Postdoctoral Position at SSRL for in-situ/operando Catalyst Characterization

The Stanford Synchrotron Radiation Lightsource (SSRL), a Directorate of the SLAC National Accelerator Laboratory, Stanford University, and a national user facility, seeks a Ph.D. Postdoctoral Scholar with research interest and experience in X-ray characterization of catalysts.

This postdoctoral position will involve using in-situ/in-operando synchrotron-based methods, primarily X-ray absorption spectroscopy (XAS), to study all aspects of catalysis. The candidate will join a group at SSRL, under the guidance of Simon R. Bare, whose mission is to develop a world-class synchrotron catalyst characterization facility via the Consortium for Operando and Advanced Catalyst Characterization via Electronic Spectroscopy and Structure (Co-ACCESS, https://sites.slac.stanford.edu/co-access/).

The candidate will: (i) develop an independent research program in the application of operando XAS to probe the structure of working catalysts, (ii) aid in beamline setup and data collection at SSRL with Co-ACCESS collaborators, (iii) perform in-situ XAS experiments, and analyze the XAFS data. The candidate will also give instruction on data analysis to graduate students. The candidate will work closely with visiting scientists, postdoctoral fellows, and students from leading research groups, on all aspects of the synchrotron-mediated research; provide guidance to, and foster the development of, graduate and undergraduate students; publish experimental results in scientific journals and present results at scientific meetings; and maintain a safe working environment in the laboratory. Given the collaborative nature of Co-ACCESS this is an excellent opportunity for a candidate wishing to engage with a broad segment of the catalysis community.

Qualifications:

- Ph.D. in physics, chemistry, materials sciences or related fields.
- Experience with all aspects of synchrotron X-ray absorption spectroscopy is a must, including demonstrated ability in data analysis and modeling of XAFS data. Use of Athena/Artemis and/or Larch preferred.
- Experience with synthesis, testing or characterization of catalysts, desired.
- Willingness to learn and bridge knowledge/experience gaps.
- Ability to work independently and in a team environment.
- Strong organizational skills a must.
- Ability to work and communicate effectively with a diverse population; good interpersonal skills are essential.
- Effective written and verbal communication skills.

Please send a letter with CV and list of publications, and names of two references, to the address below:

Simon R Bare, email: simon.bare@slac.stanford.edu