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# Example of Research Staff Member Job Description

Our company is hiring for a research staff member. We appreciate you taking the time to review the list of qualifications and to apply for the position. If you don’t fill all of the qualifications, you may still be considered depending on your level of experience.

## Responsibilities for research staff member

* Study and develop meta-surface patterning of optics, derive models to interpret the experimental results, and suggest design and concept advancements
* Assist with additional optics surface processing under research and development
* Pursue independent but complementary research interests and interact with a broad spectrum of researchers internally and externally to the Laboratory
* Develop and pursue innovative research addressing advanced nuclear forensics and environmental isotope geochemistry
* Determine the concentration and isotopic composition of actinide decay-series nuclides and other metal elements in complex matrices (including nuclear materials and environmental samples) using high-purity separation chemistry and multi-collector mass spectrometry
* Document and publish research results in peer-reviewed scientific publications and present results at external conferences, seminars and/or technical meetings
* Conduct research in and development of optical, laser, photonic, and/or electronic systems for various applications in ultrafast sources and diagnostics, arbitrary waveform generation, sensing, and high-speed instrumentation
* Design, implement, and analyze experiments and/or perform end-to-end modeling of novel system designs
* Collaborate with other team members in the design, implementation, and qualification of cutting edge R&D systems
* Perform research in areas relevant to the overall project

## Qualifications for research staff member

* Experience in laser technology and optics, and fundamentals of laser-matter interactions
* Knowledge of thermal and optical properties of materials, , metal alloys, wide gap semiconductors and VisNIR optical materials
* Experience with continuous wave (CW) and pulsed (fast/ultrafast) laser systems
* Experience in laser processing and hands-on laboratory experimentation (e.g., ability to configure automated experiments for efficient data collection)
* Experience in computer programming for data analysis (e.g., Python, Matlab, Mathematica, C/C++), and programming for instrumentation design and control (e.g., LabView, Zeemax)
* Demonstrated mathematical background and knowledge of optical transport theory