

**CFD-DEM simulation seminar you might be interested in...
checkout the seminar announcement at:**

<http://www2.cd-adapco.com/l/14592/2016-09-28/6qjq1f>

**Complimentary Workshop:
Advanced Simulation to Solve and Optimize Process Development Problems**

DATE AND LOCATION

November 9, 2016: [Princeton Marriott at Forrestal](#), Princeton, New Jersey ([Add to Calendar](#))

If you would like to see examples of the benefits of deploying simulation: CFD (Computational Fluid Dynamics) and DEM (Discrete Element Modeling) in the chemical process, pharmaceutical and biotech industries, please join us for a complimentary workshop.

Building a “Digital Twin” using computational fluid dynamics (CFD) and particle modeling with discrete element method (DEM) have been identified as key enabling technologies in finding solutions to many of the challenges that surround scale-up; capable of reducing operating costs across manufacturing and quality divisions.

In this workshop, we will discuss how simulation can be used in process development from multiple aspects: **fluid flow and hydrodynamic behavior in stirred vessels, dispersing gas and solids, behavior of high viscosity fluids, fluid structure interactions**, etc.

We will also present methods of optimizing the performance of various equipment used in a process and how simulation can aid this work.



Guest Speaker: Dr. Yijie Gao, Takeda Pharmaceuticals International "Quantitative Investigation on Segregation Phenomenon Using Discrete Element Method in Large Scale Pharmaceutical Compression Process"

WHO SHOULD ATTEND?

- If you are an engineer or a manager who wants to troubleshoot problems or employ Quality by Design initiatives this event will help you understand the applicability of deploying simulation to achieve these objectives.
- If you are already using CFD in your engineering work flow, this session will demonstrate the strength of STAR-CCM+® meshing, workflow and latest physics models for some of the most challenging problems in the industry.

AGENDA

8:30 AM - 9:00 AM	Registration and Breakfast
9:00 AM - 9:15 AM	Welcome & Introduction, CD-adapco/Siemens
9:15 AM - 10:00 AM	Using CFD for Mixing & Process Scale-up: Theory and Case Studies
10:00 AM - 10:30 AM	Software Demonstration: Admixtus – Go Swiftly from Geometry to Results
10:30 AM - 10:45 AM	Coffee Break
10:45 AM - 11:15 AM	Segregation Phenomenon in Pharmaceutical Compression Using DEM Guest Speaker, Dr. Yijie Gao, Takeda Pharmaceuticals International
11:15 AM - 11:45 AM	Optimization of Process and Equipment Design
11:45 AM - 12:15 PM	Software Demonstration: Design Space Exploration – A Path to the Future
12:15 PM - 1:00 PM	Lunch (provided by Siemens PLM)
1:00 PM - 2:00 PM	Hands-on workshop using CFD for mixing applications
2:00 PM - 2:15 PM	Workshop close and final comments

SPEAKER BIO

Yijie Gao graduated from Tsinghua University in Beijing 2007, majoring in Biology with a minor in Computer Science. He received a PhD in Chemical Engineering at Rutgers University in 2012, with a focus on modeling continuous manufacturing of solid dose drug product. He joined Takeda Pharmaceuticals in the same year as a formulation scientist, working on solid dose formulation development and manufacture of oncology drug product. His main interests lie in the application of computational modeling of solid dose unit operations to improve efficiency, and reduce cost and consumption of drug substance in research and development. He has written 20+ publications for pharmaceutical and chemical engineering journals and spoken at major conferences.

This event is free, but registration is required. Please complete the provided form to sign up.