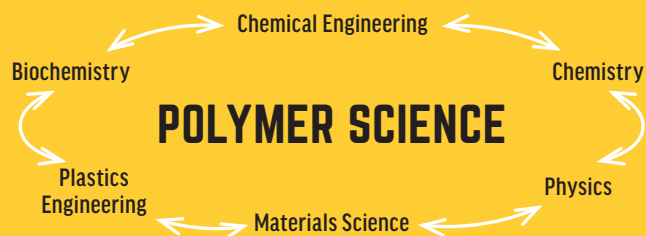


# REU RESEARCH EXPERIENCE FOR UNDERGRADUATES

**2023** Monday, May 22 – Friday, July 28

**2024** Monday, May 20 – Friday July 26

Each summer, participants will be engaged in fundamental research projects that span the complex, interdisciplinary facets of materials sustainability—including polymer synthesis from renewable sources, materials with enhanced properties and lifetime, materials to improve utilization of natural resources, reduced energy polymer processes, and biodegradable materials—while gaining the tools to assess the environmental impact of new material development.



## RESEARCH AREAS

### Design for Recyclability and Degradability

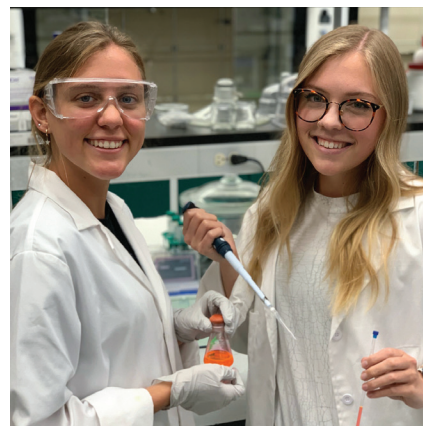
Synthesis of degradable thermosets, development of polymers with degradable linkages, design/modeling/processing of high-performance recyclable thermoplastic matrix composites

### Materials for Sustainable Energy

Synthesis and characterization of polymer membranes for  $\text{CO}_2$  separation and  $\text{H}_2$  purification, evaluation of electrode composites for renewable energy storage, design of melt processable conjugated polymers for printed electronics

### Sustainable Polymers: (Bio) Renewable Feedstocks and Resource-Efficient Processing

Synthesis of polymers from vegetable oil derivatives for high-performance coatings, design of antimicrobial polymer surfaces using naturally occurring bacteriophages



## PARTICIPANT BENEFITS

- \$6,000 summer stipend
- On-campus housing ([usm.edu/housing](https://usm.edu/housing))
- Limited travel support
- Team-building activities
- Field trips

## APPLICATION MATERIALS

- Completed application form
- Two letters of recommendation
- Current transcripts

## DEADLINE

All application materials are due March 1.  
[usm.edu/reu](https://usm.edu/reu)