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Formula Quickstart Training

# Fundamentals of Formulation Science and Technology

28<sup>th</sup> - 30<sup>th</sup> May 2012  
University of Leeds



**Fundamentals of Formulation Science and Technology** is a new short course which will provide attendees with a broad overview of the fundamentals of formulation.

The course is targeted towards industry personnel and academic researchers who are working in formulation or would like to familiarise themselves in this field.

The course is organised by **Intelligent Formulation Ltd** and **ParticlesCIC** and course tutors will be industrial and academic experts with a distinguished record in practical industrial applications of formulation science and technology.



**Fundamentals of Formulation Science and Technology** will ensure a good basic grounding in the underpinning science of formulation and will concentrate on the applications of this knowledge and the tools available to the practising scientist.

## Schedule

### Day 1 Colloids and Structured Materials 28<sup>th</sup> May 2012

09.00	Welcome	<b>Simon Lawson</b>
09.15	Introduction to formulation	<b>Jim Bullock</b>
09.45	Introduction to colloid and interface science	<b>Brent Murray</b>
10.45	<b>Break</b>	
11.00	Particle synthesis	<b>Yulong Ding</b>
12.00	<b>Lunch</b>	
12.45	Dispersions, suspensions and slurries	<b>Peter Dowding</b>
13.45	Emulsions, foams and gels	<b>Olivier Cayre</b>
14.45	<b>Break</b>	
15.00	Choosing and using surfactants, dispersants and additives	<b>Wuge Briscoe</b>
16.00	Other ingredients used in formulation	<b>Jim Bullock</b>
17.00	Reception/discussion	<b>Simon Lawson / Jim Bullock</b>
18.00	<b>Close</b>	

## Day 2 Processing

### 29<sup>th</sup> May 2012



08.45	Welcome	Simon Lawson Neil George Dave York
09.00	Organic crystallisation	
10.00	Atomisation	
11.00	<b>Break</b>	
11.15	Powder mixing and milling	Ewart Richardson
12.15	<b>Lunch</b>	
13.00	Granulation and drying	Ali Hassenpour Vivienne Gray
14.00	Compaction and capsules	
15.00	<b>Break</b>	
15.15	Encapsulation and controlled release	Olivier Cayre
16.15	Wet milling	Yulong Ding Simon Lawson / Jim Bullock
17.15	Reception/discussion	
17.45	<b>Close</b>	
20.00	<b>Networking Dinner</b>	

## Day 3 Characterisation

### 30<sup>th</sup> May 2012

08.45	Welcome	Simon Lawson Simon Lawson
09.00	Brief introduction to characterisation techniques	
09.30	Particle size and zeta potential	Stephen Ward-Smith
10.30	<b>Break</b>	
10.45	Use of rheological techniques in product development and formulation engineering	Trevor Gregory
11.45	High throughput formulation	Sander Van Loon
12.45	<b>Lunch</b>	
13.30	Stability	Macolm Povey Martina Pfau
14.30	In-process measurement	
15.30	<b>Break and discussion</b>	
16.00	Optional laboratory tours and demonstrations	Simon Lawson
17.00	<b>Close</b>	

## Who Should Attend?

- Newcomers to formulation teams (at all levels) within company R&D.
- More experienced laboratory technicians who require a deeper understanding of the underpinning science and technology of formulation.
- Academics and students who would value an overview of industrial formulation issues
- R&D scientists from all disciplines who are less familiar with formulation science and require an introduction

## Course Objectives:

By the end of this course, attendees will have a good basic understanding of:

- Colloid and interface science
- The main types of formulated products and the importance of their microstructure
- How to make particulate products
- The choice and function of the main ingredients used in formulated products
- The main processing methods used for formulated products and their key features at laboratory and production scale
- The use of analytical and characterisation methods for formulated products
- The use of other supporting techniques

## Registration:

**Fees for three days, includes course notes, all lunches and course dinner. Accommodation not included:**

Full Fee	<b>£995 + VAT</b>
Early Bird Rate (until 17 <sup>th</sup> February 2012)	<b>£925 + VAT</b>
Intelligent Formulation Partner companies	<b>£850 + VAT</b>

To book yourself on the course, simply email your details to [info@intelligentformulation.org](mailto:info@intelligentformulation.org) or call **01484 346 540**



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\* Please note that in the event of unforeseen circumstances, one or more the named tutors may be substituted