



**10th Annual Amgen-Clorox
Graduate Student Symposium**
Friday, October 6, 2017



8:00 AM	Registration and Breakfast	ESB Courtyard
8:30 AM	Welcome	ESB 1001
	Rachel Segalman, E.N. Kramer Professor and Department Chair, Chemical Engineering, UCSB	
8:45 AM	Session I: <i>Thermodynamics & Process Modeling</i>	ESB 1001
Thomas Farmer	Solid Form Selection by Continuous Precipitation	
Jeffrey Frumkin	Target Bounds on Reaction Selectivity	
Tanmoy Sanyal	A New Approach to Computationally Fast Coarse Grained Models of Hydrophobic Interactions in Fluids	
David Smith	Charting Design-Specific Interactions of Nanoparticles with Cellular Membranes through Model Biophysical Simulations	
10:05 AM	Industrial Keynote Talk	ESB 1001
	Shawn Walker, Director of Process Development, Synthetics Technologies and Engineering, Amgen	
10:35 AM	Break	ESB Courtyard
10:50 AM	Session II: <i>Polymers & Complex Fluids</i>	ESB 1001
Jimmy Liu	Coarse-Graining Polymer Field Theory for Fast and Accurate Polymer Simulations	
Chih-Cheng Chang	Aging Oil-Water Interfaces with Asphaltene Adsorption: Interface Rheology and Heterogeneity	
Joseph Peterson	Predictions for Non-Linear Flows of Polydisperse Blends	
Mengwen Zhang	Formation of Multicomponent Nanoemulsions for Colloidal Synthesis	
12:10 PM	Academic Keynote Talk	ESB 1001
	Lynn Walker, Professor, Chemical Engineering, Carnegie Mellon	
12:40 PM	Lunch	ESB Courtyard
1:40 PM	Poster Session	ESB Courtyard
2:40 PM	Session III: <i>Interfacial Phenomena & Characterization</i>	ESB 1001
Szu-Ying Chen	Improving Oil Recovery via the Low-Salinity Effect: a Mechanistic Study	
Howard Dobbs	Characterizing the Electrochemically Enhanced Dissolution of Silica and Alumina in Alkaline Environments	
Alexandra Bayles	In Situ Characterization of Sorption and Diffusion in Ionic Liquids	
Richard Hermann	<i>Dow Discovery Lecture</i> : Nanoscale Chemical Interrogation of Surfaces Using Tip-Enhanced Near-Field Optical Microscopy	
4:00 PM	Break	ESB Courtyard
4:15 PM	Session IV: <i>Bio-Engineering, Materials, & Informatics</i>	ESB 1001
Joel Bozekowski	Analyzing the Antibody Repertoire in Age-Related Macular Degeneration for Diagnostic Development	
Sean Gilmore	Engineering Synthetic Systems Inspired by Anaerobic Fungi	
Michael Paull	Serum Antibody Target Discovery Using Pattern Tiling	
5:15 PM	Conclusion	ESB 1001
	David Smith and Howard Dobbs, Symposium Co-Chairs	
5:30 PM	Reception Dinner and Award Ceremony	Mosher Alumni House
	Industry guests, faculty and presenters are all welcome	
8:30 PM	End of Reception Dinner and Award Ceremony	