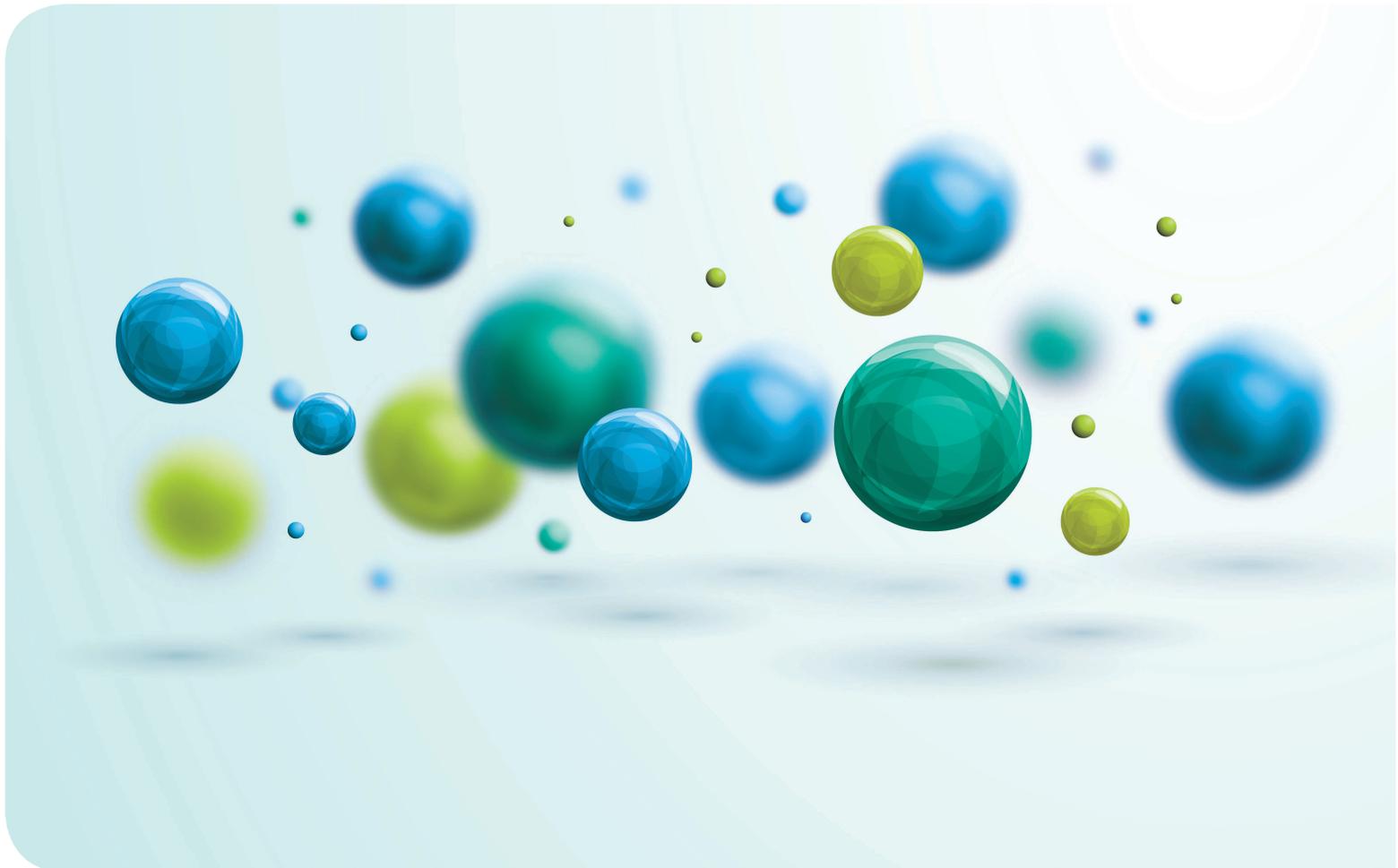


PARTEC 2019

International Congress on Particle Technology

April 9-11, 2019 | Nürnberg, Germany



together with:



POWTECH 2019

Honorary Sponsor:



www.partec.info

NÜRNBERG / MESSE



Purpose

Modern production processes in chemical, pharmaceutical and biological industries are characterized by solids processes with complex process structures.

Grand challenges has been achieved to better understand and to adjust processes for particle product design and the corresponding and required product properties, which are of multiscale nature.

Besides this classical fields the PARTEC, as one of the largest international particle and powder technology conferences, wants to address also emerging fields of applications of particle technology in life sciences and medicine, environmental and energy technology, synthesis reactions, materials science, electronics, photonics and additive manufacturing, which influence our daily life.

Scientific Committee

Antonyuk, S. – TU Kaiserslautern, Germany

Arastoopour, H. – IIT, USA

Bowen, P. – EPFL, Switzerland

Braun, M. – Ansys Germany GmbH, Germany

Butt, H.-J. – MPIP, Germany

Chaouki, J. – EPM, Canada

Cocco, R. – PSRI, USA

Cölfen, H. – U. Konstanz, Germany

Coppens, M.-O. – UCL, UK

Dave, R.-N. – NJIT, USA

Fan, L.-S. – U. Ohio State, USA

Fritsching, U. – U. Bremen, Germany

Frye, L. – Bayer AG, Germany

Fuji, M. – NITech, Japan

Ghadiri, M. – U. Leeds, UK

Herrmann, H. J. – ETH Zürich, Switzerland

Jacob, M. – Glatt Ingenieurtechnik GmbH, Germany

Jacob, K. – Dow Chemical Company, USA

John, E. – Novartis Pharma AG, Switzerland

Kalman, H. – BGU Negev, Israel

Khinast, J. – TU Graz, Austria

Kind, M. – KIT, Germany

Kleinebudde, P. – HHU Düsseldorf, Germany

Klupp-Taylor, R. – FAU Erlangen-Nürnberg, Germany

Kraus, T. – INM – Leibniz, Germany

Kuipers, J.A.M. – TU Eindhoven, Netherlands

Lettieri, P. – UCL, UK

Li, J. – CAS, China

Litster, J. – U. Sheffield, UK

Luding, S. – U. Twente, Netherlands

Matsusaka, S. – U. Kyoto, Japan

Executive Committee

Heinrich, S. – Hamburg University of Technology, Germany

Kleine Jäger, F. – BASF SE, Germany

Kwade, A. – TU Braunschweig, Germany

Mädler, L. – Stiftung Institut für Werkstofftechnik Bremen, Germany

For this reasons the major topic of the next PARTEC in 2019 is „Particles for a better life“. PARTEC attracts a very wide mix of attendees, from both academia and industry, all meeting together in the same place and surrounded by POWTECH, the world's leading exhibition for the processing, analysis and handling of powder and bulk solids.

I would therefore like to invite the academic world and the representatives from the industry to take part in this important event.

I look forward to meeting you at PARTEC 2019.

