

# The Department of Chemistry and Biochemistry

University of Missouri-St. Louis

Announces

## The Twenty-fourth Annual Robert W. Murray Lecture

Presented by

### Professor Rachel Segalman

Chair of the Department of Chemical Engineering and Warren and Katherine  
Schlinger Professor of Chemical Engineering at UC Santa Barbara

### "Charge-neutral polymer complexes as battery components"

**4:00 pm Monday, September 11, 2023**

103 Benton Hall

Rachel Segalman received her B.S. degree from the University of Texas at Austin (1998), and her Ph.D. degree from the University of California, Santa Barbara in 2002. She was a Postdoctoral Fellow at Ecole Européenne de Chimie, Polymères et Matériaux (ECPM) une composante de l'Université Louis Pasteur, Strasbourg, France prior to moving to UC-Berkeley in 2004, where she made the ranks up to Associate Professor. She moved then to UC Santa Barbara in 2014. Rachel received numerous awards. Among these are the Presidential Early Career Award for Scientists and Engineers, the Camille Dreyfus Teacher-Scholar Award, the John H. Dillon Medal of the American Physical Society, and the Journal of Polymer Science Innovation Award. Rachel is an elected member of the National Academy of Engineering and an elected Fellow of the Royal Society of Chemistry, the American Academy of Arts and Sciences and the American Physical Society.

The Segalman group answers fundamental polymer physics questions at the heart of energy and sustainability. The group is particularly interested in the fundamental interactions that lead a polymer to "fold" like a protein as well as the interactions between a polymer and an ion that leads to ionic conductivity or highly selective separations for water purification. The group uses molecular design and synthesis combined with measurements of materials properties to establish design rules for new materials for applications ranging from energy storage (batteries) to water separation, polymer upcycling, and marine anti-fouling.



An abstract of the talk and further information is available at [www.umsl.edu/chemistry](http://www.umsl.edu/chemistry).

Parking is available in the West Drive parking garage