R&D Aeronautical Engineer (Early/Mid-Career)

Location: Albuquerque, NM
Full Time, Regular
What Your Job Will Be Like

Are you passionate about your work and dream of utilizing state-of-the-art facilities to explore solutions? Do you want to join a dynamic team that solves significant issues for our nation's security?

We are seeking a self-directed, customer focused, individual who has strong interpersonal skills to support lab-wide efforts focusing on the aerodynamic and aero-thermal analysis of reentry systems, atmospheric flight vehicles, and rocket systems. Aero-thermal Analysts will perform analyses and capability development using analytical and computational techniques to design and analyze thermal protection systems. The responsibilities associated with this position span the spectrum of activities from research to development and applications.

On any given day, you may be called on to:

- Work with other researchers in the department over the complete capability development cycle of discover, model, validate and apply, developing new and extending existing analysis capabilities as needed to deal with constantly evolving technical needs and requirements
- You will be involved in supporting Sandia's numerous flight test programs, working to analyze proposed vehicles to support design and analyze flight test data in support of these programs. It is expected that this experience will feed back into the capability development cycle
- You will show demonstrated proficiencies and interest in modeling analysis spanning multiple disciplines, including turbulent high speed flowfield modeling, fluid structure interactions, aero-thermodynamics, and material thermal response

Qualifications We Require

- Master's degree in Mechanical or Aerospace Engineering, or other related engineering or natural science field
- Ability to obtain and maintain a DoE Q clearance

Qualifications We Desire

- Experience with thermal protection materials, computational fluid dynamics modeling, or a closely related discipline
- Experience with the Linux operating system and experience with a high-level programming language such as FORTRAN, C, or C++
- Experience with Matlab, Python scripting languages and with grid generation software
- Experience/familiarity with Verification and Validation and Uncertainty Quantification
- Experience with computational approaches (finite element, finite difference, and finite volume methods) for CFD simulations of compressible High Reynolds number flows
- Thorough knowledge of and applied experience with scientific and engineering methods and with discipline standards for the ethical conduct of research
- You should have strong verbal and written communication skills and an ability to interact well with fellow technical workers with diverse technical background

About Our Team

The Aerosciences Department (1515) offers challenging and important work relating to national security in R&D and technology applications in aerodynamics, aerothermodynamics, compressible fluid mechanics, and flight dynamics. Our primary mission supports U.S. Department of Energy Defense Programs, and aerosciences projects funded through the U.S. Department of Defense, DARPA, NASA, and industry.

Our projects span the Mach number range from subsonic through hypersonic and involve systems ranging from aircraft released ordinance to reentry systems and rocket systems. Technical activities include experimental, analytical, and computational efforts plus support of flight test activities, both pre-flight/post-flight analyses and field test operations. The Aerosciences Department maintains a strong balance of research and development activities and works synergistically with other organizations at Sandia to meet current and future customer needs.

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or veteran status

Apply online at:
sandia.gov/careers
Job #: 665199

When applying to this requisition, you may be interviewed and/or hired by one of several cybersecurity-focused organizations.

About Sandia:
Our culture values work-life balance; we offer programs such as flexible work schedules with alternate Fridays off, on-site fitness facilities, and three weeks of vacation. Sandia provides employees with a comprehensive benefits package that includes medical, dental, vision, and a 401(k) with company-match.

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, post docs, 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.

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Life-changing careers.

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