Prof. Dr.-Ing. Stefan Heinrich

Head of the Institute of Solids Process Engineering and Particle Technology of the Hamburg University of Technology (TUHH)
Chairman of PARTEC 2019

Meesters, G.M.H. – TU Delft, Netherlands

Miller, R. – MPI of Collids and Interfaces, Germany

Mühlenweg, H. – Evonik, Germany

Muzzio, F. J. – SoE Rutgers, USA

Naito, M. – U. Osaka, Japan

Ooi, J. – U. Edinburgh, UK

Palzer, S. – Nestlé S.A., Switzerland

Peglow, M. – IPT-Pergande GmbH, Germany

Pirker, S. – JKU Linz, Austria

Pratsinis, S. – ETH Zürich, Switzerland

Pui, D.Y.H. – U. Minnesota, USA

Riebel, U. – BTU Cottbus, Germany

Röthele, S. – Sympatec GmbH, Germany

Salman, A.D. – U. Sheffield, UK

Schmidt, E. – BUW, Germany

Schneider, H. – Zeppelin Systems GmbH, Germany

Schneider, G. – TU Hamburg, Germany

Seville, J.P.K. – U. Birmingham, UK

Sundaresan, S. – U. Princeton, USA

Teipel, U. – TH Nürnberg, Germany

Tsotsas, E. – OVGU Magdeburg, Germany

van Ommen, R. – TU Delft, Netherlands

Walker, G. – U. Limerick, Ireland

Watano, S. – OPU, Japan

Weber, A.D. – TU Clausthal, Germany

Weimer, A.W. – U. Colorado, USA

Weinekötter, R. – Gericke AG, Switzerland

Witt, W. – Sympatec GmbH, Germany

Wollny, M. – Merck KGaA, Germany

Yu, A. – Monash University, Australia

Nirschl, H. – Karlsruhe Institute of Technology, Germany

Peuker, U. – TU Bergakademie Freiberg, Germany

Peukert, W. – FAU Erlangen-Nürnberg, Germany

Program overview

Tuesday, April 9, 2019

09:00	Opening						
09:10	Friedrich Löffler-Prize in Particle Technology						
09:20	Particle Functionalization by ALD: Fundamentals, Applications, and Path Forward, Prof. Dr. Alan W. Weimer						
10:00	Coffee Break						
10:30	Modelling and Simulation	Characterization of Particles	Fluidization and Multiphase Flow	Handling and Flow of Particulate Systems	Mechanics of Particulate Solids	Modelling and Simulation	DynSim SPP 1679
12:10	Lunch Break & Exhibition Visit						
14:00	Dynamics of Cohesive Powder Flow, Prof. Mojtaba Ghadiri						
14:40	Modelling and Simulation	Application of Particle Technology	Fluidization and Multiphase Flow	Mixing	Interface Properties	Particle and Bulk Powder Characterization	DynSim SPP 1679
15:40	Coffee Break						
16:10	Modelling and Simulation	Characterization of Particles	Fluidization and Multiphase Flow	Handling and Flow of Particulate Systems	Interface Properties	Particle and Bulk Powder Characterization	Particle Technology for Pharmaceuticals
17:30	Poster Presentation Visit						
19:00	Get-together						

Wednesday, April 10, 2019

09:00	EFCE-MPS Award						
09:10	Particle Technology in Additive Manufacturing, Prof. Karen Hapgood						
09:50	Coffee Break						
10:20	Modelling and Simulation	Particle Technology for Pharmaceuticals	Fluidization and Multiphase Flow	Agglomeration and Granulation	Particle Interactions and Interfaces	Particle and Bulk Powder Characterization	Particles for Additive Manufacturing
12:20	Lunch Break & Exhibition Visit						
14:00	Model Driven Design of Particulate Processes and Products - Applications in Pharmaceutical Manufacture and Beyond, Prof. Jim Litster						
14:40	Modelling and Simulation	Particle Technology for Pharmaceuticals	Application of Particle Technology	Agglomeration and Granulation	Characterization of Particles	Particle and Bulk Powder Characterization	Particle Design and Functionalization
16:00	Coffee Break						
16:30	Modelling and Simulation	Particle Technology for Pharmaceuticals	Comminution	Particle Technology for Energy Systems	Particles for Additive Manufacturing	Life and Food Science	Particle Design and Functionalization
18:00	POWTECH Exhibition Party						

Thursday, April 11, 2019

09:00	Elsevier/Powder Technology Poster-Award, PARTEC 2019						
09:10	Engineering of particles by spray drying and spray fluidized bed processes, Prof. Dr.-Ing. Evangelos Tsotsas						
09:50	Coffee Break						
10:20	Modelling and Simulation	Agglomeration and Granulation	Comminution	Formation and Synthesis of Particles	Particle Interactions and Interfaces	Separation	Nano Hybrids
12:20	Lunch Break & Exhibition Visit						
14:00	Contribution of Particle Technology Research on CO ₂ capture and reduction, Prof. Hamid Arastoopour						
14:40	Modelling and Simulation	Characterization of Particles	Application of Particle Technology	Formation and Synthesis of Particles	Particle Technology for Pharmaceuticals	Separation	Handling and Flow of Particulate Systems
16:00	Closing Ceremony						

Tuesday, April 9, 2019

09:00 Opening

09:10 Friedrich Löffler-Prize in Particle Technology

09:20 **Particle Functionalization by ALD: Fundamentals, Applications, and Path Forward**
 Prof. Dr. Alan W. Weimer, University of Colorado, USA

Keynote

10:00 Coffee Break

	Modelling and Simulation	Characterization of Particles	Fluidization and Multiphase Flow	Handling and Flow of Particulate Systems
10:30	<p>Experimentally validated DEM characterization for a hydrodynamic granular model with application to hopper flow</p> <p>Robert Hesse, Technical University of Kaiserslautern, Germany</p>	<p>On-line Particle Size Analysis by Laser Diffraction and Scattering for nanoscale Suspensions and Emulsions</p> <p>Dr. rer. nat. Thomas Stübinger, Sympatec GmbH, Germany</p>	<p>Spatially-averaged models for fluidized gas-particle suspensions</p> <p>Dr. Simon Schneiderbauer, Johannes Kepler University of Linz, Austria</p>	<p>Characterisation of flow behaviour of metal powders for 3D printing application</p> <p>Mozhdeh Mehrabi, University of Leeds, UK</p>
10:50	<p>Numerical simulations of dry granular avalanches flowing down a vibrated inclined plane</p> <p>Dr. Sébastien Kiesgen de Richter, University of Lorraine, France</p>	<p>Online Structure Determination of Aerosol Particles Using Sequential Classification by Mobility Diameter and Vacuum Aerodynamic Diameter</p> <p>Dennis Kiesler, University of Duisburg-Essen, Germany</p>	<p>DEM-CFD simulation of the dispersion of particle agglomerates by cyclonic flows</p> <p>Dr. Alberto Di Renzo, University of Calabria, Italy</p>	<p>Revealing Rheology of Dense Non-cohesive Granular Materials by DEM Simulation</p> <p>Dr. Fenglei Qi, University of Luxembourg</p>
11:10	<p>Discrete Element Method simulation of wet granulation</p> <p>PhD Mikio Yamanoi, Prometech Software, Japan</p>	<p>Sintering of Fe-Nanoparticles in a Well-defined Model Flow Reactor</p> <p>Thore Rosenberger, University of Duisburg-Essen, Germany</p>	<p>A Simple Model to Account Particle Attrition in Pneumatic Conveying</p> <p>Dr. Dmitry Portnikov, Ben-Gurion University of the Negev, Israel</p>	<p>Influence of Fluid Pressure Gradient and Fluid Drag on Hopper Outflow Characteristics for Cohesive Powders</p> <p>Robert Hesse, Technical University of Kaiserslautern, Germany</p>
11:30	<p>An interface resolved immersed boundary method in XDEM for particulate flow simulations</p> <p>Mingqiu Wu, University of Luxembourg</p>	<p>Porosity determination techniques for spray dried particulate systems</p> <p>Nora Ruprecht, University of Hohenheim, Germany</p>	<p>A comprehensive review of current drag models and the physical limitations of their validation</p> <p>Ben Freireich, Particulate Solid Research Inc, USA</p>	<p>A New Method for Particle Dispersion by Induction Charging</p> <p>Mizuki Shoyama, Kyoto University, Japan</p>
11:50	<p>Modelling deformable particles in complex fluid flow: A reduced-order modelling approach</p> <p>A. N. Balachandran Nair M. Sc., Johannes Kepler University of Linz, Austria</p>	<p>Segmentation-Optimized Preparation Method for Particulate Samples in Micro-CT Analysis</p> <p>Ralf Ditscherlein, Technical University Bergakademie Freiberg, Germany</p>	<p>Stability Analysis of Uniform Fluidization</p> <p>Dr. Chenxi Zhang, Tsinghua University, China</p>	<p>Investigating the potential of size and density fractionation of micro particles through passive MOFF, DLDF and serpentine micro channels using μPIV and high-speed PTV</p> <p>Sebastian Blahout, Ruhr-University of Bochum, Germany</p>
12:10	Lunch Break & Exhibition Visit			

Supporting Organisations



International Association for Pharmaceutical Technology (APV), Germany



The Chinese Academy of Sciences (CAS), China



German Association of Biotechnology Industries (DIB), Germany



Deutsche Keramische Gesellschaft e. V.

