

## One-day training course covering the essentials of formulation of nanoparticles into products.

Held in partnership with, and immediately before, the international conference NanoFormulation 2013

### Why Attend iFormulate4Nano?

Formulation is often overlooked in the drive to develop and commercialise novel nanotechnology. However, the development of usable and optimal formulations is an essential step in ensuring nanoparticulates perform in the end-use application. Nanoparticles present particular challenges to the formulator in the areas of stability, characterisation and performance. This course will demystify formulation for the practical industrial scientist with an interest in nanoparticles and provide real insight to enable him or her to work more effectively with them.



### Who Should Attend?

iFormulate4Nano is suitable for industrial or academic scientists of graduate level and above from disciplines such as chemistry, chemical engineering, physics, materials science and pharmacy who have an interest and involvement in nanotechnology and nanoparticles, but who have had relatively little exposure to formulation science and technology.

### Course Tutors and Organisers

The tutors for iFormulate4Nano are experienced industrial and academic scientists, chosen to provide an excellent balance of practical expertise and underpinning scientific knowledge. iFormulate4Nano is organised and delivered by iFormulate Limited ([www.iformulate.biz](http://www.iformulate.biz)), a company founded by two experienced industry professionals to offer training, innovation events, consultancy and project management in the area of formulation science and technology. For further information contact [info@iformulate.biz](mailto:info@iformulate.biz).

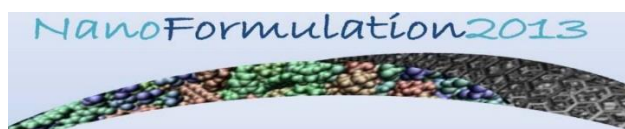
### Course Content

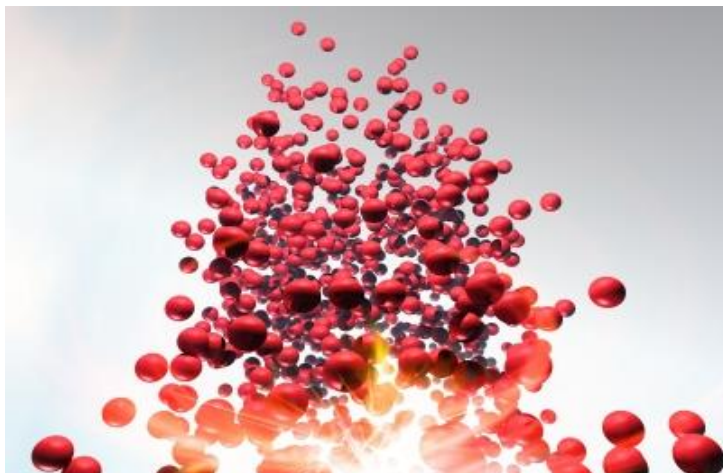
A provisional programme for iFormulate4Nano is shown overleaf. The course will start with an introduction to the basics of nanoparticles, how they are defined, why they are different, how they are made and where they are used. Following this there will be a session on stabilising nanodispersions and nanoemulsions which will include an insight into stabilisation theories and how to apply them. The course will include a workshop session where attendees will be able to work together on case studies. The next session will cover the main characterisation and measurement techniques which are essential tools for the development scientist. The course concludes with an overview of the essential toxicology, safety and regulatory factors which the product developer needs to take into account. Attendees will receive copies of all course materials in electronic format.

Image (above/below): Victor Habbick at FreeDigitalPhotos.net.

**iFormulate**

In partnership with

W: [www.iformulate.biz](http://www.iformulate.biz)E: [info@iformulate.biz](mailto:info@iformulate.biz)[www.formulation.org.uk/mnf13home](http://www.formulation.org.uk/mnf13home)



### Location and Date

We are delighted to present iFormulate4Nano in partnership with the organisers of the prestigious international conference [NanoFormulation 2013](#). This also takes place in Manchester and will start immediately following this course. The location for iFormulate4Nano is the brand new James Chadwick Building, the home of the Chemical Engineering department of the University of Manchester and we are pleased to acknowledge the support of the University in providing this venue.

### Course Fees, Registration and Discounts.

Please note that places are strictly limited so early registration is advisable. Standard fees to attend iFormulate4Nano are £295 (+VAT) per attendee. Discounted fees of £275 (+ VAT) are available to attendees who register before 31<sup>st</sup> March 2013. A further discount of £20 is applicable to those who attend both NanoFormulation 2013 and iFormulate4Nano.

To register for **iFormulate4Nano** simply e-mail your full contact details and details of your organisation to [info@iformulate.biz](mailto:info@iformulate.biz). Please state if you are also attending Nanoformulation 2013 and we will apply the discount. Please note that we cannot register you for Nanoformulation 2013 – please do that separately via the conference website: [www.formulation.org.uk/mnf13home](http://www.formulation.org.uk/mnf13home).

*Image (above/below): Victor Habbick at FreeDigitalPhotos.net.*

### Provisional Course Programme

- 9.15 Registration and Coffee
- 9.45 Introduction – Dr Jim Bullock (iFormulate)
- 10.00 Nanoparticles - The Basics  
Dr Jim Bullock and Dr David Calvert (iFormulate)  
*Definitions, Differences, Manufacture, Applications*
- 11.00 Coffee
- 11.15 Stabilising Nanoparticles in Formulations  
(Prof Steven Abbott, Prof Ian Scowen)  
*Basic theory*  
*Surfactants and dispersants*  
*Dispersion failure*  
*Stabilising nanoemulsions and nanodispersions*  
*Non-aqueous nanodispersions*
- 12.45 Lunch
- 13.30 Case study workshops
- 14.10 Case study feedback session
- 14.40 Characterising nanoformulations (Prof Ian Scowen)
- 15.40 Safety, toxicology and regulations  
Speaker to be confirmed
- 16.40 Close – refreshments

