



Course



In association with



# Tabletting technology for the pharmaceutical industry

The Møller Centre, Cambridge  
Monday 19 – Wednesday 21 November 2012

**Do you work in formulation development or the production of tablets? Do you require an intensive course of study on the formulation, production and drug-release characteristics of pharmaceutical tablets? This up-to-date and well-established three-day residential course provides the solution.**

The course is an intensive introduction to tableting and the associated processes. Delegates will leave the course with knowledge that they will be able to apply to day-to-day problems in tableting.

The course offers delegates the unique opportunity to discuss real challenges faced in day-to-day work with the expert lecturers. Delegates are encouraged to send in advance, or bring to the course, their own problems in tablet formulation or production for discussion.

## WHAT YOU WILL ACHIEVE FROM THE COURSE

### **By the end of the course you will have:**

Received an intensive three day course of study on the formulation, production and drug-release characteristics of pharmaceutical tablets.

- You will understand:
  - the essentials of the formulation of tablets
  - properties of materials used in making tablets
  - the mixing and granulation processes
  - roller compaction
  - tablet machines, instrumentation and PAT
  - requirements of Good Manufacturing Practice
  - scale-up processes
  - development pharmaceutics for

registration including QbD concepts

- tablet testing
- film coating

- Learn about the current state of knowledge of the subject, both in terms of theoretical basis and practical experience.
- Acquire skills and knowledge you will be able to apply to day-to-day problems in tableting, linked to a sound theoretical knowledge of the principles involved. Form lasting contacts with colleagues in the field, as well as the expert course tutors.



## COURSE FORMAT AND MATERIALS

The course is a blend of taught lectures, interactive workshops and problem-based learning sessions. Delegates will be provided with a full set of course notes for use during and after the course. Fees include two-night's accommodation (unless booking a non-residential place) catering and refreshments and a networking social programme.

## WHO SHOULD ATTEND

Graduates or technical staff working in the field of formulation development or production of tablets; those who have not previously worked in this field and who require an intensive introduction to tableting and the associated processes; regulatory or Quality staff, and project or contract management personnel with responsibilities for tablet formulation or production activities. Previous attendees include:

- Formulation Officer
- Head of Production
- Laboratory Technician
- Manufacturing Coordinator
- Pharmaceutical Assessor
- Process Specialist
- Product Manager
- Senior Scientist
- Senior Technical Specialist
- Tablet Team Leader

## LEARN FROM A TEAM OF EXPERTS



### COURSE DIRECTOR:

**Dr Kendal Pitt**  
Technical Director,  
GlaxoSmithKline

Dr Pitt has previously worked for Wellcome Foundation Ltd, Roche Pharmaceuticals and MSD for over 20 years in both the UK and USA. His primary research interests are powder compaction, powder flow and granulation process optimisation, including the use of compaction simulators in tablet and capsule product development. He has also published in the area of formulation and design for nasal delivery of pharmaceuticals, and on statistical design of experiments.

## COURSE PRESENTERS

- Graham Buckton, University of London
- Michael Wilkins, Almac Pharma Services
- Brian Helsdon, Bosch Packaging Technology Ltd
- Terry Lewis, Consultant
- Marshall Whiteman, Quindell Consulting
- Tesh Patel, Astellas
- Sander van den Ban, GlaxoSmithKline
- Ashley Clarke, Merck, Sharp & Dohme

## MONDAY 19 NOVEMBER

### 09.30 Registration

Tea and coffee

### 10.15 Introduction

Kendal Pitt, GlaxoSmithKline

### 10.45 Granules and tablets: A review of the reasons for granulation and tableting, the classes of excipients and principles of operation of tableting machines

