

# SANDIA NATIONAL LABORATORIES

## Low Temperature Plasma Modeling Postdoctoral Position

Sandia National Laboratories is the nation's premier science and engineering lab for national security and technology innovation. We are a world-class team of scientists, engineers, technologists, postdocs, and visiting researchers all focused on cutting-edge technology, ranging from homeland defense, global security, biotechnology, and environmental preservation to energy and combustion research, computer security, and nuclear defense.

The hosting organization, Applied Optical and Plasma Sciences, includes numerous experimental, theoretical, and computational low temperature plasma, semiconductor optics, and laser remote sensing activities. Applications vary from fundamental research to fielded devices and project sponsors span a spectrum of both internal and external customers including other federal entities and US industry.

We are seeking an exceptional recent PhD graduate for a postdoctoral position to invent, develop, and apply models for the generation and transport of low temperature dynamic plasmas and ionized gases. We are particularly interested in low and high pressure electrical discharge systems. Sandia has a number of computational tools, including advanced massively parallel electrostatic and electromagnetic PIC and DSMC tools. A successful candidate will participate in research that seeks to understand and simulate basic plasma physics focused on breakdown phenomena, plasma-surface interactions, and non-equilibrium effects. Extensive model development and simulation-based scientific investigation as part of a multi-disciplinary team will be expected. There is likely also opportunity for code development. Good project management and time management skills are a must.

Job requirements include a recent PhD in a relevant discipline, low temperature plasma physics theory, experience modeling low temperature plasmas, and an enthusiastic attitude. Other desirable experience includes a background in ionization processes, kinetic non-equilibrium non-continuum processes, massively parallel computing experience, software design, and experience with unstructured meshes.

Candidates must be able to obtain and maintain a DOE security clearance, which requires U.S. citizenship.

Please apply to posting #658029 at [www.sandia.gov/careers](http://www.sandia.gov/careers)

For more information, contact [mmhopki@sandia.gov](mailto:mmhopki@sandia.gov)

Sandia National Laboratories is a multimission laboratory managed and operated by National Technology and Engineering Solutions of Sandia LLC, a wholly owned subsidiary of Honeywell International Inc. for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525.

