



# Houk-Jung Organic Colloquium

## Biomimetic Hierarchical Structure in Synthetic Macromolecules

**Abstract:** The remarkable functions of proteins, from refined binding profiles to efficient catalysis, are currently unrivaled by synthetic macromolecules due to complex hierarchical structure in natural systems. Inspired by this grand challenge, the Knight group is at the interface of chemical biology and polymer science, developing synthetic strategies to control hierarchical structure and high-throughput platforms to understand fundamental design principles underlying macromolecule conformation. These research efforts are motivated by the need for innovative strategies to address global health and environmental challenges, where our foundational work informs the de novo design and development of functional polymeric materials.

Prof. Abby Knight  
Department of Chemistry  
University of North Carolina,  
Chapel Hill

Thursday, Nov 9, 2023 | 4:00 PM  
Mani L. Bhuamik Collaboratory - YH 4222  
Dongwon Yoo Seminar & Conference Hall