

Particle & Bulk Powder Characterization

Poster Board Number	Title	First Name	Last Name	Paper Number
1	Evaluating the Influence of Dry Granulation Processing Variables on the Rheological Properties of Granules	Tim	Freeman	54a
2	Assessment of the Homogeneity of an Alumina Powders Mixture Using Rheological Parameters	Cendrine	Gatumel	54b
3	Characterising the Grain Shape: In Search of Size Independent Shape Descriptors	Anurag	Tripathi	54c
4	Investigating Mechanical Properties of Surfactant Films at the Solid-Liquid Interface Using AFM	Anoop	Nautiyal	54d
5	Deposition Rate Consequences of the Formation of Multi-Spherule Cluster Aggregates in Gases Role of Momentum Shielding	Daniel E.	Rosner	54e
6	Experimental and Numerical Studies on the Thermal Diffusivity of Packed Powder Beds	Bereket	Yohannes	54f
7	Determination of Size, Size Distribution and Refractive Index of Artificial and Biological Microparticles	Jörg	Neukammer	54g
8	FlowCam Nano [®] Provides Counts, Sizes and Images of Nano-and Microparticles: Application to a Therapeutic Protein Pumping Study	Dave	Hamel	54bm

Particle Interactions

Poster Board Number	Title	First Name	Last Name	Paper Number
9	Numerical and Experimental Estimation on the Normal and Tangential Capillary Bridge Force Adhered to Two Spheres	Kazuo	Murase	54j
10	Numerical Simulation of Wire-Plate Electrostatic Precipitator - Effect of Particle Concentration	Bao-Yu	Guo	54k
11	Triboelectric Charge of Spherical Glass Particles Against Metal Pipeline	Kwangseok	Choi	54l

Particle Design

Poster Board Number	Title	First Name	Last Name	Paper Number
12	Spray-Drying of a Layered Double Hydroxide Nanosuspension	Boris	Golman	54m
14	Impact of Spheroidization of UO ₂ Powders on the Filling of Press Molds	Ahmed	Madian	54n

Handling & Processing of Granular Systems

Poster Board Number	Title	First Name	Last Name	Paper Number
15	Modelling a Twin Screw Granulator Using the Discrete Element Method	John P.	Morrissey	54o
16	Hybrid Multiscale Modelling of a Twin Screw Granulator	John P.	Morrissey	54p
17	Blocking Rules for Discharging Granular Materials from a Flat Bottom Hopper	Charley	Wu	54r
18	Characterization of Mesoscopic Structure in Cohesive Powder, Neat or Blended, By X-Ray Computed Tomography and Prediction By the Discrete Element Method	Sean	McClure	137b

Particle Classification

Poster Board Number	Title	First Name	Last Name	Paper Number
19	Numerical Research of Hydrodynamics in Gas-Solid Micro Fluidized Beds	Lijie	Cui	54t

Fluidization & Multiphase Flow

Poster Board Number	Title	First Name	Last Name	Paper Number
20	An Improved Bubble-Based Drag Model for Accurate Coarse-Grid Two-Fluid Modeling of Geldart a Powder Bubbling Fluidization	Qingang	Xiong	54v
20	An Improved Bubble-Based Drag Model for Accurate Coarse-Grid Two-Fluid Modeling of Geldart a Powder Bubbling Fluidization	Kun	Hong	54v

