Tuesday 06 August: Conference, day 1 moderated by Marcial Gonzalez and Maitraye Sen

- **8:00 Registration & Introduction-Armstrong Hall of Engineering-701 W. Stadium Avenue**

	Speaker	Affiliation	Title
• 8:30	**John Hecht**	**Procter & Gamble**	**What we still need to eradicate powder segregation in industrial processes**
• 9:15	**Richard Lueptow**	**Northwestern**	**Predicting particle segregation in industrial granular flows**
• **10:00**	**Morning Break**		
• 10:30	Jie Ren	Merck, PA	Development of a continuous blending process through mechanistic understanding of the shear effect
• 11:00	Zhekai Deng	Northwestern	Continuum modeling of segregation for polydisperse granular material in hopper discharge flow
• 11:30	Parind Desai	GSK, PA	Evaluation of segregation intensity of pharmaceutical blends using near infrared spectroscopy
• **12:00**	**Lunch Break**		
• 1:00	**Carl Wassgren**	**Purdue University**	**Contact spreading of liquid between particles in mixed granular systems**
• 1:45	Tom Baxter	Jenike & Johanson	Separation anxiety (part 1): Experimental segregation test methods and their use from development to commercial scale
			Separation anxiety (part 2): Troubleshooting & solving bend and segregation issues in industrial applications
• 2:30	Rohit Ramachandran	Rutgers University	The genesis of content non-uniformity in high-shear wet granulation
• **3:00**	**Afternoon Break**		
• 3:15	Manogna Adepu	Arizona State	Particle & wall friction in discharging cylindrical hoppers
• 3:45	Ben Freireich	PSRI	A review of mixing & segregation in fluidized beds
• **4:15**	**Flash Presentations**		
• **5:30**	**Posters Reception**		
• **7:00**	**Forum banquet**		
• **8:00**	**Jennifer Sinclair Curtis**	**UC Davis**	**Using DEM to develop constitutive models for CFD simulations of particulate flows**

Wednesday 07 August: Conference, day 2 moderated by Yi Fan and Aaron Morris

Location: Armstrong Hall of Engineering-701 W. Stadium Avenue

Speaker	Affiliation	Title
8:00 **Anthony Thornton**	**University of Twente**	**Multiscale modelling of industrial granular materials**
8:45 Kerry Johanson	Material Flow Solutions	What type of mass flow will prevent or limit segregation of powders? Calculation of custom design curves for a particular powder in preselected process geometry
9:15 Thomas Weinhart	MercuryLab, NL	MercuryCG – from discrete particles to continuum fields
9:45 Morning Break		
10:00 Chen Mao	Genentech	Assessment of powder flow obstruction using principles of continuum mechanics; implications in drug product manufacturing
10:30 Yu Liu	Dow Chemicals, TX	Modeling granular material segregation using a finite element method and advection-diffusion-segregation equation multi-scale model
11:00 William Ketterhagen	AbbVie	Application of DEM to understand, predict, and de-risk segregation in the manufacturing of pharmaceutical drug products
11:30 Rohit Kumar	Alkermes	Effect of different powder charging techniques and blender angle on the powder blending efficiency in an IBC blender
12:00 Lunch Break		
12:45 Michael Gentzler	Merck, PA	Quantification of segregation potential for polydisperse, cohesive, multi-component powders and prediction of tablet die-filling performance. A methodology for practical testing, re-formulation and process design
1:15 Hongyang Cheng	University of Twente	Bayesian calibration/validation and uncertainty propagation for discrete particle models of granular materials
1:45 Paul Mort	Purdue University	Cohesion as a strategy to control segregation and implications for flowability
2:15 Afternoon Break		
2:30 Siying Liu	Vertex	Connecting segregation to rheology for inherently scalable model development
3:00 Daniel Mateo-Ortiz	AbbVie	Continuous powder blending inside a twin screw extruder
3:30 Ivan Christov	Purdue University	Fundamental aspects of continuum modeling of granular diffusion and dispersion in tumbler flow
4:00 Wyatt Roth	Eli Lilly and Company	Industrial perspectives on mixing in a continuous direct compression manufacturing process
4:30 Conclusion		

Blending & Segregation