



9. - 10. Mai 2023

# Caking and Lump Formation of Powders and Bulk Solids;

Lehrgang - Online

Bearbeitet von am 25. Jan. 2023

"Concentration on issues relating to keeping powders and granules in a freeflowing, lump-free condition"

This course is designed to deal with issues relating to keeping powders and granules in a free-flowing, lump-free condition. A large percentage of work undertaken at the Wolfson Centre relates directly to the spoiling and/or solidifying of powders and particulates during handling, storage and discharge. In order to pass on this knowledge and expertise, the course on **Caking and Lump Formation in Powders and Bulk Solids** has been developed to provide process engineers with the information they need to predict and avoid this problem that can cost the company valuable time and money in re-work, lost customer confidence and reduced business.

#### **Course Dates**

### 9 - 10 May 2023

The course will run on line over 2 sessions; each session will start at 09:00 hrs UK time; both sessions need to be attended to complete the course.

Each day there will be an opportunity to discuss operational issues with the presenters and other delegates.

#### **Course Fee**

£450 per delegate. <u>Discounts</u> are available for group bookings and returning delegates.

# Registration

Registration and payment is available via the on-line shop.

A link to join will be sent in the week prior to the course start date.

# **Subjects covered**

- Understanding the forces between particles and how they relate to chemistry, the environment and physical processes;
- Methods for determining caking tendencies of powders and granules;
- Practical advice on changes to the product and the handling and storage conditions to reduce this problem;
- Advice on selection of the solution and practical implementation;
- Extensive case studies of caking problems and their solutions across the food, pharmaceutical, chemical, mineral and other industries.

## **Format**

This course is designed with an emphasis on the practical aspects of technology. We begin with a comprehensive introduction to give a basic understanding of materials handling, before moving on to more detailed work.

We'll use case studies throughout to illustrate the presentations, with plenty of discussion periods so that we can analyse any specific problems experienced by attendees.

## Is this for me?

The course is aimed at Produce Managers, Development Chemists/Formulators, Quality Assurance Officers and Plant Designers/Managers.

Operational staff or senior management will also benefit through a better understanding of what can go wrong and how to make your plant as efficient and

trouble-free as possible. The course is ideal for those new to materials handling, those who require an update on the subject, or those who need a working knowledge of the behaviour of powdered/granular materials.

## **Course team**

The course leader is <u>Richard Farnish</u>, <u>Consultant Engineer</u>, with over twenty years' experience in commercial design work related to materials handling.

Contributions may also be made from the rest of the Team, including Dr Baldeep Kaur, whose interests lie in characterisation and transportation of bulk materials;

Dr Vivek Garg, whose interests lie in powder flowability;

<u>Dr Lucas Massaro Sousa</u>, whose interests lie in fluidisation, solid feeding devices and CFD simulation;

Dr Atul Sharma, whose interests lie in pneumatic conveying systems.

Please note that The Wolfson Centre reserves the right to substitute leaders of equal quality should this be dictated by circumstances beyond their control.