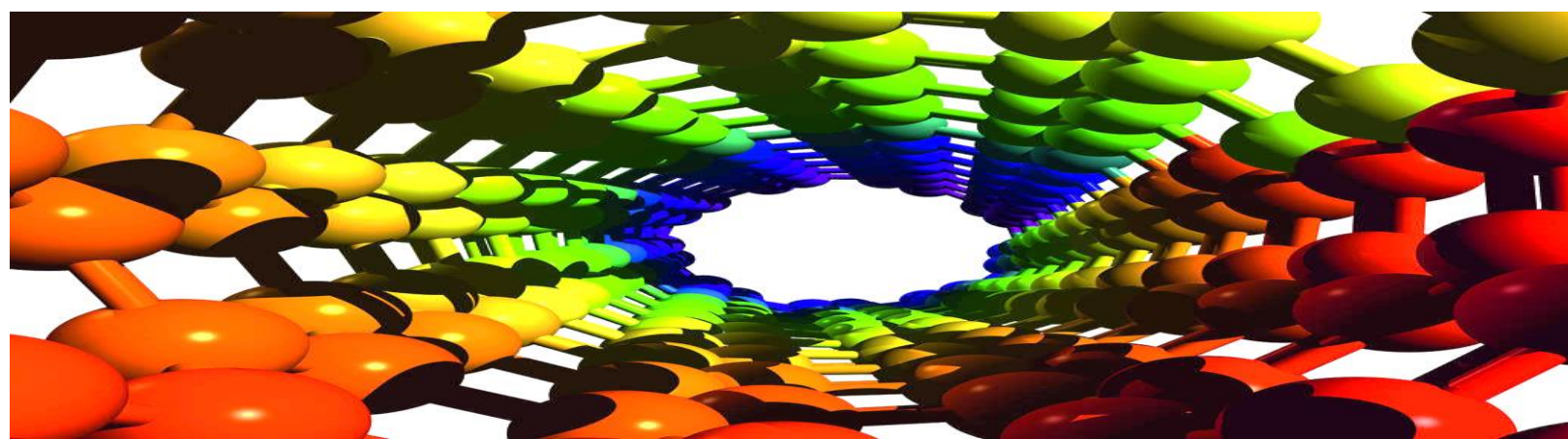


SMART POLYMER COMPOSITE MATERIALS AND STRUCTURES

A Research Experience for Undergraduates



Smart Polymer Composite Materials and Structures is a Research Experience for Undergraduates (REU). Faculty from the departments of chemistry, mechanical engineering and civil engineering will mentor students.

Requirements

- U.S. citizen/permanent resident
- Enrolled in an undergraduate program at a two- or four-year institution
- Cumulative GPA of at least **3.00**
- Desire to pursue a career in research and/or graduate school in your major
- We especially seek applications from women and groups traditionally underrepresented in STEM disciplines.

Research Projects

- Data-enabled Discovery of Smart Polymers for 4D Printing of Composite Structures
- Synthesis and Characterization of Mechanically Strong, Remoldable and Recyclable Polyaminal Thermosets
- Ionic Fluorescence Materials for Detection of Self-Healing and Strength in Ionomers
- Self-sensing and Self-heating Nanocomposite Films for Structural Health Monitoring and Repair of Thermoplastic Composite Joints
- Design and Fabrication of Additive Flexible Formwork for the Design of Concrete Interlocking Modules
- Cure-on Demand Composites with Frontal Radical-Induced Cationic Polymerization
- Hierarchically Structured Nanocomposite Polymers
- Metaheuristic-based Reverse Design and Development of 4D Printable Polymer Composites with Targeted Properties

Benefits

- \$600/week stipend
- On-campus housing, if needed
- Up to \$500 travel reimbursement
- Dining card provided

Contact

Dr. Kristen Williams
kwilliams9@lsu.edu
225-578-3782

For more information, visit our website:

www.lsu.edu/smartreu

Important Dates

Application Open: January 1, 2021

Application Deadline: March 1, 2021

Program Dates: May 24 - July 30, 2021



LSU
Office of
Strategic Initiatives