



**POSITION:** Research Scientist – Nanoelectronics and Nanophotonics

**JOB ID:** 64277

**MANAGER:** Sarah Allendorf

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### DEPARTMENT DESCRIPTION

The Materials Physics Department is part of the Biological and Materials Sciences Center at Sandia National Laboratories in Livermore, California. Department staff members conduct a broad and coordinated array of experimental and theoretical research to identify and understand the fundamental physical mechanisms underlying the surface, interface, and transport behavior of a variety of advanced materials. Our materials physics and chemistry modeling/simulation experts employ state-of-the-art density functional theory, molecular-dynamics simulation techniques, and quantum-transport approaches. Our department also has experimental expertise in and resources for nanofabrication; electronic, optoelectronic, and optical characterization; ultrahigh vacuum (UHV) technology; thin-film preparation; nanomaterials synthesis; and a wide range of advanced materials-characterization techniques (e.g., Auger electron spectroscopy [AES], atomic force microscopy [AFM], diffuse reflectance spectroscopy [DRS], low-energy electron diffraction [LEED], low-energy electron microscopy [LEEM], low-energy ion scattering [LEIS], secondary ion mass spectrometry [SIMS], and scanning tunneling microscopy [STM]).

### JOB DESCRIPTION

Sandia/California's Materials Physics Department seeks a staff scientist who will conduct experimental research in the areas of nanoelectronics and nanophotonics. The selected candidate will develop a world-class research program that will complement our existing materials programs. We seek a scientist with the skills and technical background necessary to design, fabricate, characterize, and test electronic, optoelectronic, and photonic devices that use nanomaterials.

### QUALIFICATIONS

This position requires a PhD in materials science, physics, chemistry, electrical engineering, or a closely related field. Other required qualifications include (1) a sustained record of research accomplishments in a postdoctoral or more advanced position; (2) published evidence of scientific leadership and stature; and (3) the ability to work in teams and establish strong collaborations, particularly with theorists in our department.

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### 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.

### FOR ADDITIONAL INFORMATION, CONTACT:

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