



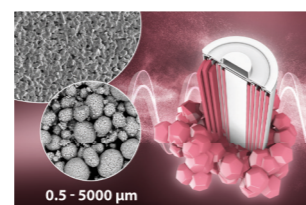
What to expect?

You will receive a comprehensive overview of processes for powder production at elevated temperatures:

- Particle/process gas interaction
- Production of raw materials / precursors
- Processes in the synthesis reactor
- Downstream processes
- Analytics
- Specific application examples

For synthesis, coating and calcination of micro- and nanopowders, treatment in a pulsating hot gas stream has proven to be advantageous in numerous cases. Learn more about this technology and its potential.

We bring together leading scientists in this field. In this way, we can shed light on the entire process chain in the production of novel powders, both theoretically and by means of selected examples.



Product design of battery materials with higher capacity and stability

- Anode materials
- Cathode materials
- Solid electrolyte



Ceramic powders for highest requirements

- Improved sintering
- Improved stability
- Improved catalytic properties

Who should attend?

Are you a materials scientist or product developer working in research or production? The colloquium is basically aimed at anyone who is looking for new possibilities for the production, coating and thermal post-treatment of fine powders - from the nano to the micrometer range.

Solutions for complex stoichiometry and crystal structure requirements, for example for mixed oxides, are considered as well as options for organic and inorganic core-shell coating and aspects of calcination.

The combination of theoretical considerations and practical experience takes into account different levels of prior knowledge.

How to attend?

Date
29.10. to 30.10.2024

Location
Glatt Ingenieurtechnik GmbH
Nordstrasse 12, 99427 Weimar, Germany

Participation fee
120 € (plus VAT)
Costs for the evening program on 29.10.2024 are included

Registration



Register NOW



Program

Tuesday, October 29, 2024

- 13:00 – 13:45 Welcome
- 13:45 – 14:15 *Prof. Martin Oschatz (FSU Jena)*
From molecules to materials for energy storage and catalysis
- 14:15 – 14:45 *Prof. Evangelos Tsotsas (OVGU Magdeburg)*
Spray drying in gas flows with droplet breakup and secondary atomization
- 14:45 – 15:30 Coffee Break
- 15:30 – 16:00 *Dr. Christoph Roitzheim / Dr. Martin Finsterbusch (Forschungszentrum Jülich)*
Oxide-based solid electrolytes and active materials for future battery technologies - influence of calcination and sintering
- 16:00 – 16:30 *Dr. Viktor Drescher (Glatt Ingenieurtechnik GmbH)*
A flexible tool for synthesis, coating and thermal modification of micro and nano powders
- 16:30 – 17:30 Guided Tours
- 19:00 – 22:00 Evening Event

Wednesday, October 30, 2024

- 09:00 – 09:30 *Prof. Stefan Heinrich (TU Hamburg)*
Multi-scale modelling and characterization of dense gas-solid flows
- 09:30 – 10:00 *Mr. Arne Teiwes (Glatt Ingenieurtechnik GmbH)*
Glatt Powder Synthesis®: Development of methods and tools for a deeper understanding of the prevailing sub-processes
- 10:00 – 10:30 *Prof. Arno Kwade / Prof. Carsten Schilde (TU Braunschweig)*
Modelling and simulation of mixing, dispersion and comminution processes
- 10:30 – 11:00 Coffee Break
- 11:00 – 11:30 *Prof. Michael Stintz (TU Dresden)*
Aerosol sizing methods for nanoparticle analysis
- 11:30 – 12:00 *Dr. Thomas Jähnert (Glatt Ingenieurtechnik GmbH)*
Analytical methods for the characterization of powders
- 12:00 – 13:00 Lunch
- 13:00 – 13:30 *Dr. Sabine Begand (Fraunhofer IKTS)*
Synthesis of high-purity, nanosized oxide powders using advanced pulse powder technology
- 13:30 – 14:00 *Prof. Marcus Halik (FAU Erlangen-Nürnberg)*
Cleaning water with 'smart rust' and magnets
- 14:00 – 14:30 *Dr. Buchheim (Glatt Ingenieurtechnik GmbH)*
Innovative powders for energy applications
- 14:30 End of Event