Job title: Nuclear Weapons Design Margin Assessment Engineer (Experienced) – LTE

Location: Albuquerque, NM

Regular/Temporary: Temporary

Job ID: 653579

Department: 01557

Full/Part-time: Full Time

What Your Job will be Like

The Program and Test Integration Department is seeking a Mechanical Engineer to oversee Margin Assessment activities for Nuclear Weapon development programs.

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

- Play a key leadership role in coordinating and overseeing Margin Assessment activities for Nuclear Weapon development programs
- Develop close relationships with system and component organizations in order to share expert-level engineering knowledge and become the trusted partner for activities related to test and simulation evidence for supporting margin assessment
- Coordinate testing and modeling activities with the Product Realization Teams (PRTs) regarding efforts to assess component design margin
- Use technical and analytic skills to provide direction on component margin and lead the effort in support of the PRTs to gather technical evidence and document the assessment activities
- Interact with all levels of program management including systems engineers, design teams, system analysts, program management, and senior leadership in the effective communication of technical data assessment materials
- Work as part of a team and contribute effectively to the team objectives
- Engage multiple stakeholder groups in order to facilitate and drive strategic and technical decisions
- Collect, organize, document and effectively communicate analytical results
- Handle classified material in accordance with all related processes and procedures

Qualifications We Require

- Master's degree in Systems, Mechanical, Structural or Civil engineering or relevant discipline plus 2 years' related experience
- Experience with fatigue models and energy methods
- Familiarity with MATLAB software tool
- Experience working both independently and as part of a large team
- Good communication skills as evidenced by a history of publication of results in peer-reviewed journals and external presentations at appropriate scientific conferences
- Ability to obtain and maintain a DOE Q clearance
Qualifications We Desire

- PhD in a relevant discipline
- Experience and knowledge of nuclear weapons
- Understanding of Environmental Specifications for nuclear weapons
- Experience in structural dynamics testing, modal analysis, structural analysis, thermal analysis, digital signal processing, modeling or evaluation

About Our Team

The Program and Test Integration Department is in the Solid Mechanics and Shock Physics Group of the Engineering Sciences Center. The department is responsible for leading integration of complex environmental test operations with computational simulation activities in structural dynamics and solid mechanics supporting fundamental research, model validation, development, qualification and acceptance for nuclear weapons, satellites, national missile defense, and other applications. In addition to planning and integration activities, the department directly supports several experimental capabilities, including: centrifuge, thermal conditioning, humidity, altitude, and corrosive atmosphere capabilities.

About Sandia

Sandia National Laboratories is the nation’s premier science and engineering lab for national security and technology innovation, with teams of specialists focused on cutting-edge work in a broad array of areas. Some of the main reasons we love our jobs:

- Challenging work with amazing impact that contributes to security, peace, and freedom worldwide
- Extraordinary co-workers
- Some of the best tools, equipment, and research facilities in the world
- Career advancement and enrichment opportunities
- Flexible schedules, generous vacations, strong medical and other benefits, competitive 401k, learning opportunities, relocation assistance and amenities aimed at creating a solid work/life balance*


*These benefits vary by job classification.

Security Clearance

Position requires a Department of Energy (DOE) granted Q-level security clearance. Sandia is required by DOE directive to conduct a pre-employment background review that includes personal reference checks, law enforcement record and credit checks, and employment and education verifications. Applicants for employment must be able to obtain and maintain a DOE Q-level security clearance, which requires U.S. citizenship. Applicants offered employment with Sandia are subject to a federal background investigation to meet the requirements for access to classified information or matter if the duties of the position require a DOE security clearance. Substance abuse or illegal drug use, falsification of information, criminal activity, serious misconduct or other indicators of untrustworthiness can cause a clearance to be denied or terminated by the DOE, rendering the inability to perform the duties assigned and resulting in termination of employment.

EEO

Equal opportunity employer/Disability/Vet/GLBT