Deutsche Keramische Gesellschaft (DKG), Germany



Deutsche Keramische Gesellschaft (DKG), Germany



The Chemical Industry and Engineering Society of China



IChemE PTSIG, England

Mechanics of Particulate Solids	Modelling and Simulation	DynSim SPP 1679
<p>Contact behavior of wet cylindrical particles during compression and impact</p> <p>Philipp Grohn, Technical University of Kaiserslautern, Germany</p>	<p>Predictive modelling and experimental evaluation of structured food powder dissolution</p> <p>Nora Ruprecht, M. Sc., University of Hohenheim, Germany</p>	<p>Model-based optimization of ripening processes with feedback</p> <p>Michele Spinola, Friedrich-Alexander-University of Erlangen-Nuremberg, Germany</p>
<p>Analysis of the Influence of Protein Crystal Shape and Breakage on the Filtration Behaviour Using a Downscaled Filtration Cell</p> <p>Benjamin Radel, Karlsruhe Institute of Technology, Germany</p>	<p>Particle simulations: a story of scales and how to bridge them</p> <p>Dr. Thomas Lichtenegger, Johannes Kepler University of Linz, Austria</p>	<p>Dynamics and control of continuous fluidized bed layering granulation</p> <p>Christoph Neugebauer, Max Plank Institute for Dynamics of Complex Technical Systems Magdeburg, Germany</p>
<p>A numerical adhesive contact law for deformable particles</p> <p>Dr. Csaba Sinka, University of Leicester, UK</p>	<p>Numerical Investigation of Particle Transport in Human Respiratory System</p> <p>Dr. Shuji Ohsaki, Osaka Prefecture University, Japan</p>	<p>Dynamic Flowsheet Simulation of a Crystallization Reactor with Material Recovery via a Hydrocyclone</p> <p>Simon Kulozik, M. Sc., Technical University of Munich, Germany</p>
<p>Stability analysis of stick-slip phenomena</p> <p>Karl Krueger, TU Bergakademie Freiberg, Germany</p>	<p>Development of dust release functions validation methods for simulations</p> <p>Nadja Schwindt, University of Wuppertal, Germany</p>	<p>Dynamic flowsheet simulation of the mechanical fluid separation in solid bowl centrifuges</p> <p>Philipp Menesklou, Karlsruhe Institute of Technology, Germany</p>
<p>Understanding the mechanics of particulate solids: From particles to continuum-theory and applications</p> <p>Prof. Stefan Luding, University of Twente, The Netherlands</p>	<p>Modelling breakup of a suspension droplet containing nanoparticles during pulse combustion drying</p> <p>Daniel Pramudita, Otto Von Guericke University of Magdeburg, Germany</p>	<p>Interconnected multivariate population balances based on the Monte Carlo method</p> <p>Gregor Kotalczyk, University of Duisburg-Essen</p>



The Research Association of the German Food Industry (FEI), Germany



Association for Aerosol Research (GAeF), Germany



VDI Society Chemical and Process Engineering (VDI-GVC), Germany



AIChE's Particle Technology Forum (AIChE's PTF), USA



The Society of Powder Technology, Japan



ProcessNet, Germany



Nano in Germany, Germany

Tuesday, April 9, 2019

14:00 Dynamics of Cohesive Powder Flow Keynote Prof. Mojtaba Ghadiri, University of Leeds, United Kingdom				
	Modelling and Simulation	Application of Particle Technology	Fluidization and Multiphase Flow	Mixing
14:40	Modelling the calendaring process of lithium-ion electrodes via DEM simulations Clara Sangrós, Technical University of Braunschweig, Germany	What Particle Measurement Software should provide to prepare the Way to Industry 4.0 Oliver Rutsch, Sympatec GmbH, Germany	Investigation of fluidization characteristics and agglomerate formation during drying of nanosuspensions in a vacuum fluidized bed Prof. Dr.-Ing. Andreas Bück, Friedrich-Alexander University of Erlangen-Nuremberg, Germany	Validation of DEM simulations of a high intensity mixer and coater Tom Meaclem, University of Canterbury, UK
15:00	Coarse-grained DEM for granular shear flow and application to powder mixing process Hideya Nakamura, Osaka Prefecture University, Japan	Real time measurement of flocs produced during the water treatment process Dr. Stephen Ward-Smith, Malvern Panalytical, UK	Measurement of residence time distributions in a continuous spouted bed Swantje Pietsch, Hamburg University of Technology, Germany	Experimental study on shear induced percolation Dr. Silvia Volpato, University of Padova, Italy
15:20	DEM study of cohesive solid flow in screw feeder with asymmetrical screw designs Xin Li, Monash University, Australia	Adaptive feedback control of continuously operated convective dryers for particulate materials Prof. Dr.-Ing. Andreas Bück, Friedrich-Alexander University of Erlangen-Nuremberg, Germany	Bubble Hydrodynamic Comparison for Geldart Group a and B Materials at Different Fluidization Regimes Shyam Sundaram, Particulate Solid Research, Inc. USA	Shaping Segregation: Multiscale modelling of industrial mixers Dr. Anthony Thornton, University of Twente, The Netherlands
15:40 Coffee Break				
	Modelling and Simulation	Characterization of Particles	Fluidization and Multiphase Flow	Handling and Flow of Particulate Systems
16:10	Modelling of particle formation in spray-drying of multi-component mixtures Prof. Dr.-Ing. Andreas Bück, Friedrich-Alexander University of Erlangen-Nuremberg, Germany	Formation and characterisation of inorganic particle residues from lube oil droplets Julia Thieringer, Karlsruhe Institute of Technology, Germany	Reduction of metal powder in a fluidized bed reactor using a dielectric barrier discharge reactor Malte Bierwirth, M. Sc., TU Clausthal, Germany	Online monitoring of particle distribution in pneumatic conveying systems via electrical capacitance tomography Dr. Stefan Putteringer, Johannes Kepler University of Linz, Austria
16:30	Numerical simulations of melt pool dynamics in powder-bed additive manufacturing processes Dr. Claas Bierwisch, Fraunhofer IWM, Germany	Imaging of Particles for Size and Shape Analysis in Laboratory and Process Environments Dr.-Ing. Ulrich Köhler, Sympatec GmbH, Germany	Particle Attrition in cyclone Fabio Fulchini, University of Leeds, UK	Investigation of energy loss in horizontal bends in dilute phase pneumatic conveying Prof. Haim Kalman, Ben Gurion University of the Negev, Israel
16:50	Modelling and Characterization of Aggregated Nanoparticle Films Prof. Dr.-Ing. Lutz Mädler, University of Bremen, Germany	Characterization of Particles needs International Standardization Prof. Dr.-Ing. habil. Michael Stintz, Technical University of Dresden, Germany	Development of a Simple Approach for Quantifying the Magnitude of Interparticle Forces in a High Temperature Gas-Solid Fluidized Bed Dr. Sepeher Hamzehlouia, CanmetENERGY-Ottawa, Canada	Dependence of flowability of dusts from dry off-gas dedusting and other fine granular powders on the consolidation stress DI Dr. Christof Lanzerstorfer, University of Applied Sciences Upper Austria
17:10	Numerical Simulation of the Frictional Behaviour of the Tire-Pavement System in Presence of Ice-Snow Interface Prof. Rimantas Kačianauskas, Vilnius Gediminas Technical University, Lithuania	Comprehensive Characterization of Nano-Aerosols by Wide-Angle Light Scattering (WALS) and Laser-Induced Incandescence (LIID) Simon Aßmann, Friedrich-Alexander-University Erlangen-Nuremberg, Germany	tba. on site	Cohesive Powder Flow of Faceted Particles in Screw Feeders Dr. Alejandro Lopez, University of Leeds, UK
17:30	Poster Presentation Visit			
19:00	Get together			

