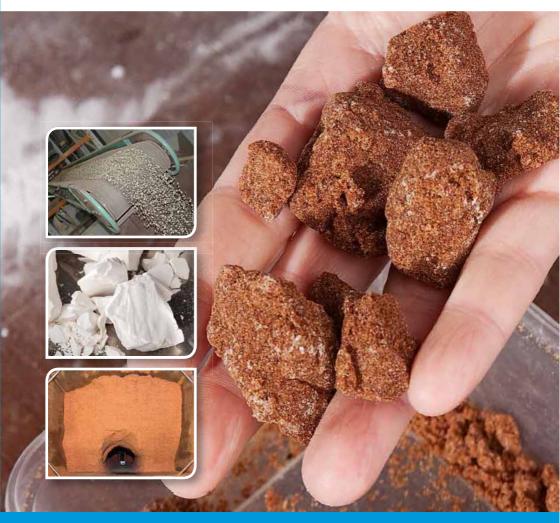


Storage and Discharge of Powders and Bulk Solids

5–7 March 2013, includes optional one-day practical session



www.bulksolids.com

Welcome to the Wolfson Centre for Bulk Solids Handling Technology

Our mission: cost-effective solutions to industrial problems

The Wolfson Centre is a leader in the field of powder and bulk solids handling technology and has established strong links with industry. This enables us to offer consultancy, research projects and short courses that combine technological excellence with personalised teaching. Our experts' in-depth knowledge, as specialists in powders and bulk solids, is complemented by their experience across all industries, including pharmaceuticals, process engineering, recycling, food processing and mining.

Objectives and content

This short course deals with the basics in the operation, design and specification of hoppers and silos and provides you with the knowledge to identify your powder handling storage and discharge problems and the techniques which can be employed to overcome them.

"The Storage and Discharge of Powders and Bulk Solids short course was not only a great eye opener but gave us knowledge in this so often overlooked subject. Tools and techniques provided during the twoday course helped to improve our process as well as avoid common mistakes in the future. No more trial and error and empirical improvements. I would like to thank all the experts at the Wolfson Centre for providing clear guidelines for future endeavours in particulate materials handling."

Arunas Janusis Welding Alloys UK

Topics include:

- Basics of hopper and silo function
- Dealing with potential problems
- Determination of hopper geometry
- Discharge aids and interfacing to feeders
- Predicting discharge rates
- Feeder design
- Silo inserts
- Practical examples.

The first two days are theory/presentations; the third day is an optional practical session in the on-site laboratories where delegates will have the opportunity to use equipment and see demonstrations of kit not available elsewhere.

Who should attend?

- Engineers
- Plant managers
- Skilled operatives
- Maintenance crew
- Equipment manufacturers.

Anyone involved in using powders or particulates would benefit from attending this course. You do not need advanced qualifications. A basic technical education and/or experience in industry is enough.

Course presenters

Mike Bradley is Professor in Particle and Bulk Technology and Director of the Wolfson Centre. He was awarded both his honours degree and PHD from Thames Polytechnic (now the University of Greenwich) and, as manager/director, provides technical leadership in all aspects of bulk solids handling. He was awarded professorship in 2006 and directorship in 2008.

Richard Farnish joined the Wolfson Centre in 1997 as a research fellow/ consultant engineer. He has worked extensively on consultancy projects on silo design, pneumatic conveying and segregation problems. He received an MPhil in 2006. His research interests are in optimising packaging and tanker filling systems.

Rob Berry joined the Wolfson Centre as a full-time PhD student, evaluating silo design methods for reliable flow. During that time he was involved in the Quality in Particulate Management (QPM) project, which resulted in the production of the Segregation Tester. More recently he was involved in a DEFRA-funded project which led to the production of the awardwinning Brookfield Powder Flow Tester, a unique piece of kit used for powder characterisation. His interests lie with silo design, powder flow measurements and feeder design.

Bookings

To book a place:

- Go online at www.bulksolids.com
- E-mail wolfson-enquiries@gre.ac.uk
- Telephone 020 8331 8646

Course fees

Storage and Discharge of Powders and Bulk Solids

5-7 March 2013

Cost: £1,075 per delegate for the full three-day course, or £695 per delegate for the two-day theory course.

A discount of 5% is available for three or more delegates from one company attending the same course at the same time.

Please note that in the event of a cancellation within three weeks of the start date, a charge of 50% will be made to cover administration costs. Substitution of delegates, however, can be made at any time.

More spring/summer courses

- 16 April: Evaluation of Electrostatics in Powder Handling
- 17 April: Dust Explosions: How to Demonstrate DSEAR/ATEX Compliance
- 21–23 May: Practical Powder Characterisation and Sampling for Industry
- 4 June: Segregation, Degradation and Caking
- 25–26 June: Biomass Handling, Feeding and Storage.

Full details can be found at **www.bulksolids.com**.

Should these dates be inconvenient and/or you have a number of employees wishing to take part, please call us to discuss how we can provide these courses at your place of work.



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