Post-Doctoral Position in the Interfacial Science Laboratory

Position Summary: The Interfacial Science Laboratory (ISL) in the Department of Chemical and Environmental Engineering at the University of California, Riverside invites applications for two postdoctoral positions in the areas of **interfacial science/rheology** and **biophysics/biomaterials**. The initial appointment would be for one year, with the opportunity to renew after the first year. Salary is commensurate with qualifications and years of experience.

Requirements: The successful candidate must have a Ph.D. in Chemical Engineering, Physics, Chemistry, Materials Science and Engineering, Biomedical Engineering or a closely related field. The experiences in surface forces apparatus, atomic force microscopy, fluorescence microscopy, and micro/nanofabrication would be highly desired but not mandatory. Candidates should be familiar with writing protocols, managing day-to-day implementation of protocol procedures, ensuring quality data acquisition, analyzing multilevel repeated-measures data, writing manuscripts, and collaborating with students.

1. Interfacial Science/Rheology Postdoc:

The ideal candidate will be involved in projects seeking **(a)** to perform rheological measurements in multiple length scales ranging from macroscale to mesoscale and nanoscale to gain insights into how the isotropic and anisotropic adsorption of organic molecules and ligands alter the flow characteristics of colloidal suspension and **(b)** to perform experimental data analysis and interpretation in comparison with appropriate hydrodynamical and rheological models. Some of the key skillsets and backgrounds of the successful candidate in this position include microfluids, nanofluids, force spectroscopy, rheological testing, colloidal synthesis, colloidal interactions, and adsorption.

2. Biophysics/Biomaterials Postdoc:

The successful candidate is expected to take a leadership role in the following research areas of **(a)** measuring intermolecular forces arising biomembranes and proteins to elucidate pathological pathways of human diseases such as Alzheimer's Disease, Multiple Sclerosis, and Chronic Obstructive Pulmonary Disease and **(b)** investigating lipid/protein phase transition behaviors in parallel with theoretical modeling of domains (rafts). The candidate is expected to have a PhD with a strong background in one or more of the following topics: lipid bilayers, protein interactions, force spectroscopy, structural characterization via fluorescence microscopy, neural cell culturing, and bacterial adherence and biofilm formation.

Application Procedure: Applicants will need to send a cover letter (describe how the position relates to his/her academic experiences and previous accomplishments), curriculum vitae, contact information of three academic references as a single PDF file to ymin@engr.ucr.edu, with the subject line "Postdoctoral Position in the ISL." Further information about the ISL can be found here: http://yminlab.engr.ucr.edu.