POSITION: Post Doctoral Researcher in Stochastic Uncertainty Quantification

JOB ID: 636709

MANAGER: Damian Rouson

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### **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**

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#### **HOW TO APPLY**

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