

Industrial perspectives: food, chemicals

Milda Embuscado **Material characterization: an important component of food product development**
McCormick and Company

Remi Trottier **A lifetime experience in particles characterization**
The Dow Chemical Company

Experimental and manufacturing aspects

Zhenqi Shi **Real-time analytics in material characterization: current trends and perspectives**
Eli Lilly and Company

Stephen Beaudouin **Incorporating particle-scale properties into powder-scale adhesion descriptions**
Purdue University

Jonathan E. Seppala **Measuring and predicting crystal structure in materials extrusion additive manufacturing**
NIST
National Institute of Science & Technology

Carl Allenspach **Characterization of direct compression grades of HPMC excipient**
Bristol-Myers Squibb

Madhusudhan Kodam **Revisiting uniaxial compression tests for Powder flowability - comparison with ring shear tests**
Corteva Agriscience

Daniel J. Burnett **Surface energy and its contribution to powder adhesion, cohesion and powder flow**
Surface Measurement Systems
BET surface area determination using vapor sorption techniques

Abhishek Shetty **Fluidized bed rheology for granular media**
Anton Paar

Rachel Brekovsky **Tuning of spray dried particles to facilitate direct compression pharmaceutical processing**
Merck

Edward Yost **How do we evaluate compact strength to de-risk pharmaceutical tablet manufacturing**
Genentech

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| Tim Freeman Freeman Technology | A comparative analysis of granular sugar: using dynamic at-line and in-line powder rheology techniques |
| Denis Schutz Anton Paar GmbH | Powder characterization at the edge of sintering: high and low temperature ring shear testing |
| Arne Luddecke TU Braunschweig (DE) | Characterization and tailoring of metal powder for improving the powder bed fusion process |
| Samual R. Zukowski Corteva Agriscience | Comparison of experimental methods for predicting the optimum liquid-to-solid ratio for extrusion granulation of WDG formulations |
| Aurelien Neveu Granutools (BE) | Experimental characterization of powders in the framework of additive manufacturing |
| Hojae Yi Pennsylvania State University | Determination of fundamental mechanical properties and modeling the flow behavior of biomass feedstocks using the Cubical Triaxial Tester |
| Jordan Klinger Idaho National Laboratory (INL) | Bulk material shear characterization |
| Beth Ann Young University of Iowa | Polymorphic discrimination via powder Brillouin light scattering |
| Steffen Beitz TU Braunschweig (DE) | Comparison of different test methods for characterizing the flow properties of fibrous materials |

Numerical and peripheral aspects:

Jerome B. Johnson **Characterizing punch sticking propensity of pharmaceutical powders using a calibrated
U. of Alaska, Coupi Inc.** **mechanistic DEM elastic-plastic model simulation**

David Russ **Automatic and intelligent calibration of DEM simulations**
Siemens

Zhengpu Shen **Determination of material & interaction properties of corn and wheat kernels for DEM simulation**
Purdue University

notes:

1-keynote presentations (highlighted in blue) are 45 minutes in duration and podium presentations are 20-30 minutes

2-abstracts & biosketches are posted on the website under the SPEAKERS tab; additional abstracts under review will be posted when approved