

Opportunity Title: Multiscale modeling of materials

Opportunity Reference Code: 0072-NPP-NOV23-ARC-Interdisc

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0072-NPP-NOV23-ARC-Interdisc

Application Deadline 11/1/2023 6:00:59 PM Eastern Time Zone

Description Computational materials science research at the NASA Ames Research Center is directed towards multiscale modeling (ab initio, atomistic, continuum) of next generation materials for aerospace applications. We have multi-disciplinary teams (chemists, physicists, material scientists) working on both experimental and computational issues.

Material systems ranging from metal alloys to battery materials (electrolytes/electrodes) to polymer composites are under investigation. Computational tools utilized include a combination of ab initio methods, molecular dynamics simulations, cluster expansions, machine learning, high throughput methods as well as continuum multiphysics modeling. Candidates should have significant experience with one or more of these techniques. Direct experience with the software packages VASP, LAMMPS and/or ATAT is desirable but not required.

Location:

Ames Research Center
Moffet Field, California

Field of Science: Interdisciplinary/Other

Advisors:

John Walter Lawson
John.W.Lawson@nasa.gov
(650) 604-6189

Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of the United States. A complete list of Designated Countries can be found at: <https://www.nasa.gov/oiir/export-control>.

Eligibility is currently open to:

- U.S. Citizens;
- U.S. Lawful Permanent Residents (LPR);
- Foreign Nationals eligible for an Exchange Visitor J-1 visa status; and,
- Applicants for LPR, asylees, or refugees in the U.S. at the time of application with 1) a valid EAD card and 2) I-485 or I-589 forms in pending status

Eligibility Requirements • **Degree:** Doctoral Degree.



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