HIGHLANDS IN CHEMISTRY SEMINAR SERIES



FEBRUARY 23, 2024

2:30 PM

HAHN HALL NORTH 140

FACULTY HOST: AMANDA MORRIS

MICHAEL SCHULZ

VIRGINIA TECH

"Challenge-inspired Polymer Chemistry"

Modern society faces an array of challenges. New treatments for disease, sustainable sources of energy, and greener materials are in demand. These challenges not only underscore pressing societal needs, but also reveal intriguing, unresolved scientific questions. The interplay between synthesizing "challenge-inspired" materials and investigating "challenge-revealed" fundamental questions characterizes the overarching philosophy of our research group. In this seminar, I will present selected research vignettes that illustrate this approach to developing new polymer synthesis methods, functional materials, and thermodynamics insights, all with the goal of making polymers that can address ongoing challenges in our modern world.

Michael D. Schulz is an assistant professor in the Department of Chemistry at Virginia Tech, and a member of the Macromolecules Innovation Institute, the Center for Emerging, Zoonotic, and Arthropod-borne Pathogens, and the Virginia Tech Center for Drug Discovery. He received his Ph.D. in 2014 in organic and polymer chemistry and an M.S. in Pharmaceutical Science at the University of Florida under the supervision of Prof. Ken Wagener. After conducting research at the Max Planck Institute for Polymer Research as a Fulbright Scholar in the group of Prof. Klaus Müllen, he was a postdoctoral scholar in the group of Prof. Robert Grubbs at Caltech. He began his independent career at Virginia Tech in 2017. His diverse research interests span both fundamental and applied polymer chemistry including metal-chelating materials, hyperbranched polymers, novel polyesters, and antiviral polymers.