21	Numerical Simulation on Fine Particle Transport Behaviour in Electrostatic Precipitators	Ming	Dong	54w
22	Lattice Boltzmann Simulations of Porous Particulate Flows	Chenggong	Li	54x
23	Modeling of a Novel Multi-Particle Collision Model for Gas-Solid Flows	Vikrant	Verma	54z
24	Dpm Analysis of Large Fluidized Catalytic Cracking (FCC) Reactors	Azita	Ahmadzadeh	54aa
25	Catalytic Reactor Design Using Multiphase CFD	Dimitri	Gidaspow	54ad
26	Simulation of Large Particle Turbulent Fluidization in Riser Reactors By Coarse Grain DEM-CFD	Alberto	Di Renzo	54ae
27	Numerical Study of Particles Shape Effects on Solid-Liquid Fluidizations	Zongyan	Zhou	54af
28	Bubbling Behavior Under Mechanical Bed Vibrating Condition in a Gas-Solid Fluidized Bed	Yoshihide	Mawatari	54ag
29	The Effect of Pressure on Hydrodynamic Characteristics in Dense Fluidized Bed and Riser	Junguo	Li	54ah
30	CFD Investigation on Gas-Solids Flow and Heat Transfer in Two Fluidized Catalyst Cooler	Xiuying	Yao	54ai
31	Hydrodynamics and Mixing Characteristics of a New-Type Particle Mixer	Mengxi	Liu	54aj
32	Power Spectral Density Analysis of Pressure Signal in 18 m Circulation Fluidized Bed Riser	Chengxiu	Wang	54ak
33	Characteristics of Pressure Fluctuations in Particle-Transport Inclined Pipe of a Circulating Fluidized Bed	Chaoyu	Yan	54al
34	Dynamic Modeling of Attrition and Reactions in Circulating Fluidized Bed Reactors	Stefan	Heinrich	54am
34	Dynamic Modeling of Attrition and Reactions in Circulating Fluidized Bed Reactors	Johannes	Haus	54am
35	Analysis of FCC Cyclone Fault Diagnosis Technology Based on Particles Information	Jianfei	Song	54an
36	The Multi-Hole Throttling Effect and the Erosion Characteristics of the High Pressure Natural Gas	Jiangyun	Wang	54ao
37	Numerical Simulation of Flow Field In a Gas Pipe Distributor of the FCCU Regenerator	Yaodong	Wei	54ap
38	Full-Loop Simulation of Gas-solids Flow in Circulating Fluidized Bed of FCC System	Xingying	Lan	54aq

Applications for Sustainable Energy & Environment

Poster Board Number	Title	First Name	Last Name	Paper Number
39	Immobilization of Sulfur-Oxidizing Bacterium, <i>Thioalkalivibrio Sp.</i> D301 on Magnetic Nanoparticles and Biodesulfurization	Jianmin	Xing	54ar
40	Simulation of Bulk Solids and Granular Systems By Using Combined Discrete Element Models	Yongzhi	Zhao	54as
41	Material Optimization of Perovskite Films using High Throughput Synthesis and Multi-Dimensional Analysis	Ahmed M.	Salaheldin	54bk

Particle-Based Separations: Fundamentals & Applications

Poster Board Number	Title	First Name	Last Name	Paper Number
42	Solid Liquid Separation Via Particle Flow Instability	Steven	Wang	54au

Applications of Particle Technology for Pharmaceuticals

Poster Board Number	Title	First Name	Last Name	Paper Number
43	Milling and Grindability Assessment of Pharmaceutical Materials	Tina	Bonakdar	54aw

Applications of Solids Processing Unit Operations

Poster Board Number	Title	First Name	Last Name	Paper Number
44	Bi-Directional Thermal Control of Twin Screw Granulation Process Via a Specialised Annular Heat Pipe	Ahmad	Mustaffar	54ax
45	Mixing Grains with Different Elongation in a Rotating Drum	Marco	Ramaioli	54ay
46	Generation of Particles with a Special Morphology By Desublimation of Copper Phthalocyanine	Sergiy	Antonyuk	54az
47	Rubbery Milling of Seed Endosperms for Improved Sustainability by Natural Functionality Preservation	Linda	Brütsch	54bl

Education				
Poster Board Number	Title	First Name	Last Name	Paper Number
48	Particle Technology Education at Purdue University	Carl	Wassgren	54ba
49	Teaching Particle Technology in Portugal – University of Coimbra	Maria G.	Rasteiro	54bb
50	Highlights of Particle Technology Teaching in Singapore	Jia Wei	Chew	54bc
51	Particle Technology Course at the University of Salerno	Massimo	Poletto	54bd
52	Professional Master of Engineering Degree in Particle Technology	R. Bertrum	Diemer	54be
52	Professional Master of Engineering Degree in Particle Technology	James N.	Michaels	54be
53	Recent Developments in Particle Technology at the Universidad Tecnica Federico Santa Maria	Francisco	Cabrejos	54bf
54	Using Perusall to Enhance Student Learning of Particle Technology at Graz University of Technology	Daniel	Lepek	54bg
55	A Graduate Course in Fluidization and Gas-Solid Flow Systems	Hamid	Arastoopour	54bh
56	Education of Fluid-Solid Multiphase Flow at Department of Mechanical Engineering, Osaka University	Toshitsugu	Tanaka	54bi
57	Bulk Solids Handling Education at the KSU Bulk Solids Innovation Center	Johnselvakum	Lawrence	54bj