

Dr. Corey Oses Assistant Professor Department of Materials Science & Engineering Johns Hopkins University

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Job: Postdoc Opportunity in Materials Informatics at Johns Hopkins University, USA

Position: Postdoctoral Researcher

Location: Baltimore, MD 21218

Open Date: August 1, 2023

## **Description**

The Entropy for Energy (S4E) Laboratory at Johns Hopkins University (PI Corey Oses) has openings for postdoctoral researchers in the data-driven discovery of energy materials. Projects focus on innovating clean hydrogen production, waste-heat conversion, nuclear power generation, and energy storage.

## **Qualifications**

- A. Doctorate in materials science, physics, chemistry, computer science or related fields.
- B. Excellent communication skills in English, both written and verbal. The dissemination of research findings through peer-reviewed articles and presentations is mission critical.
- C. Ability to lead research projects and collaborate with experimentalists.
- D. Understanding of thermodynamics of materials, solid-state physics, inorganic chemistry, and metallurgy.
- E. Strong programming skills in C++ and Python and proficiency with Unix systems.
- F. Proven experience with VASP, Quantum ESPRESSO, LAMMPS, or other *ab-initio* codes.
- G. Expertise in any of the following areas: high-entropy materials, disorder, phonons, magnetism, catalysis, machine learning/artificial intelligence, database/API development, aflow.org repositories.

Graduate students near the completion of their Ph.D. are welcome to apply.

## **Application Instructions**

Prepare a single PDF file named "LASTNAME\_FIRSTNAME\_S4E\_202308.pdf" containing a cover letter, CV, and contact information for 3 references. Send your submission to the S4E team (jobs AT s4e.ai); subject line must contain "S4E Post-Doc: Application Submission". The cover letter should address each point of the qualifications list explicitly (i.e., A, B, C, ...).

OPTIONAL: DOIs for 3 recent and relevant publications can be included at the end of the packet. Questions can be sent to Dr. Corey Oses (corey AT jhu.edu).

## **Equal Employment Opportunity Statement**

The Johns Hopkins University is committed to equal opportunity for its faculty, staff, and students. To that end, the university does not discriminate on the basis of sex, gender, marital status, pregnancy, race, color, ethnicity, national origin, age, disability, religion, sexual orientation, gender identity or expression, veteran status or other legally protected characteristic. The university is committed to providing qualified individuals access to all academic and employment programs, benefits and activities on the basis of demonstrated ability, performance and merit without regard to personal factors that are irrelevant to the program involved.