Graham Buckton,  
University of London

### 11.30 Material properties of importance for tableting (I)

Graham Buckton,  
University of London

### 12.15 Material properties of importance for tableting (II)

Graham Buckton,  
University of London

### 12.45 Lunch

### 13.45 A brief introduction to modified release

Graham Buckton,  
University of London

### 14.15 Dissolution testing

Graham Buckton,  
University of London

### 14.45 Key aspects of tablet formulation and characterisation

Michael Wilkins,  
Almac Pharma Services

### 15.45 Tea and coffee

### 16.00 Problem based learning I: Active Pharmaceutical Ingredient (API)

Kendal Pitt,  
GlaxoSmithKline

### Problem based learning 2: Formulation development

Michael Wilkins,  
Almac Pharma Services

### 16.45 Problem based learning (continued)

### 17.30 Topic and speaker tbc

### 18.00 Close

### 18.45 Informal reception

### 19.30 Dinner

## TUESDAY 20 NOVEMBER

**08.30 Tableting machines and in-process control**  
Brian Helsdon,  
Bosch Packaging Technology Ltd

**09.30 Punch design**  
Terry Lewis,  
Consultant

**10.30 Tea and coffee**

**10.45 Compaction simulation**  
Kendal Pitt,  
GlaxoSmithKline

**11.45 Continuous processing concepts**  
Michael Wilkins,  
Almac Pharma Services

**12.30 Lunch**

**13.30 Roller compaction**  
Kendal Pitt,  
GlaxoSmithKline

**14.30 Production workshop**  
Terry Lewis and Tesh Patel,  
Astellas

**15.30 Tea and coffee**

**15.45 Production workshop**  
Second session

**16.45 Close of day's programme**

**17.10 Social programme**

**19.45 Dinner**

## WEDNESDAY 21 NOVEMBER

**08.30 Process Analytical Technology (PAT) applied to tabletting**

Sander van den Ban,  
GlaxoSmithKline

**09.30 Granulation equipment and end point control**

Ashley Clarke,  
Merck, Sharp & Dohme

**10.15 Tea and coffee**

**10.30 Scale-up tablet manufacturing processes and transfer from R&D to production**

Ashley Clarke,  
Merck, Sharp & Dohme

**11.15 An introduction to pharmaceutical coating technology**

Marshall Whiteman,  
Quindell Consulting

**12.15 Lunch**

**13.15 Coating-advances in techniques of formulation**

Marshall Whiteman,  
Quindell Consulting

**14.00 Compaction characterisation and process understanding**

Kendall Pitt,  
GlaxoSmithKline

**15.00 Concluding discussion**

**15.15 Close**

For more information or to register, visit

[www.rpharms.com/events](http://www.rpharms.com/events)

## WHAT PREVIOUS DELEGATES SAID ABOUT OUR COURSES

“Excellent course, great to have such a varied background of participants and to be able to discuss ideas.”

“I have definitely learned subjects and topics which I will use back at work.”

“Very good course, good technical pitch and a very thorough overview of tableting area. Very enjoyable.”

“Extremely relevant and useful lectures”

## VENUE AND ACCOMMODATION

The Møller Centre is a modern and purpose-built conference and training venue in the grounds of Churchill College - easily accessible by road, train and air. Car parking facilities are available.

The Møller Centre  
Management and Training  
Conference Centre  
Storey's Way  
Cambridge  
CB3 0DE



**Two ways to register**

- Visit [www.rpharms.com/events](http://www.rpharms.com/events) and pay with credit/debit card or request an invoice.
- Complete this form and post, email or fax it back to us. You will be registered upon receipt of the completed form and payment must be made before the start of the course.

**What's included in the fees?**

- Course documentation
- Social programme
- Meals and refreshments throughout the day
- Fees with accommodation include two nights at the Møller Centre and evening meals

**N.B. Please contact us if you haven't received an email confirmation of your booking within 5 working days of submitting your form.**

MEMBERS	Early bird fee (before 24.09.12)	Full fee
Course only	<input type="checkbox"/> £1,145	<input type="checkbox"/> £1,305
Course + accommodation + evening meals	<input type="checkbox"/> £1,435	<input type="checkbox"/> £1,595
NON-MEMBERS	Early bird fee (before 24.09.12)	Full fee
Course only	<input type="checkbox"/> £1,200	<input type="checkbox"/> £1,360
Course + accommodation + evening meals	<input type="checkbox"/> £1,490	<input type="checkbox"/> £1,650

**PAYMENT AND DETAILS**

Method of payment	Debit/credit card (someone will contact you to obtain your card details)	
	<input type="checkbox"/> Bank transfer (Sort code <b>60 60 04</b> Account number <b>45130574</b> <input type="checkbox"/> National Westminster Bank, 91 Westminster Bridge Road, London SE1 7ZB Quoting reference: <b>MMS EVT 405</b>	
Title	Firstname	Surname
Job title		Company
Address		
		Postcode
Telephone		Membership number
Email		
Dietary requirements		

**PLEASE RETURN THIS FORM TO:**

Events Coordinator; Royal Pharmaceutical Society, 1 Lambeth High Street, London SE1 7JN **Telephone:** 0845 257 2570 **Fax:** 020 7572 2506 **Email:** [events@rpharms.com](mailto:events@rpharms.com) **Web:** [www.rpharms.com/events](http://www.rpharms.com/events)

The contact details you have provided may be used to keep you informed about future RPS Events, products and services. If you do not wish to receive such information by any of the methods listed, please indicate by ticking the corresponding box: Post ☐ Telephone ☐ Email ☐ All ☐

**Cancellations policy:** For full details of terms and conditions please visit [www.rpharms.com/eventstc](http://www.rpharms.com/eventstc). For cancellations, the following refunds will apply:

More than 30 working days before the event = 50% of the fee, 30 working days or less = no refund. In the unlikely event of the cancellation of the event, delegates will receive a full refund of the fees but we can not be held liable for other expenses incurred by delegates.