

Some comments on previous courses:

"For people who need to quickly grasp the essentials and diversity of this area (of technology) this is an excellent course. I am confident that GlaxoWellcome will continue to send staff on this valuable course"

Mark Robertson, **GlaxoWellcome**

"Very relevant, gives a good introduction to the subject and a good mix of applications and academic background"

Neil Rabone, **SmithKline Beecham**

"Provides a very good overview of the broad powder technology area which anyone working in this field should have"

David Goddard, **British Nuclear Fuels**

"The course was successful in delivering a basic overview of the general handling of powders"

Bruce Ellis, **Warwick International**

"...I don't believe that I could praise it enough..."

Ivan Langan, **Warwick International**

"Well-structured course pitched correctly, as its title indicates"

Martyn Whitworth, **Brunner Mond (UK)**

VENUE AND ACCOMMODATION



The course will be held in Grants Hotel, Harrogate, North Yorkshire, UK

Grants Hotel is a Johansen's recommended three star townhouse hotel which is a member of 'Best Hotels of the World' and a founder member of 'Fine Individual Hotels'. There are forty two tastefully decorated bedrooms each equipped with private bathroom, colour television, radio, direct-dial phone, modem point, hairdryer, and trouser press. It also boasts a fully air conditioned Conference facility. The popular bistro 'Chimney Pots' serves excellent food and caters for guests and non-residents. The hotel never closes and is able to provide service for its guests 24 hours per day, 365 days per year.

The hotel is affiliated to the nearby Academy health and leisure club which provides swimming facilities, gymnasium, indoor tennis, jacuzzi, steam room, sauna, massages and beauty treatments for hotel guests during their stay.

A special reduced room rate is available to participants who should make their own hotel reservations direct with the hotel by mentioning the name of the course at the time of booking a room.

Please quote the course reference: **GETTING STARTED IN POWDER TECHNOLOGY** in order to benefit from the special accommodation rate negotiated for participants by the course organiser.

Harrogate is situated 12 miles north of Leeds and 20 miles west of York. There are direct fast trains from London and other major cities to Leeds and York, from which local trains can be taken to Harrogate. The hotel stands in its own grounds near the town centre and is about 10 minutes walk from the train station. It is about 25 minutes by taxi from Leeds-Bradford Airport, which provides regular connections with Paris, Amsterdam, Brussels, London and Dublin.

All enquiries to:
Course Director: Professor Derek Geldart
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North Yorkshire HG3 1LU
Fax: 01423-873375 Fax (International): +44-1423 873375
e-mail: PRFGELDART@aol.com
Visit The Website At: www.powderresearch.co.uk

IF THIS COURSE IS NOT OF INTEREST TO YOU, PLEASE
PASS THE LEAFLET ON TO YOUR COLLEAGUES, TO YOUR
TRAINING OFFICER, OR TO YOUR LIBRARY

Getting
started in

Powder

Technology

27-30 April
2004

*Powder
Research Ltd.*

Getting started in Powder Technology

27-30 April 2004

REGISTRATION FORM (Please PRINT OR TYPE details)

Surname _____

Given name _____ Title (Dr/Mr/Mrs/Miss/Ms) _____

Firm/Organisation _____

Address for correspondence _____

Tel: _____ Fax: _____

e-mail: _____

Please register me for **Getting Started in Powder Technology**
(27-30 April 2004)

☐ Please invoice me for £1195 (but I accept that my registration shall not be confirmed until payment in full is received by Powder Research Ltd)

☐ I enclose a cheque for £1195 made payable to "Powder Research Ltd" and drawn on a UK bank

Signature _____

The course fee is inclusive of tuition, course notes, lunches, coffees/teas and course dinner.

This form should be completed and returned (by fax or mail) as soon as possible to:

Powder Research Ltd.

Fax: 01423-873375

(International- +44-1423-873375)

e-mail: PRFGELDART@aol.com

On receiving your application we shall send you an acknowledgment and an invoice.

Confirmation of your place on the course will be sent when the course fee has been received.

A discount is available for companies that wish to send three or more participants- please ask for details.

Cancellations of confirmed registrations

A written cancellation received at least three weeks before the start of the course will be subject to a FULL REFUND.

No refunds shall be made for cancellations received after this date or for non-attendance, but copies of all course materials shall be issued. Substitutions may be made at any time.

POWDER TECHNOLOGY

In many of the process industries more than 70% of the products are sold in the form of powders, pass through a powder stage in their manufacture, or use powders as their raw material. Some examples are found in the food, chemical, pharmaceutical, nuclear and metal industries.

The importance of a knowledge of powder technology and science to these industries cannot be over-emphasised, yet few undergraduate science or engineering courses contain even a passing reference to the subject area.

Very often the difficulties encountered in handling and processing particulate solids are ignored or under-estimated at the design stage, with the result that start-up and operational problems reduce the effective capacity of the plant and threaten the quality of the products. A basic understanding of the technology of powders can minimise processing problems and help industrial scientists and engineers to improve existing operations, and **this is the longest running course in Europe that gives a broad coverage of Powder Technology.**

THE COURSE

Introduction

This course has been run annually since 1986 and has received many hundreds of participants in that period. Because the lecturers are active researchers or consultants the subject matter is kept up to date, and this year includes some new topics. Participants have always appreciated the practical way in which powder technology principles are put across and the opportunity to discuss their own powder problems with lecturers in a relaxed atmosphere. The programme, though intensive, provides adequate time for participants and lecturers to meet and interact informally

Aim of the course

The aim of this course is to provide participants with a broad understanding of the fundamentals of powder technology with an emphasis on concepts and practical problems.

For whom intended

The course is intended for those who have recently become engaged in work involving the handling or processing of powders. These would include chemists, physicists, pharmacists, mechanical and chemical engineers in the pharmaceutical, food processing, nuclear, chemical, oil, mineral processing, detergent and related industries. It is also suitable for graduate students who are starting their research and a special reduced fee is available for bone fide students

COURSE LECTURERS

The course is given by specialists who are actively engaged in various areas of Powder Technology as researchers, lecturers, or industrial consultants.

Mr. L. Bates	<i>Ajax Equipment Ltd.</i>
Professor D. Geldart	<i>Bradford University</i>
Professor H. Benkreira	<i>Bradford University</i>
Dr. I. Grimsey	<i>Bradford University</i>
Dr. N. Hamby	<i>Bradford University</i>
Professor P. Hewitt	<i>Bradford University</i>
Professor K. Palmer	<i>Consultant</i>
Mr. A. McLeish	<i>Hosakawa Micron Ltd.</i>
Professor L. Svarovsky	<i>Fine Particle Software</i>
Mr. Tom Taylor	<i>Taymark Engineering Consultants</i>
Dr. Bao Xu	<i>Leeds University</i>

The course is sponsored by Powder Research Ltd. and directed by Professor Derek Geldart.

PROGRAMME

Tuesday April 27

Registration at 08.45

Introduction
Mixing of powders
Sampling and characterising powders
Fluidization

Reception at 18.00

Wednesday April 28

Size enlargement & supercritical fluid technology for nano-particle formation
Flow and storage of bulk solids
Pneumatic conveying
Particle-gas separation

Thursday April 29

Solid-liquid handling
Particle-liquid separation
Characterising powders in an industrial laboratory
Size reduction

Course dinner in the evening

Friday April 30

Fire and explosion hazards of fine powders
Computer simulation and modelling in powder technology
Case studies of industrial powder technology problems & their solutions
Industrial dust control and health risks

Lectures will commence at 9am each day
The course will end at 3.45pm on the final day