sponsored by



Interface Properties	Particle and Bulk Powder Characterization	DynSim SPP 1679
<p>Formulating with particles using Hansen Solubility/Similarity Parameters</p> <p>Prof. Steven Abbott, Steven Abbott TCNF Ltd, Ipswich, UK</p> <p>Prof. Dietmar Lerche, LUM GmbH, Berlin, Germany</p>	<p>Significant advances in bulk solids handling and ultrafine grinding through the life's work of Prof. Jörg Schwedes (Ehrenvortrag anlässlich des Todes von Prof. Jörg Schwedes)</p> <p>Prof. Dr.-Ing. Arno Kwade, Technical University of Braunschweig, Germany</p> <p>Flow of formulated powders</p> <p>Dr. Mehrdad Pasha, University of Leeds, UK</p>	<p>Simulation of Technical Precipitation Processes DYNOSIM</p> <p>Hendrik Rehage, Karlsruher Institute of Technology, Germany</p> <p>A software framework for dynamic flowsheet simulation with advanced treatment of multidimensional distributed parameters</p> <p>Vasyl Skorych, Hamburg University of Technology, Germany</p>
<p>On the characterization of the wettability of microparticles using Finite Dilution Inverse Gas Chromatography – critical introduction and application in ultrafine particle separation processes</p> <p>Dr.-Ing. Martin Rudolph, Helmholtz-Zentrum Dresden-Rossendorf, Germany</p>	<p>TiO₂ Pigment Sizing: Constituents, Aggregates and Primary Particles</p> <p>Dr. Ralf Theissmann, KRONOS International Inc., Germany</p>	<p>Simulation of dynamic behaviour of fine grinding in stirred media mills</p> <p>Greta Fragnière, Technical University of Braunschweig, Germany</p>

Interface Properties	Particle and Bulk Powder Characterization	Particle Technology for Pharmaceuticals
<p>Atomic Force Microscopy – A Powerful Tool for the Quantitative Determination of Adhesive Interactions</p> <p>Prof. Urs Peuker, Technical University Bergakademie Freiberg, Germany</p>	<p>Study on the influence of solids volume fraction on filter cake structures using micro tomography</p> <p>Erik Loewer, Technical University Bergakademie Freiberg, Germany</p>	<p>Characterization of Liposomal Particles for Pharmaceutical Applications</p> <p>Kirsten Ullmann, Karlsruhe Institute of Technology, Germany</p>
<p>The Effect of the Surface Functionalization of in Polymers Embedded Nanoparticles</p> <p>Dr. Reza Saadat, Technical University of Braunschweig, Germany</p>	<p>Characterization of precipitated Silica in terms of use in vacuum insulation panels (VIPs)</p> <p>Manuel Meier, Karlsruhe Institute of Technology, Germany</p>	<p>Process chain design as a tool to tailor the release kinetics of poorly soluble APIs</p> <p>Sebastian Melzig, Technical University of Braunschweig, Germany</p>
<p>Liquid – solid interaction during wet extrusion/spheronization: Impact of different solvents on pellet characteristics</p> <p>Vincent Lenhart, Heinrich-Heine-University Dusseldorf, Germany</p>	<p>In situ determination of the polymorphism gas-borne nanoparticles by Raman spectroscopy</p> <p>Leo Bahr, TU Bergakademie Freiberg, Germany</p>	<p>Characterization of primary lyophilization using a coulometrically based humidity sensor</p> <p>Nicole Vorhauer, Otto-von-Guericke Universität Magdeburg, Germany</p>
<p>Selective Agglomeration of Graphite in a Heterogeneous Suspension – Effect of Contact Angle</p> <p>Julia Schreier, M. Sc., Trier University of Applied Sciences, Germany</p>	<p>Unifying size-topology relationship in random packings of poly-disperse adhesive spheres</p> <p>Dr. Wenwei Liu, University of Surrey, UK</p>	<p>Characterization of primary lyophilization op frozen bulky solids</p> <p>Dr. Petra Först, Graz University of Technical University of Munich</p>



Wednesday, April 10, 2019

09:00 EFCE-MPS Award

09:10 Particle Technology in Additive Manufacturing
Prof. Karen Hapgood, Deakin University, Australia

Keynote

09:50 Coffee Break

	Modelling and Simulation	Particle Technology for Pharmaceuticals	Fluidization and Multiphase Flow	Agglomeration and Granulation
10:20	<p>Simulation of soot and ash dynamics in diesel particulate filters employing a hybrid subgrid/resolved particle approach with a Lattice Boltzmann Method</p> <p>Nicolas Hafen, M. Sc., Karlsruhe Institute of Technology, Germany</p>	<p>Application of Physicochemical Characterization Techniques for Complex Generic Product In Vitro bioequivalence studies</p> <p>Deborah Huck-Jones, Malvern Panalytical, UK</p>	<p>Fluidized bed rheology: Direct measurements of apparent viscosity through stokesian and bingham approaches</p> <p>Dr. rer. nat. Denis Schütz, Anton Paar GmbH, Austria</p>	<p>Development of Dry Granulates: Comparability of Granulates Obtained by Tableting and Roller Compaction</p> <p>Dr. Barbara Fretter, Solids Development Consult GmbH, Germany</p>
10:40	<p>Particle systems on the molecular scale: Multiscale modeling of bio-agglomerates</p> <p>Philipp Nicolas Depta, Technical University of Hamburg, Germany</p>	<p>Determination of the solid (true) density of pharmaceutical powders and the impact on tablet compression characterization</p> <p>Dr. Edgar John, Novartis Pharma AG, Switzerland</p>	<p>Influence of Temperature on the Transition from Bubbling to Turbulent Fluidization for Geldart's Group B Particles</p> <p>Tom Wyrwat, Hamburg University of Technology, Germany</p>	<p>Experimental parameter study on Mn oxides agglomeration's key factors</p> <p>John-Lee Dubos, ERAMET Research, France</p>
11:00	<p>Potentials and Constraints for the application of CFD to dry powder inhalers: A Review</p> <p>Prof. Dr.-Ing. Martin Sommerfeld, Otto-von-Guericke University of Magdeburg, Germany</p>	<p>Energy State Quantification of Amorphous Systems using Differential Scanning Calorimetry</p> <p>Karsten Fluegel, Merck KGaA, Germany</p>	<p>Understanding calcium cooping activity of limestone for thermo-chemical energy storage of concentrated solar power</p> <p>Dr. Pablo Garcia Trinanes, University of Greenwich, UK</p>	<p>Auto-Agglomeration of Cohesive Powders Due to Mechanical Vibration</p> <p>Umair Zafar, University of Leeds, UK</p>
11:20	<p>Residence Time Distribution Prediction in Large-Scale Continuous Apparatuses using Recurrence CFD</p> <p>Paul Kieckhefen, Technical University of Hamburg, Germany</p>	<p>Particle Size Analysis for Medical Sprays and Inhalation Products</p> <p>Jana Krone, Sympatec GmbH, Germany</p>	<p>High pressure fluidized-bed reactors for chemical looping CO₂ capture processes using two novel concepts: internally circulating reactor (ICR) and gas switching reactor (GSR)</p> <p>Shahriar Amini, SINTEF, Norway</p>	<p>Mechanistic modeling of spherical agglomeration process for pharmaceutical manufacturing</p> <p>Dr. Omid Arjmandi-Tash, The University of Sheffield, UK</p>
11:40	<p>Simulation of a Fluidized Hot-Melt Coating Process Using CFD - DEM</p> <p>Peter Böbling, M. Sc., Research Center Pharmaceutical Engineering, Austria</p>	<p>Particle size distribution and impact on the pharmaceutical development</p> <p>Frank Rüschoff, Micronisierungs-Kontor Oberrot GmbH, Germany</p>	<p>Coupled VOF/CFD-DEM method for simulation of heat transfer in dense particle-laden free surface flow</p> <p>Tim Nijssen, Eindhoven University of Technology, The Netherlands</p>	<p>Characterization of agglomerating wet fluidized particulate</p> <p>Ziv Greidinger, Ben Gurion University of the Negev, Israel</p>
12:00	<p>Microscale CFD-DEM Simulation of the Carbon Black Aggregates Behavior in a Shear Flow</p> <p>Ernek Asylbekov, Karlsruhe Institute of Technology, Germany</p>	<p>Calibration strategy for material parameters in DEM modelling of compaction</p> <p>Dr. rer. nat. Jan Henrik Finke, Technical University of Braunschweig, Germany</p>	<p>Drying of cohesive particles in vibrated fluidized beds</p> <p>Sören Lehmann, M. Sc., Hamburg University of Technology, Germany</p>	<p>Experimental investigation of dynamic process stability of continuous fluidized bed spray agglomeration with internal classification</p> <p>Daniel Müller, M. Sc., Otto von Guericke University Magdeburg, Germany</p>
12:20	Lunch Break & Exhibition Visit			

