



9<sup>th</sup> Annual Clorox-Amgen  
Graduate Student Symposium  
Friday, September 30, 2016



9:00 AM	Registration and Breakfast	ESB Courtyard
9:30 AM	Welcome Professor Rachel Segalman, UCSB Chemical Engineering Department Chair	ESB 1001
9:45 AM	Session I: <i>Transport and Theory</i>	ESB 1001
	Carl Tilbury Enhancing the Accuracy and Applicability of Mechanistic Crystal Growth Models for Rapid Morphology Predictions	
	Mark Joswiak Size-Dependent Surface Free Energy of Water Nanodroplets: Energetic and Entropic Components and Implications for Nucleation	
	Geoffrey Poon Accelerating nucleation with trace additives	
	Arash Nowbahar Interfacial Polymerization Kinetics for Reverse Osmosis Membranes	
11:05 AM	Break	ESB Courtyard
11:20 AM	Session II: <i>Materials</i>	ESB 1001
	Matthew Idso Photo-responsive membrane proteins in nanostructured silica as new materials for light-activated ion transport	
	Zachariah Berkson Correlating atomic-scale compositions, structures, & properties of heterogeneous zeolite catalysts	
	Niels Zussblatt New non-precious-metal mesoporous carbon electrocatalysts and their properties	
12:20 PM	Lunch	ESB Courtyard
1:20 PM	Poster Session	ESB Courtyard
2:20 PM	Session III: <i>Polymers and Interfacial Phenomena</i>	ESB 1001
	Corinne Carpenter Directed self-assembly of diblock copolymers in multi-VIA configurations: using chemically patterned substrates to reduce defectivity and placement errors	
	Emily Davidson Self-Assembly and Crystallization of P3EHT Containing Block Copolymers	
	Nicholas Cadirov Characterizing the Surface Interactions between Gecko-Inspired Adhesives and Diversified Substrates	
	Alex Schrader Characterizing surface hydration through parallel measurements of water diffusivity and surface forces	
3:40 PM	Break	ESB Courtyard
4:00 PM	Session IV: <i>Biomolecules and Biomaterials</i>	ESB 1001
	Abe Pressman Estimating ribozyme kinetics from analysis of in vitro evolution	
	John Henske Engineering Regulation in Anaerobic Gut Fungi during Lignocellulose Breakdown	
	Douglas Vogus Engineering polymer drug conjugates to schedule synergistic chemotherapeutics	
5:00 PM	Conclusion Corinne Carpenter, Symposium Co-Organizer	ESB 1001
5:15 PM	Reception Dinner and Award Ceremony Industry guests, faculty and presenters are all welcome	Mosher Alumni House
8:30 PM	End of Reception Dinner and Award Ceremony	