Research Engineer / Postdoctoral Researcher

Computational and theoretical modeling of low-temperature plasma dynamics

Aeronautics and Astronautics Stanford University

The Plasma Dynamics Modeling Laboratory (PDML) in the Department of Aeronautics and Astronautics at Stanford University is seeking a Research Engineer or a Postdoctoral Research Fellow. The position is focused on development of computational and theoretical models to understand the physics of low-temperature plasmas (such as plasma-material/surface interaction, plasma chemistry, plasma instabilities, plasma turbulence, etc) in space propulsion, cross-field discharges, high-power microwave sources, and plasma processing systems.

The researcher must have a Ph.D. degree in Physics or Engineering, with a particular focus in plasma science, rarefied gas dynamics, computational fluid dynamics, or closely related fields. Expertise in developing kinetic (particle- and grid-based), fluid (drift-diffusion, moment, etc), or data-driven models, preferably with experience in high-performance computing, is strongly desired. Highly motivated and hardworking candidates with a strong background in computational plasma and fluid dynamics are encouraged to apply.

More information about the research group is available at https://pdml.stanford.edu/

The initial appointment period is 1 year with a reappointment for 2 or 3 years upon availability of funds and subject to performance.

Applicants are invited to send a resume/CV, including a list of publications, a brief statement of research interests, and contact information of three references to Prof. Ken Hara (kenhara@stanford.edu).

