

Aiiso Yufeng Li Family Department of Chemical and Nano Engineering

Department Seminar

Wednesday, April 8, 2026

11:00am – 12:00pm PT

SME 248



Dr. LaShandra Korley, PhD

*“Framing Circularity in the
Plastics Landscape”*

**Distinguished Professor
Department of Materials Science and Engineering
University of Delaware**

Abstract: Polymers are ubiquitous in the modern world, and the demand for and production of plastics products continues to climb. Historically, the chemical manufacturing of plastics has focused on key features, such as durability, low-cost, and multifunctionality; however, these aspects also challenge current interventions to combat the plastics waste dilemma. I will overview plastics sustainability from the perspective of transitioning from a linear to a circular economy, addressing macromolecular diversity and plastic waste complexity, reducing dependence on petroleum feedstocks, and maintaining (or improving) material performance.

Bio: She received a B.S. in both Chemistry & Engineering from Clark Atlanta University as well as a B.S. in Chemical Engineering from the Georgia Institute of Technology in 1999. Prof. Korley completed her doctoral studies at MIT in Chemical Engineering and the Program in Polymer Science and Technology in 2005, and she was the recipient of the Provost's Academic Diversity Postdoctoral Fellowship at Cornell University in 2005. Her innovative research program utilize a bioeconomy framework or the nexus of biologically-inspired and sustainable principles for the molecular design, manufacture, and valorization of functional polymeric systems, including thermoplastics, networks, composites, and gels. Korley has received several distinguished honors, including 2023 (ACS Fellow, AIChE Fellow, Fellow of RSC, ACS POLY Fellow); 2022 (APS Fellow, ACS PMSE Fellow); 2021 Chemical and Engineering News Black Trailblazer); 2020 AIMBE Fellow, 2012 Kavli Fellow, and was selected to the 2023 U.S. Science Envoy Cohort by the U.S. State Department. She also was awarded the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) Lloyd N. Ferguson Young Scientist Award for Excellence in Research, the American Institute for Chemical Engineers (AIChE) Minority Affairs Community (MAC) Gerry Lessells Award, and the AIChE MAC William W. Grimes Award for Excellence in Chemical Engineering.

Seminar Host: Jon Pokorski