



PARTEC

PARTICLE TECHNOLOGY FOR SUSTAINABLE PRODUCTS

Nuremberg
26-28.9.2023



List of Posters

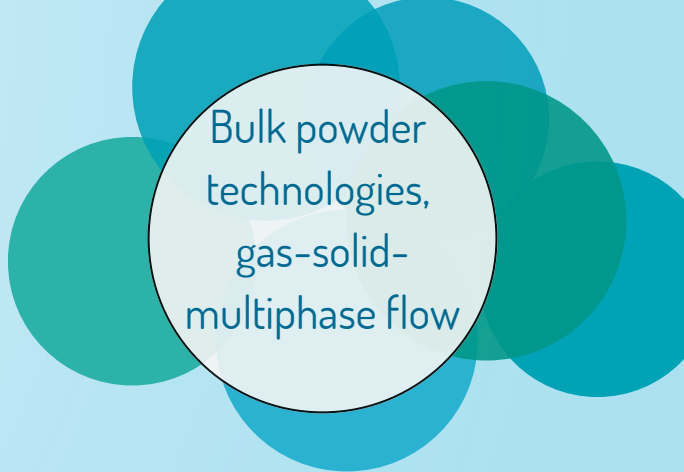
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Bulk powder
technologies,
gas-solid-
multiphase flow

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University of Kaiserslautern-Landau, DEU

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Xuqian Li
University of Sheffield, GBR

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Xuqian Li
University of Sheffield, GBR

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Wang Zheng
University of Sheffield, GBR

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Otto-von-Guericke-University Magdeburg, DEU

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TU Braunschweig, DEU

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Maike Orth
TU Hamburg, DEU



Bulk powder
technologies,
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Marian Schmitt
TU Hamburg, DEU

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Freeman Technology, UK

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Joanna Wiącek
Polish Academy of Sciences, POL

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Wang Zheng
University of Sheffield, GBR

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TU Braunschweig, DEU

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Universität Erlangen, DEU

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Wang Zheng
University of Sheffield, GBR

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Sina Zinatlou Ajabshir
University of Salerno, ITA



Bulk powder
technologies,
gas-solid-
multiphase flow

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P. Christian van der Sande
TU Delft, NLD

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Granutools, BEL

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Christin Velten
Otto-von-Guericke-University Magdeburg, DEU

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Lucas Reineking
Ruhr-University of Bochum, DEU



Comminution,
breakage,
agglomeration
and granulation

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Sohyun Ahn
Helmholtz Institute Freiberg, DEU

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Aisel Ajalova
Otto-von-Guericke-University Magdeburg,
DEU

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Simon Bahnmüller
TU Braunschweig, DEU

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Dennis, Beusen
TU Braunschweig, DEU

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Jannik Born
TU Braunschweig, DEU

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University of Sheffield, UK

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Stefano Butti
FPS Food and Pharma systems srl, ITA

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Desislava Dobreva
Ruhr-University of Bochum, DEU

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Carlo Kaiser
TU Bergakademie Freiberg, DEU

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Yashodh Karunanayake
University of Sheffield, GBR

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Fabian Krull
University of Kaiserslautern-Landau, DEU



Comminution,
breakage,
agglomeration
and granulation

Investigation of influence of pre-prilling solid nutrient addition on multi component fertilizer prill formation

Kilian Schnoor
Kreber, NLD

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Maximilian Tobaben
TU Braunschweig, DEU

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TU Bergakademie Freiberg, DEU

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University of Wuppertal, DEU

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Yang Sarah Mohamad
University of Sheffield, GBR

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László Tamás
Refra-System Ltd., HUN

