

1. Sustainable Biobased Polymers

A postdoctoral scholar position in synthesis and characterization of sustainable biobased polymers and materials from renewable natural resources. This position requires the following: (1) organic polymer chemistry backgrounds with skills in characterization of polymers including mechanical, thermal and morphological properties (tensile testing, DMA, TEM, SAXS, etc.); (2) innovative thinking on chemistry of plant oils, lignin, cellulose and/or other types of biomass; (3) ability to handle multiple tasks; (4) collegiality to work in a team.

2. Antimicrobial Polymers

A postdoctoral scholar position in synthesis and characterization of antimicrobial polymers that could possess facial amphiphilicity or allow bioconjugation with antibiotics to tackle some of most dangerous bacteria, especially multidrug-resistance Gram-negative strains. This position requires the following: (1) organic polymer chemistry backgrounds with skills in monomer synthesis and modern polymerization tools; (2) knowledge of antimicrobial and cytotoxicity tests, and collaborations with microbiologists and immunologists; (3) ability to handle multiple tasks; (4) collegiality to work in a team.

It is expected that for both positions, postdoctoral scholars will follow vigorous safety practice, conduct research, participate laboratory management, write proposals and reports on funded projects, publish results in scientific journals and present results in scientific conferences, advise students, technical staff, postdoctoral and visiting scholars, and assist in the communications and services to satisfy the needs of the sponsor.