Postdoctoral position in ***In situ Ultra High Temperature Transmission Electron Microscopy (TEM)***

Employer: University of California, Irvine

Application Deadline: Open Until Filled

Anticipated Position Duration: 2-3 years

Job description: The Dillon lab seeks a creative, motivated, and collaborative postdoctoral scholar to work on the group's effort to study materials evolution at ultrahigh temperatures using in situ transmission electron microscopy. Our experimental approach centers around utilizing localized laser heating coupled with mechanical testing to investigate high temperature materials response in relationship to problems such as creep, sintering, and grain boundary migration. The approach enables more direct insights into the mechanisms governing defect behavior and materials response in extreme environments. Our lab has a dedicated TEM for performing this work along with picoindenter and other custom specimen holders for performing these experiments. We also have access to a variety of complimentary advanced microscopy tools at UC Irvine's Irvine Materials Research Institute.

The postdoctoral scholar will join a highly cross-disciplinary team of motivated researchers working on problems focused on how interfaces and defects respond to stimuli in extreme conditions. In addition to advancing their research skills, this position also provides valuable opportunities for professional development through active collaborations, leadership and mentorship development, scientific communication and writing, and proposal development.

The following qualifications are **required** for applicants:

- A PhD in chemistry, materials science and engineering, or a related discipline. If not already received, a PhD must be earned before the position start date.
- Expertise in TEM/STEM
- Expertise in TEM sample preparation

The following areas of expertise are **desired** for applicants but not necessary:
- Prior experience related to mechanics of materials
- Past experience with 4D STEM techniques

To apply, please visit: https://recruit.ap.uci.edu/JPF09499

Complete applications must include the following:

1. **Cover Letter** that delineates specifically how your expertise can be applied to the work in this lab and your career goals

2. **Detailed CV**, including a list of publications

3. At least three (3) reference contacts

Contact:
Professor Shen Dillon, Ph.D.
Department of Materials Science and Engineering
University of California at Irvine
Email: sdillon1@uci.edu

The University of California, Irvine is an Equal Opportunity/Affirmative Action Employer advancing inclusive excellence. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, protected veteran status, or other protected categories covered by the UC anti-discrimination policy.

As a condition of employment, the finalist will be required to disclose if they are subject to any final administrative or judicial decisions within the last seven years determining that they committed any misconduct, are currently being investigated for misconduct, left a position during an investigation for alleged misconduct, or have filed an appeal with a previous employer.

- *"Misconduct" means any violation of the policies or laws governing conduct at the applicant's previous place of employment, including, but not limited to, violations of policies or laws prohibiting sexual harassment, sexual assault, or other forms of harassment, discrimination, dishonesty, or unethical conduct, as defined by the employer.*
- *UC Sexual Violence and Sexual Harassment Policy*
- *UC Anti-Discrimination Policy for Employees, Students and Third Parties*
- *APM - 035: Affirmative Action and Nondiscrimination in Employment.*
-

As a University employee, you will be required to comply with all applicable University policies and/or collective bargaining agreements, as may be amended from time to time. Federal, state, or local government directives may impose additional requirements.