Postdoctoral Position for Development and Application of Quick-Scanning X-ray Absorption Spectroscopy Methods in Elecectocatalysis at SSRL

The Stanford Synchrotron Radiation Lightsource (SSRL), a Directorate of SLAC National Accelerator Laboratory, and a national user facility, seeks a Postdoctoral Scholar with research interest and experience in synchrotron X-ray characterization of materials, with an emphasis on electrocatalysts. SSRL is in process of upgrading a wiggler beamline to allow quick X-ray absorption spectroscopy (QXAS) to become a routine operational mode. This will allow kinetic processes in electrocatalysis so be studied.

This postdoctoral position will involve developing and applying time-resolved *in-situ/in-operando* X-ray absorption spectroscopy to the study of a catalytic process of mutual interest. The focus of the project will be in developing the methodology to probe spectro-kinetics of catalytic processes with an emphasis on electrocatalysis and include advanced methods in data processing, data analysis and data modeling. 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/).

In addition to developing QXAS methods, the candidate will be expected to collaborate with user groups especially in electrocatalysis experiments, aiding in beamline setup and data collection, and assist with and teach data analysis to user groups, e.g., graduate students. They will have the opportunity to publish lead-author manuscripts and to build a career in catalysis/energy research technologies or a future teaching career.

Qualifications:
- Ph.D. in physics, chemistry, chemical engineering, materials sciences, or related fields.
- Experience with all aspects of synchrotron X-ray absorption spectroscopy, including demonstrated ability in data analysis and modeling of XAFS data using Athena/Artemis and/or Larch.
- Deep knowledge of electrocatalysis.
- Strong programming skills and knowledge of instrument control preferred.
- Willingness to learn and bridge knowledge/experience gaps.
- Ability to work independently and in a collaborative team environment.
- Strong organizational skills a must.

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