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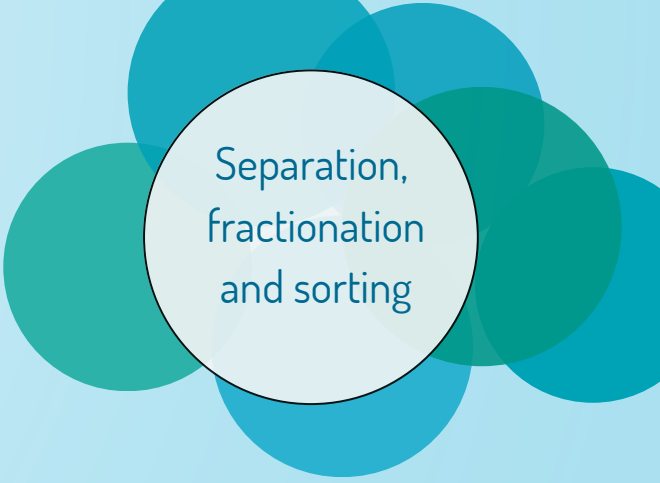
Karl Vorländer
TU Braunschweig, DEU

Effect of water activity and compression kinetics on performance of a novel tableting excipient

Jan Henrik Finke
TU Braunschweig, DEU

Developing affordable granulation methods

Yashodh Karunanayake
University of Sheffield, GBR



Separation,
fractionation
and sorting

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Martin Brünner
TU Bergakademie Freiberg, DEU

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Mariia Kepper
University of Bremen, DEU

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Praveen Kumar Nedumaran
University of Kaiserslautern, DEU

Wet vs. dry mechanical processing in battery recycling: opportunities to improve materials recirculation

Fernanda Padilha Noronha
TU Braunschweig, DEU

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Krischan Sandmann
Leibniz-Institute for New Materials, DEU

SPP2045 - Multidimensional separation of ultrafine particles using a mechanical flotation cell combined with froth fractionation - MultiDimFlot

Johanna Sygusch
Helmholtz Institute Freiberg, DEU

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Zihao Zhang
TU Darmstadt, DEU

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Dimitros Margaritis
TH Nürnberg, DEU

Experimental approach for multidimensional particle fractionation in a crossflow application with a superimposed electric field

Simon Paas
University of Kaiserslautern-Landau, DEU

SPP2045: Selective agglomeration and separation from heterogeneous submicron particle mixtures

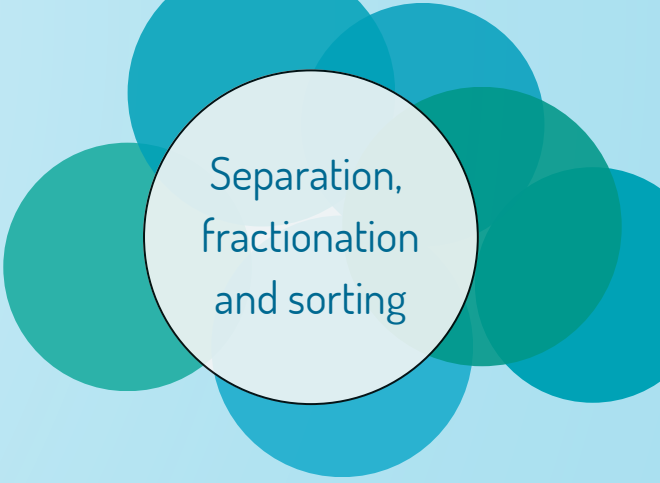
Christoph Peppersack
TU Braunschweig, DEU

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Franziska Strube
Helmholtz Institute Freiberg, DEU

High throughput 2D particle separation using enhanced DLD microsystems

Maike Sophie Wullenweber
TU Braunschweig, Germany



Separation,
fractionation
and sorting

SPP 2045 – Investigations on particle movement for an electrophoresis and a hydrodynamic force field in a discontinuous crossflow

Simon Paas
University of Kaiserslautern- Landau, DEU

SPP 2045: Fractionation of nanoparticles by preparative gel electrophoresis

Matthäus Barasinski
TU Braunschweig, DEU

SPP2045 B12: Upscaling of dielectrophoretic separators using printed circuit boards

Jasper Giesler
University of Bremen, DEU

SPP 2045 B4 Selective particle fractionation in multi-parameter potential fields – Multi- Field Fractionation (M-FF)

Krischan Sandmann
University of Bremen, DEU

SPP 2045_ Investigation of the agglomeration mechanism in binary colloidal dispersions of Au nanoparticles and ZnS quantum dots for 2D separation

Azita Rezvani
University of Duisburg-Essen, DEU

SPP 2045 CDMA: Centrifugal differential mobility analyzer transferfunction and first results

