

Practical Crystallisation & Polymorphism

26-27 OCTOBER 2017



Louisiana, USA
Hyatt Regency
New Orleans

A 2 day course given by
Dr Will Watson and Dr John Knight

"The course was
enlightening, informative
& task specific. Helpful
to the development
of understanding of
crystallisation concept."

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Practical Crystallisation & Polymorphism

A 2 day course given by
Dr Will Watson and Dr John Knight

26-27 October 2017 Hyatt Regency New Orleans, Louisiana, USA

Multiple attendees discounts
UP TO 15% available

INTRODUCTION

This 2-day course aims to give chemists and chemical engineers a thorough practical knowledge of crystallisation processes. After an introduction the course will cover crystallisation of compounds (including hydrates and solvates), different methods of crystallisation, polymorphism, salts and co-crystals, crystallisation of chiral compounds and classical resolution, analytical methods for studying the solid state and will finish with some case studies. Real life practical examples will be used throughout the course to exemplify the different aspects of crystallisation and polymorphism. The course will cover all aspects of the subject including crystallisation of intermediates as well as final products. In addition precipitations and amorphous solids will be covered and the differences between amorphous solids and crystalline solids will be discussed.

Course participants – who is the course aimed at?

Discovery chemists, process chemists and chemical engineers who want to learn about practical aspects of crystallisation as well as the science and the art of crystallisation.

COURSE OUTLINE

Day 1

Introduction to crystallisation and Polymorphism Solvates and hydrates

- > Differences between solvates, hydrates and anhydrates/asolvates
- > Characterisation of solvates and hydrates

Principles of crystallisation

- > Methods of crystallization
- > Cooling crystallisations
- > Evaporative crystallisations
- > Anti-solvent crystallisation
- > Melt crystallisation

Crystallisation design/case studies

- > Designing a crystallisation process

Day 2

Polymorphism and Disappearing polymorphs

- > Polymorphism
- > Polymorph screening
- > Characterising polymorphs
- > Patenting polymorphs

Salts and co-crystals

- > Salt formation
- > The use of co-crystals
- > Definitions

Chiral compounds/resolution

- > Crystallisation of chiral compounds
- > Classical resolution methods
- > Upgrading ee by crystallisation

Methods of analyzing the solid state

- > Analytical methods
- > Infra-red, Raman
- > XRPD
- > DSC

Case studies/Conclusions

IN-HOUSE COURSE

For 8+ people contact us to discuss holding this event
In-House -
sciup@scientificupdate.co.uk

VENUE

Hyatt Regency New Orleans
601 Loyola Avenue, New Orleans,
Louisiana, USA, 70113
www.neworleans.regency.hyatt.com

This four star downtown New Orleans hotel is located right next door to the Mercedes-Benz Superdome, Smoothie King Center and Champions Square, Hyatt Regency New

Orleans offers easy access to the area's most popular attractions. Hop on the Loyola Avenue Streetcar, or take a walk to the historic French Quarter, Arts District, Audubon Aquarium of the Americas and the scenic Mississippi Riverfront. A special accommodation rate of \$229 has been organised and details on how to book this rate will be given upon confirmation.



Start 8.30am - Thursday 26 October
Finish 5.15pm - Friday 27 October
Course dinner 7.30pm - Thursday 26 October

Course Fee: \$1,950

Which includes comprehensive course manual, refreshments throughout the day, lunch and one course dinner.

Course Fee: \$1,950

COURSE TUTORS

Dr Will Watson

Technical Director,
Scientific Update

Will Watson gained his PhD in Organic Chemistry from the University of Leeds in 1980. He joined the BP Research Centre at Sunbury-on-Thames and spent five and a half years working as a research chemist on a variety of topics including catalytic dewaxing, residue upgrading, synthesis of novel oxygenates for use as gasoline supplements, surfactants for use as gasoline detergent additives and non-linear optical compounds.

In 1986 he joined Lancaster Synthesis and during the next 7 years he was responsible for laboratory scale production and process research and development to support Lancaster's catalogue, semi-bulk and custom synthesis businesses. In 1993 he was appointed to the position of Technical Director, responsible for all Production (Laboratory and Pilot Plant scale), Process Research and Development, Engineering and Quality Control. He helped set up and run the Lancaster Laboratories near Chennai, India and had technical responsibility for the former PCR laboratories at Gainesville, Florida. He joined Scientific Update as Technical Director in May 2000. He is also involved in an advisory capacity in setting up conferences and in the running of the events. He is active in the consultancy side of the business and sits on the Scientific Advisory Boards of various companies.

@ will@scientificupdate.co.uk



Dr John Knight

Consultant,
JKonsult Ltd

John first started his industrial career at the age of 16 as a technician with ICI. Following several years' laboratory experience he went on to study at the University of Southampton for a degree in chemistry, staying on to complete his PhD with Phil Parsons. John then took up a NATO-funded post-doctoral position with Gilbert Stork before returning to the UK to work for Glaxo, initially in medicinal chemistry before transferring to chemical development. John then moved to work for a small contract research organisation which, after significant growth, is now part of Aptuit. John left Aptuit at the end of 2007, following 14 years in the CRO arena, to join Scientific Update LLP where he provided training and consultancy services. In January 2015 John established his own consultancy business while continuing to work very closely with Scientific Update.

John's main professional focus is in working with early stage chemical development projects and transfer to plant, often working with small pharma companies where he helps with CMC issues and securing material supplies to toxicological studies and Phase I and II clinical trials.



REGISTRATION

You can either use our fast online booking system or mail or fax the attached registration form to:

Scientific Update
Maycroft Place, Stone Cross, Mayfield,
East Sussex, TN20 6EW, UK
Fax Number +44 1435 872734

How to Pay

When you register online, you can have the option to pay via credit card (Amex, Mastercard or Visa) For email payments please include course title, card number, expiry date and security code. A receipted invoice will be automatically generated once paid and sent via email. Should your company wish to pay by cheque or bank transfer bank details will be supplied with an invoice.

Bank Transfer or Cheque

Should your company wish to pay by cheque or bank transfer, on booking you can choose between paying in either £ or €. All bank details will be supplied with an invoice.

Group Discounts

Group discounts are available on 2 or more attendees – see registration form. This offer only applies if bookings are made simultaneously and from the same billing address.

Confirmation of your registration

Confirmation and your invoice will be sent via email.

Late Applications

For late applications, please register on-line or fax the completed registration form, including credit card payment information.

Cancellations/Refunds

Should you be unable to attend and cancel in writing no later than 1 month before the start of the course, Scientific Update will refund your registration less £300 processing fee. Unfortunately refunds are not possible after that date. Substitutions can be made at any time.

At the end of the course, participants will have gained:

At the end of the course delegates should be better placed to apply scientific principles to the design and development of crystallization processes as well as better understanding for problem solving. The course will be of interest and use to both process development chemists as well as those working in discovery areas, especially when involved in the first scale-up batches.

Course:

Dates:

Location:

Register 2 delegates and receive 5% on 2nd booking
Register 3 delegates and receive 10% on 3rd booking
Register 4 or more delegates and receive a 15% discount

No. of attendees

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* Currency Payments

If you select to pay in GBP or Dollars, the amount charged will be based on the exchange rate at the time of preparing the invoice.

Discounts

Complete the details for either two or three delegates and your discount will automatically be applied. This offer only applies where all delegates are booked simultaneously and at the same billing address.

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