

## Material Characterization Forum Timeline

### Material Characterization of Particle-based Ingredients, Intermediates and Finished Products

10 Nov—Announce event date & venues

02 Dec to 28 Feb—Early Registration

21 Feb—Deadline for abstract submission

31 May—Deadline for poster submission

**Mon 10 Aug—Forum Training Session (opt)**

**Tues 11 Aug—Forum Scientific Conference**

**Wed 12 Aug—Forum Scientific Conference**

**Thur 13 Aug—Forum Symposium (opt)**



SciFora  
Scientific Forums

### Sponsorships

Sponsorship opportunities are also available to Industrial partners and Forum partners to contribute to the support of the Forum; sponsorships include website and venue publicity.

### Training Session (optional, Monday)

The optional Monday training session (11:00 to 18:00) is designed to familiarize a small group of attendees with state-of-the-art laboratory equipment and procedures used to measure the mechanical properties of particles, powders, granules, and compacts.

The attendees will learn the principles of operation, review standard operating procedures, observe a demonstration and discuss the data output of several devices. Materials from the pharmaceutical, agricultural, food and additive manufacturing industries will be used in the demonstrations.

### Symposium (optional, Thursday)

The optional Symposium (9:00 to 15:00) is organized as a small panel that includes casual presentations and discussions.

This symposium will focus on the process integration aspects of continuous manufacturing, mostly from the point of view of in-process characterization, monitoring and control.

### Exhibitor Packages

Providers of instrumentation, equipment, software and services are seen as important partners by MCF and its organizers: Forum Partners are offered the possibility to display during the 2 days of the Scientific Conference, and the exhibitor package includes:

- Website and venue publicity
- Display table and space for a backdrop
- Ability to display instruments, small equipment, videos, literature
- Possibility of short presentation during the Monday workshop

Please contact us early ([jeanlefloch8@gmail.com](mailto:jeanlefloch8@gmail.com)), as the exhibition is limited to the first 8-10 applicants



## Material Characterization

### A Purdue CP3 Forum

**10-13 August 2020**

**Purdue University**

**West Lafayette, IN**

Planned and organized by SciFora & Purdue University, the first Material Characterization Forum will be hosted by Purdue's Center for Particulate Products and Processes (CP3).



## Inaugural MCF2020 Forum

Material characterization is essential for determining raw material and product quality, controlling manufacturing processes, and making accurate model predictions of process and product performance. Significant progress has been made in recent years toward developing on-line, at-line, and off-line techniques for measuring the characteristics of particulate materials and particle-based products. In addition, modellers have been developing methods for directly measuring or calibrating model input parameters.

The aim of the MCF2020 aims to bring together a select group of practitioners and researchers from industry, government laboratories, and academia to present and discuss recent developments focused on the characterization of particulate materials and particulate-based products. Areas of emphasis for the Forum include characterization to support process control and product performance, as well as characterizing parameters for models supporting these topics.

### Scientific Committee

The Scientific Committee is responsible for reviewing and selecting abstract applications and organizing the conference sessions.

- **Dr. Kingsly Ambrose**, Assoc. Professor of Agricultural & Biological Engineering, Purdue University
- **Dr. Madhusudhan Kodam**, Solids Processing Technology Leader, Corteva AgriScience
- **Dr. Jie Ren**, Sr. Scientist, Merck & Co.
- **Dr. Carl Wassgren**, Professor of Mechanical Engineering & Industrial & Physical Pharmacy, Purdue University



The Scientific Committee adopted the following structure that will feature prominent industrial & academic representatives from the fields of chemical/mechanical engineering, mathematics, numerical modelling & materials science, working in the chemical, food, pharmaceutical, and additive manufacturing.

### Forum Schedule

#### Mon Pre-conference events

11:00 Training session (optional)

18:00 Welcome reception

#### Tues Scientific Conference

08:30 Start of the conference

09:00 Podium presentations

16:00 Flash presentations

17:00 Poster competition & reception

18:30 MCF Banquet

#### Wed Scientific Conference

08:30 Podium presentations

18:00 End of Scientific Conference

#### Thurs Post conference events

9:00 Symposium (optional)

15:00 End of Forum

For typical SciFora programmes,  
go to [www.blendingsegregation.com](http://www.blendingsegregation.com)

### Abstract Submission:

**Abstracts for oral presentations (30 Min) at the scientific conference can be submitted until 21 February 2020.**

- Short abstracts (<1/2 page)
- Submit abstracts to: [info@blendingsegregation.com](mailto:info@blendingsegregation.com)

#### Topics accepted for the MCF2020 Forum:

- Characterization techniques (particulates)
- Particles size/shape distribution, polydispersity
- Particle measuring technology (PMT)
- Flowability and compressibility of powders
- Material characterization of solid dosage forms
- Characterization of punch sticking
- Challenges of model calibration
- Microstructural characterization
- Image analysis to enhance characterization
- Advanced spectroscopy, process analysers
- Terahertz imaging & spectroscopy
- Additive manufacturing aspects (characterization)
- Industrial research, applications, case studies
- Process integration for continuous manufacturing
- Process understanding & characterization (CM)
- In-line, on-line, at-line process monitoring (CM)
- Process control (CM)