

Job Description: Two post-doctoral fellow positions available at MIN Research Laboratory, Department of Polymer Engineering, University of Akron, Akron, OH, USA.

MIN Research Laboratory is seeking two highly talented and motivated post-doctoral fellows in the areas of **interfacial science** and **biomedical engineering/biomaterials**. Preference would be given to a candidate with a track record of prior accomplishments as evidenced by at least two first author papers. Excellent interpersonal and communication skills, with demonstrated ability to effectively collaborate are also required. The positions are expected to be filled by September but applications will be accepted until the positions are filled. Please send a letter of intent on how the position relates to your past experience and curriculum vitae (including publications list and the details of three academic referees) as a single PDF file to ymin@uakron.edu, with the subject line "Postdoctoral Research Associate." Further information about the MIN Research Laboratory can be found here: <http://minlab.uakron.edu/>

Interfacial Science Postdoc (Areas of Surface Science and Interfacial Phenomena):

The ideal candidate will be involved in projects seeking (a) to obtain fundamental understanding and relationships describing how the structure, viscosity, and glass transition temperature of ionic liquids depend on degree of confinement (separation) and (b) to investigate kinetics and thermodynamics of Janus particles with the surrounding liquid. The candidate is expected to have a PhD with a strong background in one or more of the following topics: adhesion, force profiles, nanoparticle characterization and functionalization, friction and lubrication, rheology, and thin films. The experiences in surface forces apparatus and atomic force microscopy would be highly desired but not mandatory.

Biomedical engineering/Biomaterials Postdoc (Areas of Bio-interfaces, Biomaterials, and Biomedical Engineering):

The successful candidate is expected to take a leadership role in the following research areas of (a) fabricating microneedle device for vaccination applications (evaluation of release kinetics and animal model development) and (b) elucidating physiology of human diseases associated with lipid membranes and proteins such as Alzheimer's Disease, Multiple Sclerosis, and Chronic Obstructive Pulmonary Disease. The candidate is expected to have a PhD with a strong background in one or more of the following topics: lipid bilayers, protein interactions, neural cell culturing, small animal models (mice and rats), structural characterization via scanning electron microscopy and confocal microscopy, and bacterial adherence and biofilm formation.