

Nano Seminar

October 17 to 18, 2012

Course information

Duration of the course: 2 days

Attendance: approx. 10

Course charge contains:

- 2 overnight stays
- Lunch / Dinner
- Seminar documents

Fee: EUR 1,200.00 + VAT

Organization

Mrs. Feig-Kirschneck will advise you in all questions.

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For more information please do not hesitate to contact us.

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Our special service for you

We also offer inhouse application or service seminars according to your specifications. If you are interested, please do not hesitate to contact us.

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 info.nft@netzsch.com • www.netzsch.com

Registration

- Yes, I want to take part in the nano seminar "Production and Processing of Nanoparticles by Top-Down-Processes" at a price of EUR 1,200.00 + VAT.

Dates:

17. - 18.10.2012

- No, I cannot take part at the dates mentioned above but would like to be informed about further dates.

Please enter the following data:

Company: _____

First and last name: _____

Tel.: _____

E-mail: _____

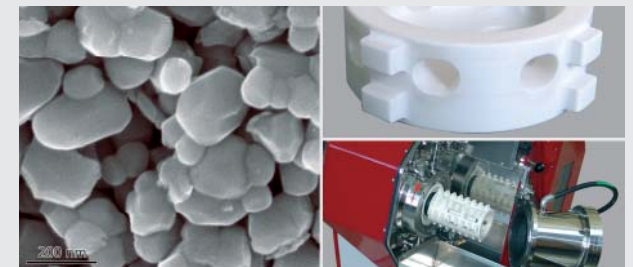
Place, date _____ Signature _____

Kindly return your filled-in registration form by fax to +49 9287 797 149

or

register online at
www.netzsch-grinding.com/seminar

- Production and Processing of Nanoparticles by Top-Down-Processes -



our technology
YOUR SUCCESS

Nano Seminar

- Production and Processing of Nanoparticles by Top-Down-Processes -

Target group

Responsible people in the fields

- Production
- Process technology
- Laboratory
- Research & Development

Programme

1st Day

- 8:30 Welcome
- Distribution of the seminar documents
 - Presentation of NETZSCH
- 9:00 Principle of agitator bead mills
- Term definition
- Survey mixing technology
- 10:00 Break
- 10:15 Process technology
- Specific energy
 - Stress energy
 - Stress number
 - Grinding media parameters
- 12:00 Basic principles of stabilization
- Electrochemical double layer
 - Zeta potential
 - DLVO theory
 - Electrostatic stabilisation
 - Steric stabilisation

- 12:30 Lunch
- 13:30 NETZSCH-CONDUX Mahltechnik GmbH
Dry grinding by *e-JET®* and *s-JET®*
- 14:15 Break
- 14:30 OxiMaTec GmbH
Homogeneous dispersions of multicomponent nanoscaled powders and production of high performance ceramic materials thereof
- 15:15 Process technology
- Residence time distribution
 - Operation of agitator bead mills
 - Survey about NETZSCH grinding systems
 - Real grinding down to the nanometer range
 - Smooth dispersion
- 17:30 Tour of the laboratory
- 19:00 Evening programme

2nd Day

- 8:00 Visit of NETZSCH-Gerätebau GmbH
Lecture about possibilities of thermal analysis in nanotechnology
- 9:00 Way back to NFT
- 9:15 Malvern Instruments GmbH
Rheological analysis of dispersions
- 10:00 Retsch Technology GmbH
Laser diffraction, static and dynamic light scattering
- 10:45 Break

- 11:00 Quantachrome Partikelmesstechnik GmbH
Ultrasonic spectroscopy, analysis of particle size and stability without mistakes in sample preparation
- 11:45 Byk Chemie GmbH
Stabilization of pigments
- 12:30 LOT-Oriel GmbH & Co. KG
Characterization of micro- and nanoparticles with the desktop electron microscope PHENOM
- 12:40 Lunch
- 13:30 Workshop
1. Production of a scratch-resistant coating
 2. Dispersion of photocatalytic active particles
 - Stabilization by using an example
 - Analysis of rheology and particle size by the invited experts using different equipment
- 15:15 Break
- 15:30 Evaluation of the results and final discussion
- 16:30 End of the seminar