POSITION: Post Doctoral Researcher in Stochastic Uncertainty Quantification

MANAGER: Damian Rouson

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. To learn more, visit http://ca.sandia.gov/.

JOB DESCRIPTION

The Reacting Flow Research department is seeking to hire a postdoctoral researcher to perform research in the areas of uncertainty quantification, probabilistic modeling, predictability, and multiscale simulation. Relevant applications include, but are not limited to, biochemistry, electrochemistry, climate modeling, combustion, and high performance computing simulators.

DEPARTMENT DESCRIPTION

The Reacting Flow Research Department is part of the Transportation Energy Center at Sandia National Laboratories in Livermore, CA. The department focuses on basic research in scientific, engineering, and mathematical disciplines related to the fluid and thermal energy sciences, including theoretical, computational and experimental investigations.

QUALIFICATIONS

Required

This position has the following requirements:
- Ph.D. degree in the physical/mathematical sciences or engineering. This can include degrees in applied mathematics, physics, chemistry, mechanical or chemical engineering, as well as related fields
- Research expertise in uncertainty quantification, probabilistic methods, and computational science
- Ability to autonomously carry a research project forward from concept to implementation and application
- Excellent collaboration and communication skills

Desired

The ideal candidate will also have demonstrated expertise in one or more of the following areas: stochastic systems, polynomial chaos expansions, spectral methods, sensitivity analysis, Bayesian inference methods, numerical methods, model reduction, linear algebra, large scale simulation of reaction or cellular signaling networks, computational singular perturbation, software development, and high performance computing.

ABOUT SANDIA

Sandia provides employees with a comprehensive benefits package that includes medical, dental, vision, and a 401(k) with company-match. 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. In addition, Sandia/California enjoys close proximity to San Francisco, the Silicon Valley, first-tier universities, and diverse cultural and year-round recreational opportunities.

HOW TO APPLY

Apply at: http://sandia.gov/careers/search-openings.html. Click on Search for Openings; then click on Advanced Search and type the Job ID number 636709 into the Job Opening ID box. Click on the Search button to access this job opening, and complete an online application.

Sandia National Laboratories is an Equal Opportunity Employer M/F/D/V. If this position requires a security clearance granted by the U.S. Department of Energy (DOE), U.S. citizenship and employee eligibility for clearance processing will be required at the time of hire. If you hold dual citizenship and accept a job offer for a position that requires a DOE-granted security clearance, you may be asked by DOE to renounce your foreign citizenship and retain only your U.S. citizenship.

Job Opening Created: 6 Dec 2010