Postdoctoral Position at SSRL for AI-driven Discovery of Earth-friendly High Entropy Alloys

The Stanford Synchrotron Radiation Lightsource (SSRL), a Directorate of the SLAC National Accelerator Laboratory, Stanford University, and a national research facility, seeks a Ph.D. Postdoctoral Scholar with research interest in discovery of new high entropy alloys and metallic glasses.

This is a two-year appointment, with a possible extension to a third year, available to begin immediately. This position will involve working in a multidisciplinary and a multi-laboratory collaboration with the aim of leveraging large-scale *ab initio* calculations, highly parallel synthesis, high throughput characterization and combining them with machine learning and artificial intelligence - based automation to dramatically accelerate discoveries of new earth friendly materials, which could help achieve net-zero green-house emission by 2050.

Although the project works with overlapping expertise and close collaborations among groups, the candidate will focus on hands-on experiments involving high throughput synthesis and X-ray characterization (both structural through X-ray scattering and electronic through X-ray spectroscopy). Additionally, a portion of the project will focus on developing machine-learning approaches to directing experimental search in higher composition and processing space.

Qualifications:
- Recent Ph.D. in physics, materials sciences, chemistry, or related fields.
- Experience with thin-film, and bulk synthesis desired.
- Experience with synchrotron X-ray scattering, X-ray absorption spectroscopy also desired, but not required.
- Demonstrated ability to not only to learn, but master new techniques quickly essential.
- Reasonably proficient programming skills (preferably Python) desired.
- Ability to work independently and in a team environment; and communicate effectively with a diverse population in face-to-face as well long-distance teleconference calls is essential.
- Effective written and verbal communications skills required.

Interested candidate should submit a cover letter with CV to Apurva Mehta (Mehta@slac.stanford.edu)