

SSRL Postdoctoral Scholar for X-ray Characterization of Battery Cathode Synthesis

The Stanford Synchrotron Radiation Lightsource (SSRL), a Directorate of the SLAC National Accelerator Laboratory, Stanford University, and a national research facility, seeks up to two Ph.D. Postdoctoral Scholar with experience with *in situ* synchrotron-based X-ray characterization. This position will involve *in situ* and *ex situ* X-ray characterization (including diffraction, spectroscopy, and microscopy) during the synthesis of disordered rock salt structures for Li-ion battery cathodes. Synthesis conditions will be optimized by rationally tuning the synthesis conditions and monitoring key X-ray signatures. The work will utilize the SLAC synchrotron sources SSRL and may include travel to other synchrotrons.

The postdoc will work within a rich scientific environment at SLAC and Stanford University and will have opportunities to cross-train in electrochemistry and X-ray characterization. The research project is part of a larger consortium of national labs and universities led by Lawrence Berkeley National Laboratory. The postdoc will have the opportunity to publish lead-author manuscripts and to build a career in energy storage technologies or a future teaching career.

For more information on current energy research at SSRL performed by the SSRL PIs see sites.slac.stanford.edu/wekergroup/, sites.slac.stanford.edu/stonegroup/, and liuyijinustcihepsl.wixsite.com/liugroup,

Qualifications:

- Ph.D. in physics, materials sciences, chemistry, or related fields.
- Experience in X-ray characterization preferred. Excellent candidates with other experience may be considered.
- Experience in synthesis is preferred.
- Willingness to learn any knowledge/experience gaps in X-ray characterization techniques and/or electrochemistry.
- Demonstrated effective written and verbal communications skills.
- Demonstrated ability to work and communicate effectively with a diverse population.
- Demonstrated ability to work independently and in a team environment.

There are up to two positions available to begin immediately. They are two-year appointments with the possibility of an extension to a third year.

Interested candidates should submit a current CV to Johanna Nelson Weker via email at jnelson@slac.stanford.edu.