

30 JULY 2003

VOL. 133 NOS. 1-3

ISSN 0032-5910

POWDER TECHNOLOGY

AN INTERNATIONAL JOURNAL ON THE SCIENCE AND
TECHNOLOGY OF WET AND DRY PARTICULATE SYSTEMS

EDITOR-IN-CHIEF

J.P.K. Seville (*Birmingham, UK*)

REGIONAL EDITORS

L.-S. Fan (*Columbus, OH, USA*)

M. Horio (*Tokyo, Japan*)

HONORARY EDITORS

R. Clift

J.C. Williams

Online Access Via:
www.elsevier.com/locate/powtec

Deriving cake detachment versus cake area load in a jet pulsed filter by a mechanistic model	134
A. Kavouras and G. Krammer	
3-D random packing of polydisperse particles and concrete aggregate grading	147
G. Fu and W. Dekelbab	
Fabrication and characteristics of Fe_3O_4 -polymer composite particles by hybridization	156
X.G. Li, S. Takahashi, K. Watanabe, Y. Kikuchi and M. Koishi	
Polyelectrolyte effect and settling of alumina dispersions	164
C.L. de Vasconcelos, D.W.O. de Medeiros, K.T. de Moura, W. Acchar, T.N.C. Dantas, M.R. Pereira and J.L.C. Fonseca	
Effects of micron-sized particles on hydrodynamics and local heat transfer in a slurry bubble column	171
H. Li, A. Prakash, A. Margaritis and M.A. Bergougnou	
Influence of synthesis parameters on the structure of boehmite sol particles	185
R. Petrovic, S. Milonjic, V. Jokanovic, Lj. Kostic-Gvozdenovic, I. Petrovic-Prelevic and Dj. Janackovic	
Discrete particle motion on sieves—a numerical study using the DEM simulation	190
J. Li, C. Webb, S.S. Pandiella and G.M. Campbell	
Modelling and measuring of cohesion in wet granular materials	203
T. Gröger, U. Tüzün and D.M. Heyes	
On the jet penetration height in fluidized beds with two vertical jets	216
R.Y. Hong, Q.J. Guo, G.H. Luo, J.-Y. Zhang and J. Ding	
Granule breakage phenomena in a high shear mixer; influence of process and formulation variables and consequences on granule homogeneity	228
K. van den Dries, O.M. de Vegt, V. Girard and H. Vromans	
Pressure fluctuations and transition from bubbling to turbulent fluidization	237
A. Chen and H.T. Bi	
Short communications	
Hydrothermal synthesis and characterization of octahedral nickel ferrite particles	247
D. Chen, X. Jiao, Y. Zhao and M. He	
Computer control of powder flow for solid freeforming by acoustic modulation	251
S. Yang and J.R.G. Evans	
Author Index of Volume 133	255
Subject Index of Volume 133	256

Contents

Abstracting Services

This journal is cited by the following Abstracting Services: Analytical Abstracts, Cambridge Scientific Abstracts, Chemical Abstracts, Chemical Engineering Abstracts, Compendex Plus, Current Contents, MFIZ Karlsruhe, Fluid Abstracts, Metals Abstracts, Metal Powder Report, PASCAL/CNRS, Physikalische Berichte, World Aluminium Abstracts, World Surface Coatings Abstracts.

Modeling and simulation of circulating fluidized bed reactor with catalytic ozone decomposition reaction	1
A. Therdthianwong, P. Pantaraks and S. Therdthianwong	
The effect of compression and preconsolidation on the effective thermal conductivity of particulate beds	15
G. Widenfeld, Y. Weiss and H. Kalman	
Density gradients and springback: environmental influences	23
J. Nam, W. Li and J.J. Lannutti	
The effect of wall friction in the compaction of pharmaceutical tablets with curved faces: a validation study of the Drucker-Prager Cap model	33
I.C. Sinka, J.C. Cunningham and A. Zavaliangos	
Analysis of some effects caused by interaction between bulk solid and r.c. silo wall structure.	44
A. Lapko, M. Gnatowski and J.A. Prusiel	
Quantification of the morphology of sucrose crystals by image analysis	54
N. Faria, M.N. Pons, S. Feye de Azevedo, F.A. Rocha and H. Vivier	
CFD modeling and experimental study of resin-bonded sand/air two-phase flow in sand coremaking process	68
S.I. Bakhtiyarov and R.A. Overfelt	
Hydrodynamic interaction between a coarse gas-emitting particle and a gas fluidized bed of finer solids	79
R. Solimene, A. Marzocchella and P. Salatino	
Numerically simulated flow characteristics of particulate beds in oscillating sectorial containers	91
M. Malik, A. Mujumdar and R. Dave	
Agglomeration of charged nanopowders in suspensions	106
J.H. Werth, M. Linsenbühler, S.M. Dammer, Z. Farkas, H. Hinrichsen, K.-E. Wirth and D.E. Wolf	
Fragmentation by high velocity impact on a target: a material grindability test	113
O. Lecoq, N. Chouteau, M. Mebtoul, J.-F. Large and P. Guigou	
Relationship between particle-size and chord-length distributions in focused beam reflectance measurement: stability of direct inversion and weighting	125
E.J.W. Wynn	

(Continued on last page of this issue)