

Senior Research Associate – Liquid Surface/Interface Science

The Center for Advanced Radiation Sources (CARS) at the University of Chicago houses three national synchrotron x-ray user research facilities, GSECARS, BioCARS, and ChemMatCARS, at Sector 13, 14 and 15, the Advanced Photon Source (APS), Argonne National Laboratory (ANL).

CARS invites applications for a Senior Research Associate (SRA) position in the area of liquid surface/interface science to join ChemMatCARS, which operates a world-class synchrotron x-ray liquid surface scattering facility available for scientists world-wide. Synchrotron x-ray liquid surface scattering is the most powerful probe of molecular and mesoscale structure at liquid interfaces and is indispensable for understanding the fundamental science of soft interfaces, as well as model systems of many natural and technological systems. The successful candidate will be expected to originate and engage in collaborative efforts in x-ray studies of liquid surfaces with ChemMatCARS users and staff, lead the user program on the liquid surface/interface science, as well as lead R&D efforts to expand capabilities of synchrotron beamlines in the area of liquid surface and interface science. Scientific areas of interest include, but are not limited to, ionic liquid interfaces, ferroelectric assemblies, tunable nanoparticle arrays, nanoparticle toxicity, chemistry of life processes at the liquid interfaces, and separation of metal ions by solvent extraction.

The position requires a Ph.D. in Chemistry or Physics in the study of liquid surface/interface phenomena with synchrotron x-ray surface scattering techniques, a research record in liquid surface/interface x-ray scattering science, and a minimum of 8 years of relevant experience with 3 years in running user science program at a synchrotron x-ray liquid surface scattering facility. Experience in advanced synchrotron x-ray liquid surface/interface scattering techniques, such as GISAXS, XFTR and high energy PDF, is highly desirable. Capability of developing liquid surface x-ray scattering techniques, strong computer skills, as well as a demonstrated ability to use these to write data acquisition, data analysis, and instrumentation control software, are also preferred. Expertise in the full range of synchrotron x-ray techniques, including the use of high energy x-rays (20 keV and above), for studying liquid surfaces and interfaces is especially beneficial. Moreover, the successful candidate will have the opportunity to serve in the role of Principal Investigator, writing proposals to federal and non-federal agencies to support such research and development.

The successful applicant must be able to satisfy the requirements for access to ANL. Interested candidates must apply through the University's Academic Jobs website at https://academiccareers.uchicago.edu/applicants/jsp/shared/search/Search_css.jsp (Posting number: 03685)

A CV including a list of publications, names and contact information for three references, and a statement describing past and current research accomplishments must be uploaded to be considered as an application. Review of complete applications will begin April 26 and will continue until the position is filled.

The University of Chicago is an Affirmative Action/Equal Opportunity/Disabled/Veterans Employer and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national or ethnic origin, age, status as an individual with a disability, protected veteran status, genetic information, or other protected classes under the law. For additional information please see the University's Notice of Nondiscrimination at http://www.uchicago.edu/about/non_discrimination_statement/. Job seekers in need of a reasonable accommodation to complete the application process should call 773-702-0287 or email ACOppAdministrator@uchicago.edu with their request.