Postdoctoral position. Modeling of liquid metal flows for nuclear fusion applications
University of Michigan-Dearborn

Job Title	Postdoctoral position. Modeling of liquid metal flows for nuclear fusion applications
Department	Mechanical Engineering https://umdearborn.edu/cecs/departments/mechanical-engineering
Institution	University of Michigan-Dearborn Dearborn, Michigan
Date Posted	Dec. 9, 2024
Application Deadline	Feb. 1, 2025
Position Start Date	Dec. 9, 2024
Job Categories	Post-Doc
Academic Field(s)	Physics - Elementary Particles/Nuclear Physics - Condensed Matter/Low Temperature Physics - Atomic/Molecular/Optical/Plasma Physics - General Mathematics/Applied Mathematics Computer/Information Sciences Astronomy and Astrophysics
Apply By Email	zikanov@umich.edu

Job Description

A postdoctoral position is available immediately to work on a project involving development of numerical models, simulations, and theoretical analysis of processes in a liquid metal subjected to a rapidly changing magnetic field.

This multi-year project is part of a collaboration led by the Oak Ridge National Laboratory, aiming to

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develop new computational models for transient processes in nuclear fusion reactors. Research work will include CFD modeling of reactor components and development of semi-analytical and spectral method solutions for simplified geometries. The successful candidate will join a large project team comprising members from various universities, national laboratories, and companies across the US.

Required Qualifications: Ph.D. in a relevant area of engineering, physics, or applied mathematics. Strong background in numerical simulations. Proficiency in coding. Candidates with expertise in both fluid mechanics and electromagnetics are especially encouraged to apply.

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

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