

Dalton Discussion 12:
Catalytic C-H and C-X Bond
Activation

13 - 15 September 2010

Durham University, UK



Applications of late metal-catalysed cross-coupling reactions involving activation of C-X and C-H bonds (X = halogen) are commonplace in the synthesis of natural products, therapeutic agents, biological probes, and advanced materials. Such cross-coupling reactions can be simplified by removing the need for reactant pre-functionalisation, although historically this has been difficult to achieve selectively. The organometallic chemistry community has worked on this problem for many years (mainly from a mechanistic perspective), with important advances being made.

Very recently (over the last five years or so) the organic community has begun to explore the opportunities for these types of transformation in terms of their synthetic applications and has recently started to adopt emerging, alternative technologies, with C-H functionalisation processes now set to transform modern synthetic chemistry, in some cases eliminating the need for substrate activation protocols.

Who should attend?

DD12 will bring together the organic, organometallic, and inorganic (coordination chemistry) communities from academia and industry to discuss the current state of the art, the development and future of late metal-catalysed cross-coupling strategies of C-X and C-H bonds.

The Science

The meeting will highlight the importance of catalytic bond activation in cross-coupling chemistry. The latest research will be presented and discussed.

Key topics that will be covered in the discussion meeting include:

- Synthetic chemistry (including applications)
- Inorganic and organometallic chemistry
- Reaction mechanism (physical organic and organometallic chemistry)
- Transition metal catalysis

Keynote Speakers

Professor Keith Fagnou

University of Ottawa, Canada

Professor Jennifer Love

The University of British Columbia, Canada

Professor William D. Jones

University of Rochester, USA

Professor Aiwen Lei

Wuhan University, China

Invited Speakers

Professor Robin Bedford

University of Bristol, UK

Dr John M. Brown

University of Oxford, UK

Professor Stuart Macgregor

Heriot-Watt University, Edinburgh, UK

Dr Hans de Vries

DSM Pharmaceutical Products, The Netherlands

Call for papers

Offers of contributed papers related to the listed themes for **presentation/discussion** or for **poster presentation** are invited. Deadlines are listed on this page.

Please send a brief abstract (one A4 page) as a Word document to conferences@rsc.org. Please use subject heading "DD12 abstract". Please include your full address and contact details in the email and indicate whether you are submitting an abstract for oral or poster presentation.

The abstracts that fit most closely with the themes of the meeting will be selected for oral presentations. Please note that not all abstracts will be accepted. Selection by the Committee will be based on abstract quality and achieving a balanced scientific discussion. The Scientific Committee's decision is final.

Authors of the selected abstracts will be expected to submit their work as a full paper, which will form the basis of their short presentation at the meeting. The paper itself must contain **new, unpublished work** and be submitted for review to the Editorial Office of *Dalton Transactions* by 2nd April 2010.

Deadlines

Discussion Abstract Submission

23 October 2009

Notification of Acceptance

November 2009

Submission of Manuscripts

2 April 2010

Poster Abstracts

16 July 2010

Scientific Committee

Professor Todd Marder (Chair)

Durham University, UK

Dr Philip Dyer (Local Coordinator)

Durham University, UK

Dr Ian J.S. Fairlamb (Secretary)

University of York, UK

Professor Sue Gibson (RSC Organic Division)

Imperial College London, UK

Professor Peter Scott (RSC Dalton Division)

University of Warwick, UK



How it works

The abstracts that fit most closely to the themes of the meeting will be selected to be developed into full papers and presented in the discussion sessions. The full papers will be refereed and then sent to all participants as preprints before the conference. Each author will be given approximately **5 minutes** to summarise the key points of their paper in order to leave the majority of time open for discussion.

The papers will be published as a special issue of *Dalton Transactions*, which will constitute a permanent record of the meeting.

The detailed discussion will not be published verbatim, but some comments will be published on the journal website as supplementary information. In addition, the Scientific Committee will summarise the flavour of the discussion in an extended editorial in the special issue.

The keynote and discussion papers will be supplemented by contributed posters which will be presented during dedicated poster sessions.

Dates and times

Registration will take place on the morning of Monday 13 September and the Discussion will begin that afternoon. Topics will be discussed during the meeting as outlined on the previous page. The meeting will end at lunchtime on Wednesday 15 September. There will be a poster session on Monday and a conference dinner on Tuesday evening.

Networking

Dalton Discussions provide an excellent opportunity for interaction with other delegates. Networking will take place through an interactive poster session and the conference dinner, which will be held at a spectacular location within Durham Castle, part of the City's World Heritage Site.

Sponsorship and Exhibition

Opportunities are available to promote your organisation at Dalton Discussion 12. Please see the website or contact RSC Conferences for details.

Further Information

Full information on registration, location, travel, and how to apply for student bursaries are available on the DD12 website, or by contacting RSC Conferences.