

Dial-a-Molecule Conference – Catalytic Sustainability in the Future

The University of Manchester, 13th February 2015

Organisers: Dr David Mills and Dr Kelly Kilpin

The University of Manchester, School of Chemistry, hosted a Dial-a-Molecule Event in the Ellen Wilkinson building, lecture theatre C5.1, on 13th February 2015 from 1100-1900.

The conference was kindly supported and sponsored by the Dial-a-Molecule Network. Chemistry Central Journal provided additional support and were represented by Dr Charlotte Hollingworth. Eighty people registered for and attended the event.

The Conference consisted of eight talks, across a broad range of subjects that encompassed the theme of catalytic sustainability, split into three sessions:

The plenary lecture was delivered by Prof. Laurent Maron (Toulouse), who discussed the potential for f-element complexes in the catalytic activation of environmentally relevant small molecules.

Prof. Igor Larrosa (Manchester) discussed selective C–H activation chemistry at the meta-position of aromatic rings with late d-transition metal catalysts.

Dr Jonathan Moseley (CatSci Ltd) gave a talk on probing reaction mechanisms to identify by-products and therefore modify reaction conditions to increase yields.

Dr Bao Nguyen (Leeds) discussed how X-ray absorption techniques can be applied to probe reaction mechanisms.

Dr Mimi Hii (Imperial) gave a talk on mechanistic investigations coupled with a discussion on the suitability of batch and flow processes.

Dr Katherine Wheelhouse (GSK) gave an industrial insight on precious metal catalysis and the development of catalytic processes by non-precious metal systems.

Prof. Matthew Davidson (Bath) discussed early transition metal catalysis, focusing on hafnium and zirconium polymerisation systems mediating bio-polymer formation.

Prof. David Procter (Manchester) talked about copper-catalysed C–C bond-forming reactions and the potential of using samarium(II) systems in catalytic processes.

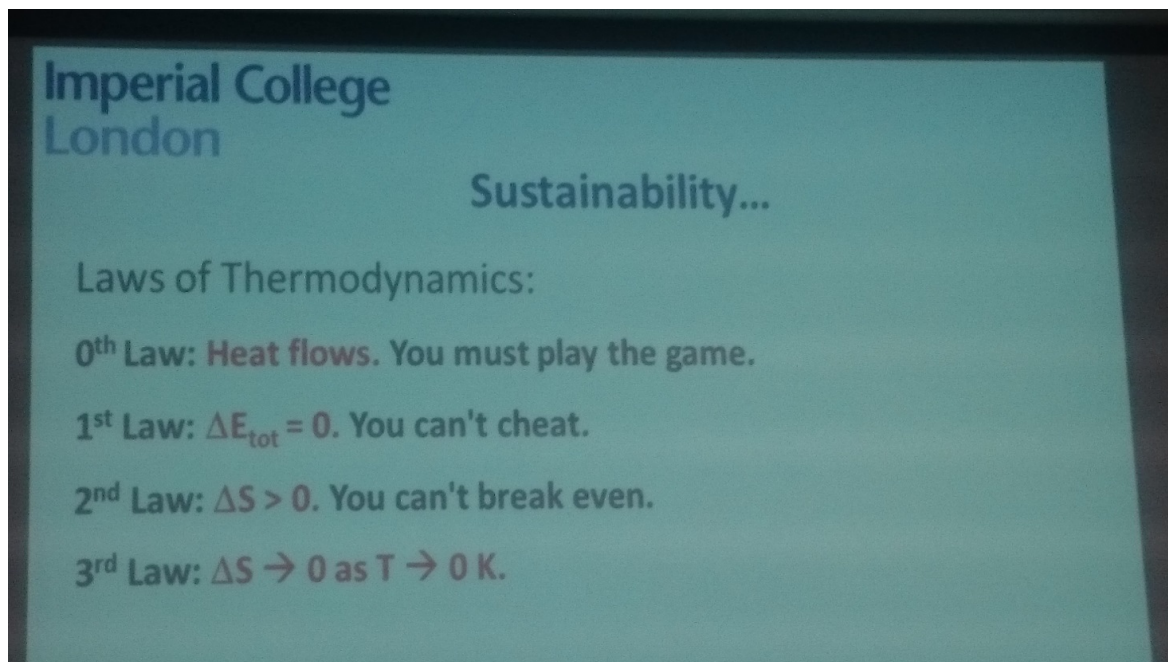
These speakers were supported by eleven flash presentations from early- and mid- career researchers from the North West Region, including lecturers, research fellows and postdoctoral researchers:

