



9th International Symposium „Fine Grinding and Dispersing“

Thursday, 11th October 2018

08:30-09:00 Registration

09:00-09:10 Welcome speech

Session 1 Advances in dry grinding technology

09:10-09:35 Stressing conditions in jet mills – accessing the influence of process parameters by particle probes
A. Strobel, B. Köninger, S. Romeis, K.-E. Wirth, W. Peukert
FAU Erlangen-Nuremberg

09:35-10:00 Grinding Bed Thickness Measurements for the Evaluation of Fine Grinding Processes
C. Karhoff
Neuman & Esser GmbH Grinding and Classifying Systems

10:00-10:25 ACP: A New Energy Efficient Classifier For Calcium Carbonate
D. Droop, S. Sander
Hosokawa Alpine AG

10:25-10:55 Coffee-break and exhibition visit

Session 2 Modeling and Simulation

10:55-11:30 **Key Note:** Advances in mathematical modelling of ball milling using DEM/PBM
L.M. Tavares
Universidade Federal do Rio de Janeiro

11:30-11:55 Modeling and Simulation of Transport in a Pilot-Scale Dry Ball Mill Using Nomura Model
A.L.R. Oliveira, L.M. Tavares
Universidade Federal do Rio de Janeiro

11:55-12:20 Rod Mill design optimization through DEM Simulation
Y. Yang
ME Global/Elecmetal Inc.

12:20-12:45 DEM simulation of the bead motion in dry operated stirred media mills
P. Prziwara, C. Thon, A. Kwade, C. Schilde
Technische Universität Braunschweig



12:45-13:45 *Lunch and exhibition visit*

Session 3 **Dry stirred media milling**

13:45-14:10 Optimization of the air flow rate in a laboratory scale horizontal continuous dry stirred media mill

Á. Rácz, L. Tamás
University of Miskolc

14:10-14:35 Impact of grinding aids on closed-circuit grinding using a dry operated stirred media mill

P. Prziwara, S. Thake, S. Breitung-Faes, A. Kwade
Technische Universität Braunschweig

14:35-15:00 Introduction of a new dry horizontal agitated bead mill - comparison of results with ball mill for limestone

C. Simon, J. Röttle, U. Enderle
ECUTECH Barcelona S.L.

15:00-15:25 Characterization of Fine Particles for Modelling of Dry Stirred Mill

O. Altun, D. Altun, S. Zencirci, S. Gökçen, H. Benzer
Hacettepe University

15:25-15:55 *Coffee-break and exhibition visit*

Session 4 **Optimization of wet grinding and dispersing processes**

15:55-16:30 **Key Note:** Practical examples on how to optimize the ink dispersion process

H.-H. Stender
Siegwerk Druckfarben AG & Co. KGaA

16:30-16:55 Assessing Stressing in Stirred Media Mills by Particle Probes

S. Romeis, A. Strobel, W. Peukert
FAU Erlangen-Nuremberg

16:55-17:20 Processing of submicron material mixtures by wet stirred media milling

M. Nöske, S. Breitung-Faes, A. Kwade
Technische Universität Braunschweig

17:20-17:45 Increasing Production Capacities – A Combination of Modification of the Grinding System, the Use of Ceramic Materials and the Optimization of Operating Parameters

S. Mende
NETZSCH-Feinmahltechnik GmbH

19:00 *Dinner*

Restaurant "Al Duomo", Ruhfäutchenplatz 1, 38100 Braunschweig



Friday, 12th October 2018

Session 5 Grinding processes in the pharmaceutical industry

08:30-09:05 **Key Note:** Size Reduction of Active Pharmaceutical Ingredients – Overview, Challenges and Advancements

M. Juhnke

Novartis Pharma AG

09:05-09:30 Mechano-Chemical Activation of APIs by Co-Milling

M. Kalt, A. Ros, P. Iamartino, S. Mercuri, D. Crivelli, B. Joost

University of Applied Sciences of Northwestern Switzerland (FHNW)

09:30-09:55 Analysis of Pin Milling of Pharmaceutical Materials

T. Bonakdar, M. Ghadiri

University of Leeds

09:55-10:20 Challenges in Nanomilling of Active Pharmaceutical Ingredients

M. Wewers, A. Kwade

Technische Universität Braunschweig

10:20-10:50 Coffee-break and exhibition visit

Session 6 Aspects of wet fine grinding

10:50-11:15 New Dense And Small Media For Ultra-Fine Milling

D. Bouttes, A.-L. Beaudonnet, B. Ropers

Saint-Gobain CREE

11:15-11:40 Controlled Surface Functionalization and Oxidation of Submicron- and Nano-sized Metallurgical Silicon During Ultrafine Grinding

B.E. Nilssen, B.R. Henriksen, R.A. Kleiv

Elkem AS, Technology

11:40-12:05 Challenges in grinding of fine-grained, complex ores

M. Buchmann, E. Schach, T. Leißner, M. Kern, T. Mütze, U. Peuker

TU Bergakademie Freiberg

12:05-12:30 Microhydrodynamics Model for Non-Newtonian Ground Suspensions in Stirred Media Mills

J. Faitli, K. Bohács and Á. Rácz

University of Miskolc

12:30-12:45 Closing speech

12:45-13:45 Lunch

14:00 Optional: Institute visit