Postdoctoral Scholar Positions in Modeling and Simulation of Kinetics and Radiation in Plasmas and other Reacting Flows

The Center for Predictive Engineering and Computational Sciences in the Oden Institute for Computational Engineering and Sciences at the University of Texas at Austin is searching for Postdoctoral Scholars with a strong background in modeling and simulation of kinetics and/or radiation in plasmas or other reacting flows, such as combustion or high-speed flows, to pursue research on high fidelity simulation of inductively coupled plasma torches. This research effort is supported in part by funding from the Department of Energy’s National Nuclear Security Administration’s Office of Advanced Simulation and Computing under the Predictive Science Academic Alliance Program. It involves multi-scale, multi-physics models and requires the use of advanced numerical methods and supercomputing resources. In addition to expertise with radiation and/or kinetics in plasmas or other reacting flows, experience with any of the following topics would be beneficial: turbulence, finite element and spectral methods, uncertainty quantification, and exascale computing algorithms and technologies. Applicants must have a Doctorate in Science, Engineering, Computer Science, Computational Science, Applied Mathematics, or a related technical field. Candidates with prior software experience in large-scale parallel code development, MPI, C++, multi-threading, GPGPU programming, git revision control, and LaTeX are preferred.

For more information about the project and team, visit pecos.oden.utexas.edu. To apply, please send a cover letter describing your interests, a CV, and a list of three references to pecos_recruit@oden.utexas.edu.

– October 2022–