Dr Matthew Edmundson (Edinburgh), Dr Fabrizio Ortu (Manchester), Dr Rebecca Melen (Cardiff), Dr Thomas Chamberlain (Nottingham), Mr Benjamin Zelenay (Imperial), Dr G. Richard Stevenson (UEA), Dr Sara Evangelisti (UCL), Dr David Mills (Manchester), Dr Jason Camp (Huddersfield), Dr James Walton (Durham) and Dr Daniele Leonori (Manchester).

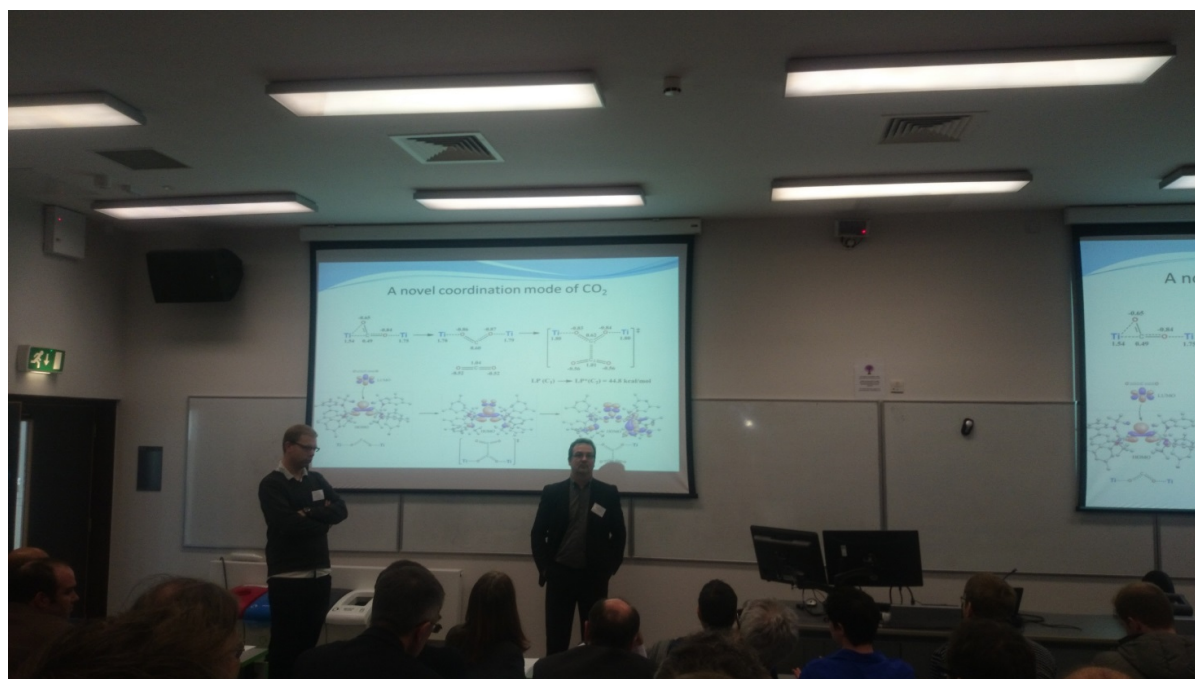
Following the oral programme a poster session with refreshments was held in the foyer of the Chemistry Building, with 20 posters presented. Feedback for the event was very positive and we thank the speakers for giving a varied and entertaining programme.

DPM and KK

Selected Event Photographs:



Dr Mimi Hii (Imperial) gave a thought-provoking talk on what we mean by sustainability (or according to the Laws of Thermodynamics, unsustainability...).



Prof. Laurent Maron (Toulouse, centre) gives his thoughts on f-element reaction mechanisms during a lively and thought-provoking Q&A session. Dr David Mills (Manchester, left) is chairing and fielding the questions.