Torben Rüter
University of Paderborn, DEU

SPP 2045: Modelling and simulation of the shape-dependent settling behavior of particles

Jan Eric Marquardt
Karlsruhe Institute of Technology, DEU

SPP 2045: Multidimensional sorting of mixed microparticles in a meshbased dielectrophoretic device

Laura Weirauch
University of Bremen, DEU

SPP 2045: Magnetic field controlled chromatography for the continuous fractionation of ultra-fine magnetic particle collectives

Laura Kuger
Karlsruhe Institute of Technology, DEU

SPP 2045 Quantitative assessment of separation behavior, using neural networks and multivariate stochastic modeling

Tom Kirstein
University of Ulm, DEU

SPP 2045 Multidimensional separation of fine particles at liquid- liquid interfaces

Claudia Heilmann
TU Bergakademie Freiberg, DEU

SPP 2045: Correlative multiscale characterization of nanoparticles statistical information beyond size and shape

Stefan Neumann
TU Bergakademie Freiberg, DEU

SPP 2045: Parametric stochastic modeling of particle descriptor vectors for studying the influence of particle wettability and morphology

Thomas Wilhelm
University of Ulm, DEU

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Fabian Zillner
Friedrich-Alexander-University Erlangen-Nuremberg, DEU

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Nikolai Benz
University of Kaiserslautern- Landau, DEU

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Anna Magdalena Baecke
Helmholtz Zentrum Dresden, DEU

Mixing and
Dispersing,
Liquid-solid-
multiphase flow

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Tim Grenda
TU Braunschweig, DEU

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Sunil Kumar
IIT Roorkee, IND

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Roman Würll
TH Nürnberg, DEU

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Benedikt Hanschmann
Fraunhofer IVV, DEU

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Anne-Charlotte Robisson
CEA, FRA

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TU Dortmund, DEU

Mixing and
Dispersing,
Liquid-solid-
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Soongsil University, KOR

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Markus Rojer
TU Braunschweig, DEU

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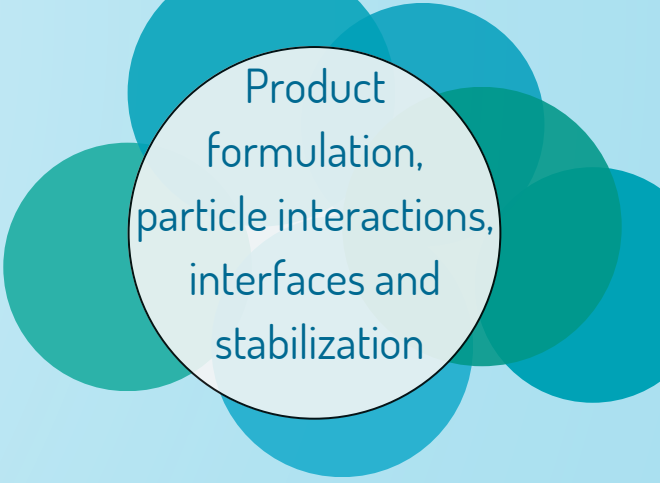
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Karlsruhe Institute of Technology, DEU

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Thomas Schubert
TU Chemnitz, DEU

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Florentin Tischer
Friedrich-Alexander-University
Erlangen-Nuremberg, DEU



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interfaces and
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Gregory Lecrivain
Helmholtz-Zentrum Dresden, DEU

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TU Braunschweig, DEU

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Yongang Ma
University of Sheffield, GBR

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Stephanie Marchal
F. Hoffmann La-Roche, CHE

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Cedric Joel Cattin
F. Hoffmann La-Roche, CHE

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University of Duisburg-Essen, DEU

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Geoffroy Lumay
University of Liège, BEL

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Sofiiia Dibrova
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Associated Soapstone Dist. Co. Pvt. Ltd., IND

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TU Braunschweig, DEU

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Paola Ivonne Cardenas Lopez
Friedrich-Alexander-University
Erlangen- Nuremberg, DEU



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Frank Babick
TU Dresden, DEU

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Sebastian Boldt
Karlsruhe Institute of Technology, DEU

