

# Essential Awareness Briefings

A series of one-day meetings, including a special one-day Conference on key organic chemistry topics

## **Carbon-Carbon Bond Forming Reactions, Ancient & Modern**

10 February 2009

## **Reduction Reactions in Organic Synthesis**

11 February 2009

## **Case Studies in Organic Process R&D**

12 February 2009

## **Industrial Asymmetric Synthesis & Related Processes**

13 February 2009

The Society of Chemical Industry (SCI)  
London, UK

[www.scientificupdate.co.uk](http://www.scientificupdate.co.uk)



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# Essential Awareness

The Tutors for these meetings are:

Dr Trevor Laird  
Dr Will Watson  
Dr John Knight  
Scientific Update  
and  
Dr Nick Greeves  
University of Liverpool

The Tutors' complete biographies can be viewed on the Scientific Update website - visit [www.scientificupdate.co.uk](http://www.scientificupdate.co.uk)

Each meeting begins with registration from 9.30am and ends at approximately 5pm. Refreshments and lunch will be provided.

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## Venue

The Society of Chemical Industry  
14/15 Belgrave Square  
London SW1X 8PS UK  
Tel: +44 (0) 20 7598 1500  
Fax: +44 (0) 20 7598 1545  
[www.soci.org](http://www.soci.org)

Belgrave Square can be reached on foot from Hyde Park Corner, Sloane Square and Victoria stations within 8 - 15 minutes. For full details on how to reach the venue, please see the society's website.

## Carbon-Carbon Bond Forming Reactions, Ancient and Modern

Tuesday 10 February 2009

Fee £250.00

The formation of carbon-carbon bonds is one of the essential components of organic synthesis. Many of the classic reactions discovered in the last century (eg Grignard, Wittig and related reactions) are still widely used, particularly on large scale, because they are robust processes whose key elements have been worked out over the years.

More modern chemistries such as cross-coupling reactions and olefin metathesis work well on small scale but can give problems when scaled up.

This new one-day meeting will update chemists on the essentials of the above and other important C-C bond-forming reactions used in industry (eg Stetter, Baylis-Hillman), focusing on the practical aspects which affect yield and quality of products.

### Outline

- Grignard and related reactions
- Olefin Metathesis
- Wittig and related reactions
- Cross-Coupling Reactions
- Miscellaneous C-C bond-forming reactions

## Reduction Reactions in Organic Synthesis

Wednesday 11 February 2009

Fee £250.00

Reduction of functional groups is one of the cornerstones of organic synthesis, yet can cause difficulties of regio-, chemo- and stereoselectivity. This new meeting will comprehensively examine reduction using hydride reagents and catalytic processes, particularly hydrogenation and reductive amination. Both homogeneous and heterogeneous hydrogenation as well as enantioselective reductions will be covered, focusing on practical issues such as work up and product isolation as well as the reactions themselves.

### Outline

- Hydride Reductions in Organic Synthesis (2 lectures)
- Heterogeneous Hydrogenation
- Practical Tips
- Homogeneous Hydrogenation (inc Asymmetric Reductions)
- Transfer Reductions (eg using formic acid)
- Reductive Amination

**For complete details of these Meetings & the special one day Case Studies in Process R&D Conference:**

[www.scientificupdate.co.uk](http://www.scientificupdate.co.uk)

# Briefings

## Case Studies in Organic Process R&D

Thursday 12 February 2009

Fee £295.00

The conversion of a chemical synthesis into a process for manufacture on tonnage scale is of vital importance in the chemical and pharmaceutical industries. 20 years ago, Trevor Laird created Scientific Update to help process chemists share their knowledge and expertise in this field.

In recognition of the continued importance of sharing process research and development experiences and to celebrate Scientific Update's 20th anniversary, we are running a special one-day conference of six new, detailed case studies presented by key speakers from top international companies.

Don't miss this opportunity to hear how your peers are developing solutions to common problems!

### Speakers include

**Dr Ian Lennon**, Chirotech Technology Ltd

**Dr Martin Hedberg**, AstraZeneca R&D Sodertalje

**Dr John Blacker**, Piramal Healthcare

**Dr Ed Cleator**, Merck Sharp & Dohme

**Dr Lee Proctor**, Phoenix Chemicals Ltd

## Industrial Asymmetric Synthesis and Related Processes

Friday 13 February 2009

Fee £250.00

The synthesis of molecules containing one or more stereogenic centres has been a major area of study for the academic organic chemistry community for the last 30 years, culminating in the award of a Nobel Prize in this field. For the industrial community, the conversion of these well-known chemistries into industrially useful and scaleable processes has not been without problems so that more old-fashioned methods, such as resolution (with subsequent recycle and racemisation, or via dynamic methods), can often compete. Biocatalysis is also being used much more in manufacture as newer and more robust enzymes are produced via directed evolution and related techniques. The latest trend in asymmetric synthesis, organocatalysis, is now starting to be used in industrial processes again (some of the older methods were first used in industry!). This one-day meeting will give a vital overview of the area allowing chemists to compare and contrast the different approaches.

### Outline

- Asymmetric Oxidation
- Asymmetric C-C bond-formation
- Biocatalysis
- Resolution and related methodologies
- Organocatalysis

[sciup@scientificupdate.co.uk](mailto:sciup@scientificupdate.co.uk)

## Register now!

You can either mail or fax the registration form on the reverse to: Scientific Update LLP  
Maycroft Place, Stone Cross,  
Mayfield, East Sussex, TN20 6EW, UK  
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Alternatively, register online at  
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### Terms and Conditions

These meetings are extremely popular and early booking is recommended. Please complete and return the form overleaf with full payment. Cancellation must be sent in writing. If notice of a cancellation is received outside of thirty days of the event there will be a £50 cancellation fee, otherwise all fees are forfeited. Scientific Update reserve the right to alter the

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Tuesday 10 February Fee £250.00 +VAT@17.5%

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Wednesday 11 February Fee £250.00 +VAT@17.5%

Case Studies in Organic Process R&D

Thursday 12 February Fee £295.00 +VAT@17.5%

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