Particle Interactions and Interfaces	Particle and Bulk Powder Characterization	Particles for Additive Manufacturing
<p>Monitoring flocculation performance of designed polyelectrolytes in an industrial effluent using Laser Diffraction Spectroscopy</p> <p>Prof. Maria Graca Rasteiro, University of Coimbra, Portugal</p>	<p>Single particle properties of elongated particles and their impact on bulk solid properties</p> <p>Steffen Beitz, Technical University of Braunschweig, Germany</p>	<p>Production of complex polymer particles for additive manufacturing by spray drying</p> <p>Dr. Jochen Schmidt, Friedrich-Alexander-Universität Erlangen-Nuremberg, Germany</p>
<p>Normal elastic impact of wet particles: a DEM study</p> <p>Prof. Chuan-Yu Wu, University of Surrey, UK</p>	<p>Understanding the nature of Active Pharmaceutical Ingredients during dry granulation</p> <p>James Clarke, University of Birmingham, UK</p>	<p>Effect of flowability on powder spreading process in Additive Manufacturing</p> <p>Vanessa Seyda, Hoedtke GmbH & Co. KG, Germany</p>
<p>Influence of the surface structure on the fluid displacement during fine particle collision: Experimental study and CFD-DEM simulation</p> <p>Fabian Krull, Technical University of Kaiserslautern, Germany</p>	<p>Magnetically assisted impaction coating (MAIC) for blending optimising</p> <p>Tim Freeman, Freeman Technology Ltd. United Kingdom</p>	<p>The effect of temperature on the flow properties of polymeric powders for selective laser sintering</p> <p>Prof. Ramirez Gomez, University of Salerno, Italy</p>
<p>Demonstrating Surface Structural Differences of Dry Powders: Processing and Powder Flow</p> <p>Hector Lozano-Perez, Purdue University, USA</p>	<p>Measuring powder flowability at low stresses: comparison of techniques</p> <p>Azza Mahmoud, University of Surrey, UK</p>	<p>Polymer and metallic powders flowability & electrical charges characterization for additive manufacturing</p> <p>Dr. Quentin Ribeyre, GranuTools, Belgium</p>
<p>From elasticity to capillarity in soft contacts</p> <p>Dr. Michael Kappl, MPI for Polymer Research, Germany</p>	<p>Bag filling characteristics of starch related to the flow properties of different starches</p> <p>Dr. Gabriel Meesters, Delft University of Technology, The Netherlands</p>	<p>Comparison of different flow assessments for Selective Laser Sintering powders</p> <p>Dr. rer. nat. Denis Schütz, Anton Paar GmbH, Austria</p>
<p>Exploring the Requirements of Pharmaceutical Powders for use in 3D Binder Jetting Printing</p> <p>Anthony Antic, Deakin University, Australia</p>	<p>Die filling behavior of spray dried ceramic granules</p> <p>Dipl.-Ing. Bianca Glöß, Fraunhofer IKTS, Germany</p>	<p>Advanced analytical insight for optimising metal powders for additive manufacture</p> <p>Dr. Cathryn Langley, Malvern Panalytical, UK</p>



Wednesday, April 10, 2019

14:00 Model Driven Design of Particulate Processes and Products – Applications in Pharmaceutical Manufacture and Beyond Keynote Prof. Jim Litster, University of Sheffield, United Kingdom				
	Modelling and Simulation	Particle Technology for Pharmaceuticals	Application of Particle Technology	Agglomeration and Granulation
14:40	Validation of a CFD – DEM Simulation Coupling Method of a Tablet Coating Process Peter Böhling, M. Sc., Research Center Pharmaceutical Engineering, Austria	Development of a novel drying technology for drying of wet powders and pastes without change of initial particle size DI Dr. Isabella Aigner, Research Center Pharmaceutical Engineering GmbH, Austria	An advanced numerical approach to predict wall erosion due to particle impact Dr.-Ing. Bernhard Peters, Université du Luxembourg	Property-based control of fluidized bed agglomeration Dr. Michael Jacob, Glatt Ingenieurtechnik GmbH, Germany
15:00	An Efficient CFD-DEM Coupling Using Network Communication Dr. Yi He, University of Leeds, UK	In situ investigation of the protein particle formation process during drying in an acoustic levitator Julian Perltz, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany	Photocatalytic performance of TiO₂ nanoparticles decorated with gold nano-nuggets in a scalable flow reactor Nadia Licciardello, Technical University of Dresden, Germany	Electrostatic Spray Drying – Innovation in Spray Dry Technology Audrey Maudhuit, Fluid Air Europe, France
15:20	Coupled CFD-DEM simulations to model the viscosity of nano-particulate suspensions Dr.-Ing. Carsten Schilde, Technical University of Braunschweig, Germany	Online Monitoring of the Drying Process of Pharmaceutical Granules using a Novel Miniaturised NIR Spectrometer Dr. Faiz Mahdi, University of Leeds, UK	Silver nanoparticles – production, application and regulatory background Gregor Schneider, RAS AG, Germany	In-Line Measurement System for Ribbon Strength at a GERTEIS PACTOR Robert Frank Lammens, Solids Development Consult GmbH, Germany
15:40	Coupled DEM/LBM Simulation of DLD Fractionation Simon Raoul Reinecke, M. Sc., Technical University of Berlin, Germany	Comparing superquadric and multisphere particles for simulating pharmaceutical tablets Di Peng, The University of Edinburgh, UK	The new test dust: DMT A2 fine quartz-free Umalan Gogilan, DMT GmbH & Co. KG, Germany	Liquid contact spreading in tumbling drums: Effect of material properties and process parameters Rachel Smith, University of Sheffield, UK
16:00 Coffee Break				
	Modelling and Simulation	Particle Technology for Pharmaceuticals	Comminution	Particle Technology for Energy Systems
16:30	Optimal Control and Optimization of Fluid Flows in Process Engineering Dr. Matthias J. Krause, Karlsruhe Institute of Technology, Germany	An attempt to mechanistically explain derived compression parameters of powders by acting micro-processes Dr. Jan Henrik Finke, Technical University of Braunschweig, Germany	A Hybrid Particle Breakage Model for Large scale DEM Simulations PhD Klas Jareteg, Fraunhofer Chalmers Research Centre Industrial Mathematics, Germany	Particle technology based design of lithium-ion battery electrodes Prof. Dr.-Ing. Arno Kwade, Hamburg University of Technology, Germany
16:50	A Surrogate Based Modelling and Optimization Methodology for Calibration and Engineering Design using DEM PhD Johannes Quist, Fraunhofer Chalmers Research Centre Industrial Mathematics, Germany	Development of a novel continuous production system of pharmaceuticals Prof. Satoru Watano, Osaka Prefecture University, Canada	Characterization of stressing conditions in jet mills by particle probes Alexander Strobel, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany	Dry coating of active material with solid electrolyte for all-solid-state secondary battery Hideya Nakamura, Osaka Prefecture University, Canada
17:10	Uncertainty propagation for population balance model of a conical screen mill PhD Satyajeet Bhonsale, BioTeC+ KU Leuven, Belgium	tba. on site	Understanding the Fine Grinding of Calcium Carbonate in Stirred Media Mills Sophie Rimmer, University of Birmingham, UK	tba. on site

