Job Description

Job Details

Job Title  Experimental Plasma Physics Postdoctoral Appointee
Location  Albuquerque, NM
Regular/Temporary  Temporary
Job ID  653341
Department  01118
Full/Part Time  Full-Time

What Your Job Will Be Like

The Applied Optics and Plasma Science department is seeking a Postdoctoral Appointee with expertise in experimental plasma physics with capability in using and developing laser-based and or optical-based methods for interrogating plasma systems.

Key functions of this role include, but are not limited to:

- Apply scientific knowledge of plasma physics and plasma generation/measurement to develop innovative techniques for data collection and experimentation
- Formulate and test hypotheses related to plasma physics in various atmospheres; plasma-air, plasma-plasma, plasma-surface interactions, and temperature/pressure effects as they relate to Sandia National Laboratories missions
- Work in the fundamentals of science and engineering while applying a deep understanding of engineering and scientific principles
- Employ frequent application of scientific theories and engineering methods to develop new designs, concepts, materials, machines, and systems relating to plasma physics applications
- Conduct discovery-based scientific research in the area of plasma physics while applying the highest code of ethics
- Ensure all work adheres to safe operation practices for electronics, optics, and laser systems
- Work both independently and collaboratively with peers
- Engage with national and international scientific communities
- Present original research at conferences and publish research in appropriate peer-reviewed journals

The Post-Doctoral Appointee Program is designed to recruit outstanding Ph.D. applicants to assist a line organization in meeting its mission in a professional technical work environment for the employee. The Ph.D. must have been conferred within five years prior to employment. The employment is up to one year, and may be extended, at management's discretion, for up to five additional years.

Qualifications We Require

- PhD in Physics, Nuclear Physics, Electrical Engineering, or similar discipline
- Minimum undergraduate GPA of 3.3/4.0 and graduate GPA 3.7/4.0
- Experience with plasma physics and plasma generation mechanisms
- Experience in experimental plasma generation and characterization techniques
- Ability to obtain and maintain a DOE Q Clearance

Qualifications We Desire

- Experience in experiment design/implementation as well as the computational infrastructure needed for analysis.
- Hands on experience with nanosecond and or femtosecond laser systems.
- Ability to identify and elucidate key physics associated with problems being studied.
- Experience in engaging and interacting with customers and research sponsors.
- Effective time management skills for immersion in a target rich environment.
- Proposal writing experience