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SANTA BARBARA •

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Postdoctoral Fellow joint positions between UC Berkeley and Lawrence Berkeley National Laboratory in Electrochemical Science, Engineering, and Technology.

The Electrochemistry and Materials Science Laboratory led by Prof. Boettcher has openings for exceptional postdoctoral fellows that are passionate about driving the frontiers of electrochemical science and technology while contributing to an inclusive, diverse, supportive, while ambitious and rigorous, collaborative research ecosystem within the Berkeley Center for Electrochemical Science, Engineering, and Technology (CESET, https://electrochemistry.berkeley.edu/).

The team's work spans and connects basic science with technologies of probable importance in the energy transition. Some areas include i) fundamental interfacial and transport processes in membrane electrolysis technology and using that understanding to build practical demonstrations of advanced electrolyzer technology with industry partners; ii) New approaches to controlling ions and ion transport, for example using bipolar membranes and other interfacial ionic systems, and using these novel components to build better technology, for example, advanced electrodialysis systems (e.g. for separations or carbon capture) that run at 10x higher rate, iii) Understanding and exploiting electrochemical phenomena in thermal catalysis, for example to build scalable electrochemical platforms that operate at ~200-300 °C and enable efficient electrochemical transformations, for example, of N_2 and CO_2 , iv) Understanding and engineering conversion battery electrode processes. One example is the Li-S positive electrode.

Postdoctoral fellows are further encouraged to develop their own innovative ideas, to apply for external fellowship funding, and to contribute to multiple projects that may be of interest to them. Postdoctoral fellows are expected to be leaders in the team, mentoring PhD students, undergraduates, and visiting scholars, while aggressively driving their own professional career development, while also being provided personalized mentoring, support, and rigorous science and engineering training to achieve their own goals.

To be considered, please send the following items with the subject line "2024 postdoc application" to boetcher@berkeley.edu

- 1) Current resume/curriculum vitae
- 2) Short cover letter (feel free to include in the body of the email, nothing fancy is needed) describing your interests and goals
- 3) Names and emails of three references (typically research advisors and collaborators)

Sincerely,

Sherrum W. Boettcher