Characterization of Particles	Particle and Bulk Powder Characterization	Particle Design and Functionalization
<p>Performance test of a novel multi-parameter optical particle counter for colloidal particles</p> <p>PD Dr.-Ing. habil. Frank Babick, Technical University of Dresden, Germany</p>	<p>Ultrasonic In-Die Measurement of Deformation Properties</p> <p>Robert Frank Lammens, TU Bergakademie Freiberg, Germany</p>	<p>Design of skeletal silica nanoparticles to improve optical property</p> <p>Dr. Chika Takai-Yamashita, Nagoya Institute of Technology, Japan</p>
<p>Crunch it if you can – or why particle sizing can free up more than 50 % of energy use in the chocolate industry</p> <p>Dr. Stephen Ward Smith, Malvern Panalytical, UK</p>	<p>The shear response of particles in the FT4 powder rheometer: a numerical and experimental investigation</p> <p>Marvellous J. Khala, University of Surrey, UK</p>	<p>Synthesis and Application of a Magnetised Ternary Core-Shell Catalyst for Biodiesel Production</p> <p>Dr. Jabbar Gardy, University of Leeds, UK</p>
<p>Enhanced spectral and size analysis of nanoparticles using analytical ultracentrifugation</p> <p>Simon Wawra, Friedrich-Alexander Universität Erlangen-Nürnberg, Germany</p>	<p>Characterising Powder Flowability in the Intermediate Flow Regime</p> <p>Dr. Colin Hare, University of Surrey, UK</p>	<p>Continuous manufacturing of coated powders by gas-phase deposition in a Pneumatic Transport Reactor</p> <p>J. Ruud van Ommen, Technical University of Delft., The Netherlands</p>
<p>The Radial Centrifugal DMA – A Novel Method for Multidimensional Aerosol Characterization</p> <p>David Rasche, M. Sc., University of Paderborn, Germany</p>	<p>Decreasing capillary and electrostatic forces with the addition of mesoporous silica grains</p> <p>Prof. Dr. Geoffroy Lumay, GRASP Laboratory, CESAM Research Unit, University of Liège, Belgium</p>	<p>Morphology control in the aerosol synthesis of titania by vapor-liquid-solid reaction and heterogeneous nucleation</p> <p>Maximilian Domaschke, Institute of Particle Technology, Germany</p>
Particles for Additive Manufacturing	Life and Food Science	Particle Design and Functionalization
<p>Manufacturing and application of novel polymer particles for selective laser sintering</p> <p>Maximilian A. Dechet, FAU Erlangen-Nuremberg, Germany</p>	<p>Improving the rehydration of granulated food powders</p> <p>Prof. Andrea C. Santomaso, University of Padova, Italy</p>	<p>Enhancing the Performance of Catalytic Oxidation of n-Butane in a Microwave-Heated Gas-Solid Fluidized Bed Reactor</p> <p>Dr. Sepehr Hamzehlouia, Polytechnique Montréal, Canada</p>
<p>Discrete Particle Model of Sintering</p> <p>Mohamad Yousef Shaheen, University of Twente, The Netherlands</p>	<p>Capillary penetration into heterogeneous food powders</p> <p>Jana Kammerhofer, M. Sc., Hamburg University of Technology, Germany</p>	<p>Strategy for coating of aerogels using spouted bed technology</p> <p>Monika Goslinska, Hamburg University of Technology, Germany</p>
<p>Characterization of powders for additive manufacturing</p> <p>Dr. Jochen Schmidt, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany</p>	<p>Adsorption and desorption behavior of protein particles at liquid-liquid interfaces under flow induced stresses</p> <p>Tobias Wollborn, M. Sc., Leibniz Institute for Materials Engineering - IWT, Germany</p>	<p>Numerical investigation of gas dynamics in a bubbling gas-solid fluidized bed in the presence of cohesive interparticle forces</p> <p>Prof. Jamal Chaouki, Polytechnique de Montreal, Kanada</p>



Thursday, April 11, 2019

09:00 Opening

09:10 Engineering of particles by spray drying and spray fluidized bed processes
Prof. Dr.-Ing. Evangelos Tsotsas, Otto-von-Guericke-Universität Magdeburg, Germany

Keynote

09:50 Coffee Break

	Modelling and Simulation	Agglomeration and Granulation	Comminution	Formation and Synthesis of Particles
10:20	<p>Numerical study of grain shape effect on surface erosion using smoothed particle hydrodynamics</p> <p>Shoya Mohseni-Mofidi, Fraunhofer Institute for Mechanics of Materials IWM, Germany</p>	<p>Scale-up of tableting processes in different fields of application</p> <p>Daniel Puckhaber, Technical University of Braunschweig, Germany</p>	<p>Fine grinding of inorganic material mixtures in stirred media mills</p> <p>Markus Nöske, M. Sc., Technical University of Braunschweig, Germany</p>	<p>Aerosol formation in the course of VOC-Degradation by means of Non-Thermal Pulsed Plasma</p> <p>Sadid Salajegheh, BTU Cottbus-Senftenberg, Germany</p>
10:40	<p>The Influence of Shape on the Settling of Particles Simulated with a Homogenised Lattice Boltzmann Approach</p> <p>Robin Trunk, Karlsruhe Institute of Technology, Germany</p>	<p>Roller compaction: Online monitoring of powder feeding</p> <p>Mingzhe Yu, University of Sheffield, UK</p>	<p>Attrition methods and how to select a jet velocity in attrition test</p> <p>Ben Freireich, Particulate Solid Research Inc., USA</p>	<p>Optical investigation of particle characteristics produced by Spray Flame Synthesis using Wide-Angle Light-Scattering (WALS)</p> <p>Bettina Münsterjohann, University Erlangen-Nuremberg, Germany</p>
11:00	<p>Optimization of Pore Scale Conjugate Heat Transfer using Lattice Boltzmann Simulations towards Lower Cost Vacuum Insulation Panels</p> <p>Jesse Ross-Jones, Mannheim University of Applied Sciences, Germany</p>	<p>High-Shear Granulation Process of Soft Porous Particles</p> <p>Dr. Shuji Ohsaki, Osaka Prefecture University, Japan</p>	<p>Comminution of wood – process parameters</p> <p>Moritz Eisenlauer, Technical Institute Georg-Simon-Ohm Nürnberg, Germany</p>	<p>Impact of atomization on particle formation in spray flames</p> <p>Ricardo Tischendorf, M. Sc., University of Paderborn, Germany</p>
11:20	<p>Fast, flexible particle simulations: An introduction to MercuryDPM</p> <p>Dr. Thomas Weinhart, University of Twente, Netherlands</p>	<p>Roller compactor: tracking the change in plastic deformation of the particle during roller compaction process</p> <p>Riyadh Al Asady, The University of Sheffield, UK</p>	<p>Dispersion and Rheology of multi-wall Carbon Nanotubes</p> <p>Alexander Dresel, Fraunhofer Institute for Chemical Technology ICT, Germany</p>	<p>Synthesis of nanoparticles out of silicon and germanium in a controlled nucleation aerosol reactor</p> <p>Lukas Wergen, Friedrich-Alexander-Universität Erlangen-Nuremberg, Germany</p>
11:40	<p>A thorough analysis of temporal plate erosion by particle impacts and validation of Lagrangian models</p> <p>Guilherme Antonio Novelletto Ricardo, M. Sc., Otto-von-Guericke University Magdeburg, Germany</p>	<p>Liquid bridge interaction in funicular regime: toward detailed simulation of wet particle agglomerates</p> <p>Dr. Alberto Di Renzo, University of Calabria, Italy</p>	<p>Breakage of Carbamazepine Dihydrate Crystals under Impact</p> <p>Wei Pin Goh, University of Leeds, UK</p>	<p>Automated High-throughput synthesis of colloidal semiconductor nanoparticles: A multi-dimensional parametric study on the influence of mixing</p> <p>Ahmed Mahmoud, Friedrich-Alexander-Universität Erlangen-Nuremberg, Germany</p>
12:00	<p>Mechanical behavior of particle aggregates during drying</p> <p>Son Thai Pham, Otto-von-Guericke-University Magdeburg, Germany</p>	<p>An investigation on the evolution of granule formation by in-process sampling of a high shear granulator</p> <p>Dr. Faiz Mahdi, University of Leeds, UK</p>	<p>Time-resolved characterization of customized aluminium-doped zinc oxide nanocrystals by means of Small-Angle X-ray Scattering (SAXS)</p> <p>Julian Ungerer, Karlsruher Institute of Technology, Germany</p>	<p>Continuous flow metal patch coating of flake-like particles</p> <p>Prof. Dr. Robin Klupp Taylor, FAU Erlangen Nuremberg, Germany</p>
12:20	Lunch Break & Exhibition Visit			
14:00	<p>Contribution of Particle Technology Research on CO₂ capture and reduction</p> <p>Prof. Hamid Arastoopour, Illinois Institute of Technology, USA</p>			<p>Keynote</p>