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TU Braunschweig, DEU

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Malvern Panalytical, GBR

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Dietmar Lerche
LUM GmbH, DEU

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Ralf Ditscherlein
TU Bergakademie Freiberg, DEU

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Dietmar Lerche
LUM GmbH, DEU

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Thomas Koch
KRONOS INT. Inc., DEU

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Thomas Stübinger
Sympatec GmbH, DEU

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Ralf Ditscherlein
TU Bergakademie Freiberg, DEU



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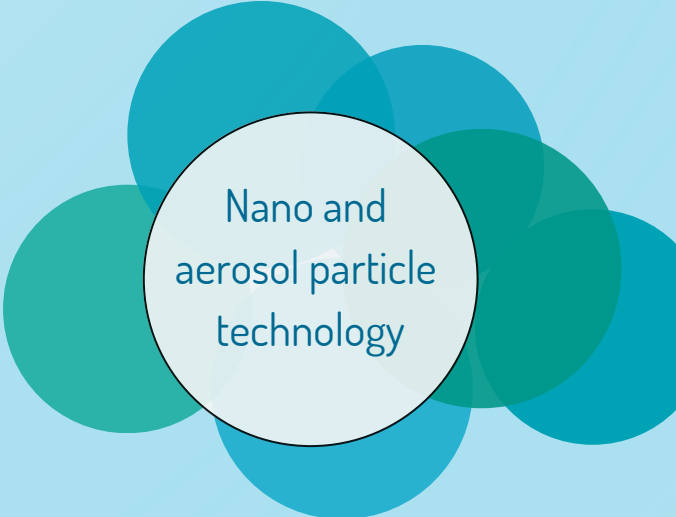
Anna Márton
INVITE GmbH, DEU

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Moritz Moß
Friedrich-Alexander-University
Erlangen- Nuremberg, DEU

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Serap Akbas
Otto-von-Guericke University Magdeburg, DEU



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TU Braunschweig, DEU

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University of Duisburg, DEU

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Fraunhofer IWM, DEU

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Krill Murasko
University of Eastern Finland, FIN

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Osaka metropolitan University, JPN

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Friedrich-Alexander University Erlangen-Nuremberg, DEU

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TU Hamburg, DEU

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Friedrich-Alexander-University Erlangen-Nuremberg, DEU

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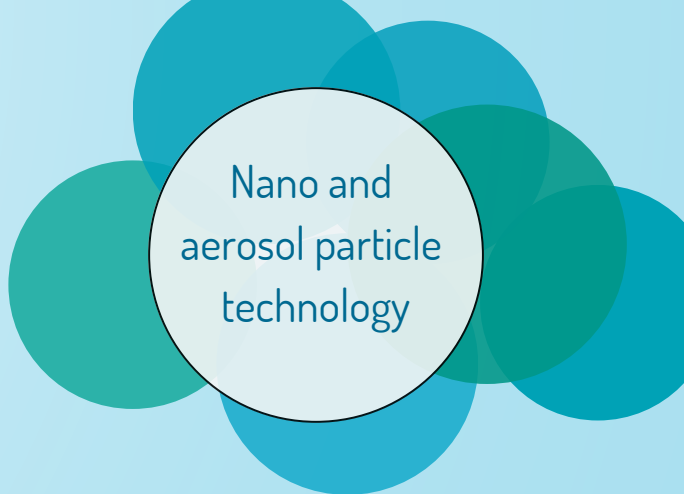
Max Deutschmann
Karlsruhe Institute of Technology, DEU

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Luc Dewulf
University of Sheffield, GBR

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TU Braunschweig, DEU



Nano and aerosol particle technology

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University of Duisburg, DEU

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Gregory Lecrivain
Helmholtz-Zentrum Dresden-Rossendorf, DEU



Particle technologies for sustainable products

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Alexandra Kaas
TU Freiberg, DEU



Particle
technologies for
sustainable
products

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Justus-Liebig-University, DEU

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Anton Maksakov
RPTU Kaiserslautern-Landau, DEU

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Johannes Buchheim
Glatt Ingenieurtechnik GmbH, DEU

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Dominik Werner
University of Birmingham, GBR

