

Invitation to conference POWDER AND PARTICLES

Flow Properties of Powder and Particle Characterization

Food, feed and pharmaceutical products very often consist of powder and/or added dry ingredients, e.g., enzymes, vitamins, colours, flavours, antioxidants and active medicinal compounds.

For most companies, it is very challenging to operationalize knowledge of particle properties, e.g., analytical results, directly to process optimization. The behaviour of particles will depend on numerous parameters such as particle size distribution, particle shape, chemical composition, moisture and temperature.

In order to optimize the flow ability of powder, and to design powder handling equipment such as silos, feeders and flow promoting devices, it is necessary to know and characterize the mechanical properties – the so-called flow properties of the particles.

This 1-day conference will give you the opportunity to learn more about characterization of powder and particles, and about how the results can improve process development.



When: Wednesday, 14th January 2015

Where: Danish Technological Institute, Building 1, Conference Room, Gregersensvej, 2630 Hoeje Taastrup

Registration: www.teknologisk.dk/k33055

Admission: DKK 950

Program:

9.30 Registration and coffee

Morning session: Inspiration from the pharmaceutical and bulk solids universe**10.00 Welcome and introduction to the programme and inSPIReFood**

Anne Maria Hansen, Danish Technological Institute,
Richard Ipsen KU-Food (Chairman) and Søren Sjøgaard KU-SUND (Chairman)

10.15 Flow properties of powder for equipment design

Dietmar Schulze, Ostfalia University of Applied Sciences & Schwedes + Schulze
Schüttguttechnik, Germany

11.15 Coffee and networking

11.30 Powder flow fundamentals, characterization and pharmaceutical applications

Changquan Calvin Sun, University of Minnesota

12.30 *Lunch*

Afternoon session: To operationalize the knowledge of the particle properties**13.30 It is not just analysis – it is just as much what comes before:****Representative Sampling (TOS) - and how to achieve it**

Kim Esbensen, GEUS & AAU

14.00 Determination of water in powder materials

Jan Nielsen, Danish Technological Institute

14.25 *Coffee and networking*

14.45 Understanding the relationship between powder properties, process behaviour and final product quality

Tim Freeman, Freeman Technology

15.15 Characterization of powder and particles at Haldor Topsoe

Niels P. Dalskov, Haldor Topsoe A/S

15.45 Process Optimization and the Influence on the different Drying Processes (Drying from Liquid to Powder)

Kaare Hvid Hansen, GEA Process Engineering A/S

16.15-17.00 *Discussions - Snacks and networking*