Particle Interactions and Interfaces	Seperation	Nano Hybrids
<p>Chemical and size-specific separation of fine particles at liquid-liquid interfaces: Challenges and system design</p> <p>Dr. rer. nat. Christian Weber, Technical University of Freiberg, Germany</p>	<p>Multidimensional fractionation of solid microparticles from aqueous suspensions by crossflow filtration</p> <p>Philipp Lösch, Technical University of Kaiserslautern, Germany</p>	<p>Aerogel particles: state of the art and recent advances</p> <p>Dr. Pavel Gurikov, Hamburg University of Technology, Germany</p> <p>Kinetics of Supercritical Drying for Production of Aerogel Particles: Effects of Process Parameters and Gel Properties</p> <p>Işık Sena Akgün, Koc University, Turkey</p>
<p>Stability and granulometric state of Pickering emulsions</p> <p>Dipl. Ing., Rodrigo Renato Retamal Marín, Technical University of Dresden, Germany</p>	<p>Numerical and Experimental Investigations on the Influence of Electrical Charge of Electret Filters on Particle Deposition</p> <p>Maximilian Kerner, M. Sc., Technical University of Kaiserslautern, Germany</p>	<p>Multiscale modeling of particles supercritical drying process</p> <p>Dr. Natalia Menshutina, Mendeleev University of Chemical Technology of Russia</p>
<p>Coating and Drying of Slot Die Coated OLED-Multilayers</p> <p>Dr.-Ing. Sebastian Raupp, BASF SE, Germany</p>	<p>Prediction of Filtration Efficiency and Local Deposition inside Fibrous Filters</p> <p>Kevin Hoppe, Anhalt University of Applied Science, Germany</p>	<p>Drying of aerogel particles and beads in lab and pilot scale</p> <p>Prof. Irina Smirnova, Technical University of Hamburg-Harburg, Germany</p>
<p>An insight into influence of particle size on vapour sorption profile of pharmaceutical anhydrate-hydrate systems</p> <p>Søren Lund Kristensen, Particle Analytical aps, Denmark</p>	<p>CFD simulations of cyclones with and without an eccentrically positioned vortex finder</p> <p>Dr. Ray Cocco, Particulate Solid Research, Inc., USA</p>	<p>Cellulose aerogel particles via emulsion technique</p> <p>Prof. Tatiana Budtova, MINES ParisTech – CEMEF, France</p>
<p>Charge transfer between single highly resistive particles: Experiments and Numerical Simulation</p> <p>Prof. Ulrich Riebel, Brandenburg Technical University Cottbus-Senftenberg, Germany</p>	<p>Quantitative evaluation of nanoparticle separation using size-exclusion chromatography</p> <p>Prof. Wolfgang Peukert, Friedrich-Alexander-University Erlangen-Nuremberg, Germany</p>	<p>Carbon-based aerogels for adsorption of toxic gases and air decontamination</p> <p>Prof. Patrina Paraskevopoulou, National and Kapodistrian University of Athens, Greece</p>
<p>Additive Manufacturing with ceramics: Simulation of the printing process using meshfree simulation methods</p> <p>Bastian Dietemann, Fraunhofer IWM, Germany</p>	<p>Fractionation of Nanoparticles by Preparative Gel Electrophoresis</p> <p>Matthäus Barasinski, M. Sc., Technical University of Braunschweig, Germany</p>	<p>Cellulose-hybrid aero/xerogels for sorption of gas, moisture and cationic compounds</p> <p>Prof. Lennart Salmén, RISE Innventia AB, Sweden</p> <p>Chitosan-based aerogels with exceptional properties for environmental control system</p> <p>Kathirvel Ganesan, German Aerospace Center, Germany</p>



Thursday, April 11, 2019

	Modelling and Simulation	Characterization of Particles	Application of Particle Technology	Formation and Synthesis of Particles
14:40	<p>Heat transfer coefficients in flighted rotary kilns: Comparison of experiments with DEM simulations</p> <p>Alexander Berndt, Ruhr-University of Bochum, Germany</p>	<p>Application of Nanofocused X-ray tomography and Image Processing for the Quantitative Analysis of Pharmaceutical Particulate Solid Products</p> <p>Frederik J. S. Doerr, University of Strathclyde, Scotland</p>	<p>Sintering free conductive hybrid ink for inkjet printed electronics</p> <p>Robert Strahl, Leibniz-Institute for New Materials GmbH, Germany</p>	<p>In Situ monitoring of particle formation with spectroscopic and analytical techniques under solvothermal conditions</p> <p>Dr. Monica Distaso, Friedrich-Alexander-University Erlangen-Nuremberg, Germany</p>
15:00	<p>A dimensionless number for scaling particle size and stiffness in DEM analyses of cohesive powders</p> <p>Mohammadreza Alizadeh Behjani, University of Leeds, UK</p>	<p>Chemical and mechanical stability of casein microparticles</p> <p>Jann Schulte, M. Sc., RWTH-Aachen, Germany</p>	<p>Developments in catalytic strip- per technology for powder measurement</p> <p>Dr. Hans-Joachim Schulz, Catalytic Instruments GmbH & Co.KG., Germany</p>	<p>Investigation of size distributions in highly concentrated particle suspensions – influence of production method</p> <p>Dr. Lena Bressel, University of Potsdam, Germany</p>
15:20	<p>Modelling of sintering in macro porous structures with discrete element method (DEM)</p> <p>Christoph Ohmstede, Technical University of Hamburg, Germany</p>	<p>The role of glidants in interparticle friction</p> <p>Dr. Sadegh Nadimi, University of Leeds, UK</p>	<p>Sustainable turbidity controls mimicking oil-in-water emulsions by the use of polymer particles</p> <p>Dr. Kyriakos Eslahian, BS-Partikel GmbH, Germany</p>	<p>Synthesis and processing of tailored AZO nanocrystals</p> <p>Ann-Kathrin Thurm, Technical University of Braunschweig, Germany</p>
15:40	<p>Predicting flowability of cohesive bulk solids via DEM</p> <p>David Craig, Jenike & Johanson, Inc., USA</p>	<p>Optical single particle detection with wide dynamic range for nano- and microparticle counting and sizing</p> <p>Dr. Martin Hussels, Physikalisch-Technische Bundesanstalt, Germany</p>	<p>Evaluation of the mixing mechanisms during Twin-Screw-Extrusion by Residence Time Distribution</p> <p>Jens Wesholowski, Technical University Dortmund, Germany</p>	<p>Correlation between pore size distribution and thermal conductivity of core materials for vacuum insulation panels (VIPs) based on precipitated silica</p> <p>Sebastian Sonnick, Mannheim University of Applied Sciences, Germany</p>
16:00	Closing Ceremony			