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Kirill Murashko
University of Eastern Finland, FIN

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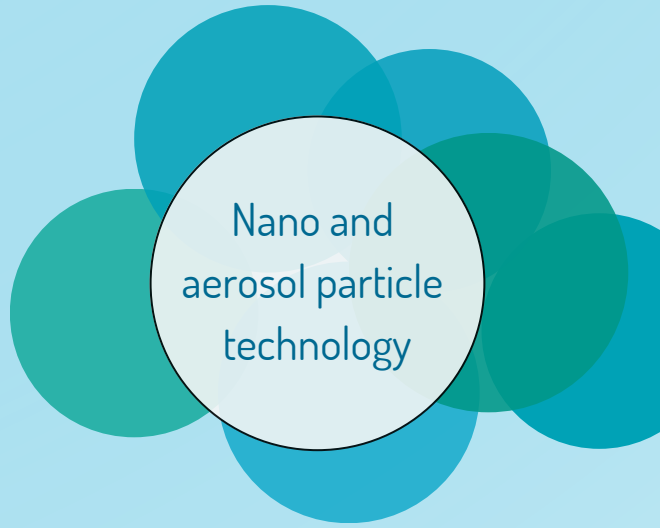
Hideya Nakamura
Osaka Metropolitan University, JPN

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Johannes Buchheim
Glatt Ingenieurtechnik GmbH, DEU

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aerosol particle
technology

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Sarah Wenderoth

Fraunhofer Institute for Silicate Research, DEU

Nano and aerosol particle technology

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Christian Wilke

TU Freiberg, DEU

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Siemens PSE, GBR

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Lina Cayla

CEA Cadarache, MYT

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Niklas Dierks

TU Braunschweig, DEU

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Universidad Politecnica de Madrid, ESP

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Johannes Lunewski

University of Wuppertal, DEU

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Tobias Ohnimus

TU Braunschweig, DEU

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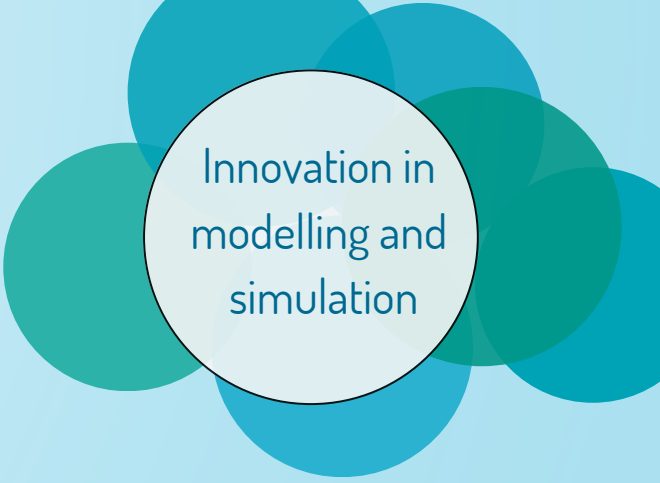
Tomotaka Otsu

Osaka Metropolitan University, JPN

Comparison of data-driven classification models for pharmaceutical tablet defects

Hagen Münkler

Novartis AG, CHE



Innovation in
modelling and
simulation

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MercuryDPM

Timo Plath
University of Twente, NLD

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Franziska Punt
TU Braunschweig, DEU

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Robert Kräuter
Hamburg University of Technology, DEU

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Amine Ait Ouazzou
TU Hamburg, DEU

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Thomas Köllner
CADFEM, DEU

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Natalie Schöning
TU Munich, DEU

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Marcela Viera Caixeta Machado
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Jobin Raju
TU Braunschweig, DEU

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Gero Stöckl
TU Hamburg, DEU

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Marvin Röhl
TU Braunschweig, DEU

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Max Winkelmann
University of Twente, NLD



Innovation in
modelling and
simulation

**Investigation of the effect of
process and material parameters
on wet granulation process**

Balázs Füvesi
University of Twente, NLD

**Investigation of the effect of
process and material parameters
on wet granulation process**

Roxana Saghafian Larijani
University of Twente, NLD

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flows in industry**

Retief Lubbe
University of Twente, NLD