**Postdoctoral Scholar Position at SSRL**
**for Developing Multi-Modal X-ray Capabilities for Understanding Membrane Materials**

The Stanford Synchrotron Radiation Lightsource (SSRL), a Directorate of the SLAC National Accelerator Laboratory, is inviting applications for a postdoctoral scholar with research interest and experience in developing and using x-ray techniques for studying membrane materials. Membrane materials play an increasingly important role in separations, chemical manufacturing, medicine, and energy applications. There is a need for transformative research that will allow for better characterization of membrane materials.

As part of this project, the postdoctoral scholar will work in a team to help develop an advanced multimodal characterization platform to understand structure-function relationships of membrane materials. This will involve design of *in situ* setups, aiding in developing x-ray characterization tools (imaging/scattering) for understanding membranes, and developing an analysis pipeline for interpretating data.

**Minimum Qualifications:**

- Ph.D. in chemical engineering, materials science and engineering, physics, chemistry, or related fields.
- Python or similar expertise.
- Willingness to learn and to bridge knowledge/experience gaps necessary for the project.
- Effective written and verbal communication skills.
- Strong organizational skills.
- Ability to collaborate with a diverse population. Good interpersonal skills are essential.
- Ability to work both independently and in a team environment.

**Desired Qualifications:**

- Experience developing data analysis pipelines (ideally for x-ray experiments).
- Experience with x-ray scattering and/or experiments including data analysis, modeling, and interpretation of results.
- Understanding of principles of soft matter and polymer physics, including molecular structure and dynamics, thermodynamics and phase behavior, mechanical properties, rheology and flow dynamics, and polymer solutions and interactions.

**Preferred Additional Qualifications:**

- Experience with designing and developing *in situ* setups using CAD software.
- Basic wet lab skills.

You do not need to meet all the desired and preferred qualifications to be considered. SLAC is committed to fostering a work environment that promotes inclusion, diversity, equity, and accountability. We encourage all qualified applicants to apply.

This is a 2-year appointment with a start date of September/October 2024 (flexible).

**Please send a cover letter, a letter with CV, a list of publications, and the contact info for three references to Sarah Hesse @ shesse@slac.stanford.edu**