General Information

PARTEC 2019 takes place at the Nuremberg Convention Centre (NCC) Ost of the Nuremberg exhibition centre. Address: Exhibition Centre Nuremberg, Messezentrum, 90471 Nuremberg, Germany



Hotel Reservation:

For booking please visit www.partec.info/hotel
Nuremberg and the surrounding region offer you many possibilities for overnight accommodation. You can also contact us directly:

PartnerHotels NurembergMesse
MesseService – Exhibition Services
Tel.: +49 911 8606-8415
Email: hotels@nuernbergmesse.de

Registration / Office hours

The registration onsite is open on
Tuesday, April 9 – Wednesday, April 11 from 8–18 h
Thursday, April 11 from 8–15 h

Particle Technology for Pharmaceuticals	Seperation	Handling and Flow of Particulate Systems
<p>Surface Modification of Pharmaceutical Particles via Scalable Atomic Layer Deposition in Fluidized Bed Reactors</p> <p>Damiano La Zara, M. Sc., Delft University of Technology, The Netherland</p>	<p>Zonal Rotor Ultracentrifugation: New Avenues in Sorting Nano-particles</p> <p>Prof. Dr. Alexander Wittemann, University of Konstanz, Germany</p>	<p>Mechanistic modelling of powder flow into a confined space</p> <p>Prof. Chuan-Yu Wu, University of Surrey, UK</p>
<p>Atomic Scale Surface Engineering of Micro- to Nano- Sized Pharmaceutical Particles</p> <p>Dr. Michael Quayle, AstraZeneca, Sweden</p>	<p>Investigation of Coefficients of Restitution for a Deflector Wheel Classifier</p> <p>Martin Weers, M. Sc., TU Clausthal, Germany</p>	<p>Towards modelling gas-solid flows of cohesive particles</p> <p>DI Alija Vila, KI-Met GmbH, Austria</p>
<p>Development of encapsulated air microparticles: Morphology of particles obtained by spray drying and single droplet drying</p> <p>PhD Tengku Farizan Izzi Che Ku Jusoh, University of Nottingham, UK</p>	<p>Determination of non-ideality parameters from theoretical and experimental sedimentation velocity and sedimentation equilibrium studies</p> <p>Maximilian Uttinger, Friedrich-Alexander Universität Erlangen-Nuremberg, Germany</p>	<p>Dynamic behavior of particle curtains in a flighted rotating drum investigated by PTV experiments and a DEM model</p> <p>Lanyue Zhang, Leibniz Institute of Agricultural Engineering and Bio-economy e.V. (ATB), Germany</p>
<p>Comparison of Scale Concepts for Pharmaceutical Hot-Melt-Extrusion</p> <p>Vanessa Dühfens, Technical University of Dortmund, Germany</p>	<p>Investigation of continuum mechanics models of granular flow by MRI</p> <p>Daniel Holland, University of Canterbury, New Zealand</p>	<p>Real-time in-situ Rheological Assessment of Sticky Point Temperature and Humidity of Powdered Products</p> <p>Johan Groen, Delft Solids Solutions B.V., The Netherlands</p>

Sponsors

We thank our sponsors for their support:



PARTEC 2019

VDI Wissensforum

VDI Wissensforum GmbH
P.O. Box 10 11 39
40002 Düsseldorf
Phone: +49 211 6214-201
Fax: +49 211 6214-154
Email: wissensforum@vdi.de
www.partec.info

I shall be attending the International Congress on Particle Technology
PARTEC 2019 on April 9-11, 2019 in Nuremberg, Germany (99TA001019)

Please choose your price category:

3 Day Ticket*	Early booking (until February 15, 2019)	Regular Price	On Site Price
3-days regular price	<input type="checkbox"/> EUR 778.-	<input type="checkbox"/> EUR 934.-	<input type="checkbox"/> EUR 1,074.-
3-days academics, speakers, poster presenters	<input type="checkbox"/> EUR 583.-	<input type="checkbox"/> EUR 669.-	<input type="checkbox"/> EUR 805.-
3-days student (BSc, MSc, PhD students)	<input type="checkbox"/> EUR 302.-	<input type="checkbox"/> EUR 362.-	<input type="checkbox"/> EUR 417.-
1 Day Ticket*			
1-day regular price	-	-	<input type="checkbox"/> EUR 551.-
1-day academics, speakers, poster presenters	-	-	<input type="checkbox"/> EUR 396.-
1-day student	-	-	<input type="checkbox"/> EUR 204.-
Social Event*			
Exhibition Party on April 10, 2019 (19-24 h)		<input type="checkbox"/> EUR 27.-	<input type="checkbox"/> EUR 27.-

I will join the Get-together on April 9, 2019 (free of charge).

*Price per Person + VAT (The VAT directive of the respective country applies)

Last Name (Family Name) _____

First Name _____

Title _____

Jobtitle _____

Department _____

Company/Institute _____

Street _____

ZIP Code, City, Country _____ Fax _____

Phone _____

Email _____

Please state your invoice address if this differs from the address given _____

Participants with an invoice address outside of Austria, Germany and Switzerland are requested to kindly pay by credit card. Please book via website: www.partec.info

Registration: Registrations for conference attendance must be made in writing. Confirmation of your registration and the associated invoice will be mailed to you. Please do not pay your conference attendance fee until you have received our invoice and its invoice number to be stated for transfer.

Conference Venue:
Exhibition Centre Nuremberg, Messezentrum,
90471 Nürnberg, Germany

**Cooperation Partner –
Abstract + Registration Management:**
VDI Wissensforum GmbH, VDI-Platz 1, 40468 Düsseldorf, Germany

Organizer:
NürnbergMesse GmbH, Messezentrum, 90471 Nürnberg, Germany

Hotel Reservation:
For booking please visit www.partec.info/hotel
Nuremberg and the surrounding region offer you many possibilities for overnight accommodation. You can also contact us directly:
PartnerHotels NürnbergMesse
MesseService – Exhibition Services
Tel +49 911 8606-8415
hotels@nuernbergmesse.de

Delegate benefits: The conference package includes the conference proceedings on USB-Stick, coffee-break beverages, lunch and the Get together on April 9, 2019.

Conference attendance conditions and terms: By way of your registration you accept the conference attendance conditions and terms of [VDI Wissensforum GmbH](http://www.vdi-wissensforum.de) as binding. Any cancellation of your registration must be made in writing. We will charge you only an administrative fee of € 50.00 plus German VAT if you cancel your registration earlier than 14 days ahead of the conference date. Any cancellation that reaches us after this deadline will entail the conference attendance fee as stated in our invoice to be charged in full. The date of the post office stamp of your written cancellation will be the decisive criterion. In that case, we will gladly mail you the conference documents on request. Subject to agreement, you may name a substitute participant. Individual parts and sections of conferences and seminars cannot be booked. You will be informed without delay if an event has to be cancelled for unforeseeable reasons. In that instance, you will be entitled only to a refund of your conference attendance fee if already paid. We reserve the right to exchange speakers and/or change the program sequence in exceptional cases. In any case, the liability of VDI Wissensforum GmbH is restricted exclusively to the conference attendance fee.

Consent of the use of data protection: By way of your registration you accept that VDI Wissensforum GmbH and the organizer NürnbergMesse GmbH captures and processes the address data of conference participants for their own corporate advertising purposes, enabling renowned companies and institutes to reach out to participants by way of information and offers within their own marketing activities. We have outsourced in part the technical implementation of data processing to external service providers. If you do not want to receive any information and offers in the future, you may contradict the use of your personal data by us or any third parties for advertising purposes. In that case, kindly notify us of your contradiction by using the e-mail address wissensforum@vdi.de or any other of the contact options.

Date _____

* Your signature _____