Postdoctoral Research Associate - Ames Laboratory

Appointment Type: Post Doc/Trainee

Job Description:
Summary of Duties and Responsibilities:
The Critical Material Institute, a multi-institution, multi-disciplinary organization led by the Ames Laboratory, a Department of Energy National Laboratory affiliated with Iowa State University, is searching for a qualified Postdoctoral Research Associate to conduct research using computational chemistry, molecular design, and AI/machine learning to improve selective separations of critical materials. The candidate will also work with data collection and analysis from automated robotic high-throughput experiments. The project is highly collaborative, including partnership with other national labs, universities, and industrial collaborators. The successful candidate is self-motivated, able to work independently or with a small group of staff scientists and graduate students, and can balance multiple concurrent projects. Excellent communication and cooperation skills are important for success. This position will accommodate on-site, fully remote, and flex schedules as agreed upon by supervisor and applicant.

The position requires the completion of a Ph.D. in chemistry, physics, computer science, or related field. Applicants having experience with machine learning methods, Python, and Git version control are preferred, but applicants with knowledge of software and coding in commonly used scientific languages will be considered. The candidate will collaborate with the supervisor and other PIs within the Critical Materials Institute at Ames Laboratory, ISU and externally; present and defend research results at professional and project meetings; and draft internal reports and external publications with collaborating co-authors.

(The Department of Energy has directed Ames Lab to determine the vaccination status of its employees. Upon hire, employees must complete an attestation regarding their vaccination status. Anyone who does not attest to being fully vaccinated will need to follow the protocol for those who are not fully vaccinated and comply with a weekly COVID-19 screening testing requirement.)

Required Minimum Qualifications:
A PhD in chemistry, physics, computer science, or related field completed prior to start date.

Preferred Qualifications:
- Demonstrated proficiency in Python, Git version control, and a willingness to learn machine learning methods for use in chemical sciences.
- Experience handling/manipulating large data sets.
- Experience running molecular mechanics (MM) and quantum mechanics (QM) calculations on chemical systems.
- A basic understanding of solvent extractions, aqueous phase metal ion complexation, and IR/Raman spectroscopy.
Department Unit/Website: www.ameslab.gov

Proposed Start Date: April 1, 2022
Proposed End Date or Length of Term: March 31, 2023
Time Type: Full time

Application Instructions:
To apply for this position, please apply online at https://isuwd1.myworkdayjobs.com/en-US/IowaStateJobs/job/Postdoctoral-Research-Associate---Ames-Laboratory_R7564

Please be prepared to enter or attach the following:
1) Resume/Curriculum Vitae
2) Letter of Application/Cover Letter
3) List of professional references

If you have questions regarding this application process, please email employment@iastate.edu or call 515-294-4800 or Toll Free: 1-877-477-7485.

Job Requisition Number: R7564

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