–6.30; even 6.30–7.00**

1. **Laura Sewell (Ox):** Using the  $\{\text{Rh}(\text{PCy}_3)_2\}^+$  fragment to study the mechanism of dimethylamine-borane ( $\text{H}_3\text{B.NMe}_2\text{H}$ ) dehydrocoupling
2. **Ed Emmett (Ox):** Sulfonyl group incorporation using palladium catalysis and DABSO
3. **Adam Healy (Ox):** New insights into bio-catalytic hydrogen oxidation using electrochemistry coupled with infrared spectroscopy
4. **Anne Kornahrens (Ox):** Advances in the Total Synthesis of Streptonigrin
5. **Elena Benedetto (Ox):** Regio- and stereoselective synthesis of allylic fluorides via iridium catalysis
6. **Jean Charles–Buffet (Ox):** Lactide Polymerisation with Group 4 Permethylpentalene Complexes
7. **Simon Jones (Ox):** Modified Palladium Nanoparticles for Hydrogen production from Formic acid
8. **Thomas Herrington (IC):** Boron-Phosphine and Silicon-Phosphine Lewis Pairs at the Frustrated/Classical Interface for the Hydrogenation of Small Molecules'
9. **Steven Lal (IC):** Clicking along nicely – copper(I)-catalysed cycloaddition reactions
10. **Adi Nako (IC):** A metal–amide dependent, catalytic C–H functionalisation of triphenylphosphonium methylyde
11. **Bryan Ward (IC):** Calcium-mediated Intermolecular Hydrophosphination Catalysis: A Computational Investigation
12. **Simon Sung (IC):** Understanding the Mechanism and Role of Chelating Ligands in the Copper-Catalysed Modified Ullmann Reaction
13. **Alex Jones (IC):** Development of a Catalytic System for Asymmetric Bromolactonisation
14. **Andy Phanopoulos (IC):** Facially Capping N-Centred Triphos Complexes For Biomass Conversion
15. **Oliver Yim (UCL):** CO and O Overlayers on Pd nanocrystals supported on Rutile  $\text{TiO}_2(110)$
16. **Robert Foster (UCL):** Highly Regioselective Ru-Catalysed Alkyne Cyclotrimerizations for the Synthesis of Substituted Isoindolinones
17. **Chara Psyraki (UCL):** Reactor Model and Procedure for Kinetics Evaluation of Gas-Liquid Reactions in Capillary Microreactors
18. **Shishir Ghosh (UCL):** Bioinspired catalysts for clean electrocatalytic hydrogen production'
19. **Rhodri Jervis (UCL):** Catalyst development for the alkaline fuel cell
20. **Savio Moniz: (UCL):** Photocatalytic  $\text{CO}_2$  reduction by heterojunction  $\text{Cu}_2\text{O-RuO}_x$
21. **Afrah Aldawsari (Ox):** Novel Design of Microwave Active Heterogeneous Catalysts

## Further Details

**Venue:** St Catherine's College Oxford: <http://www.stcatz.ox.ac.uk>



**Dates:** December 17th (~12 noon) to December 18th (~2 pm) (management meeting after this).

**Transport:** The College is a 30/35 minute walk from the Rail/Bus Station, or a 10 minute taxi ride.

See here for a map: <http://www.stcatz.ox.ac.uk/contact/map-and-directions>

**Food:** Lunch and Dinner on the 17th and Breakfast and Lunch on the 18th are provided.

**Special Requirements:** Please let us know by Wednesday 12<sup>th</sup> December if there are any special dietary or accommodation requirements.

**Posters:** Should be presented in Portrait style if possible.

**Oral Presentations:** A PC will be available but you are welcome to use your own if needed.