

TITLE: Postdoctoral Research Associate in Electron Tomography (U.S. Citizens preferred)

Overview

The Material Measurement Laboratory of the National Institute of Standards and Technology is seeking qualified candidates (U.S. Citizens preferred) to develop quantitative, atomic-resolution methods for the three-dimensional characterization of complex semiconductor devices via electron tomography. This work is part of NIST's CHIPS mission and offers a unique opportunity to conduct fundamental, publishable research with direct national impact, while collaborating with leading experts and industry partners to strengthen the U.S. semiconductor industry.

Duties

- Sample preparation via focused ion beam methods
- Collecting and processing of TEM tomography data
- Presenting results at internal meetings, and occasional meetings with external stakeholders.
- Ensuring that results, protocols, software, and documentation have been archived or otherwise transmitted to the larger organization.

Required Skills, Expertise and Qualifications

- Ph.D. in Physics, Materials Science, or a related field with a concentration in electron microscopy methods
- Experience in the collection and processing of STEM data, especially either 4D-STEM or electron tomography data as appropriate to the selected project
- Computer programming for custom data processing.

Employment Terms: This opportunity is to be an associate researcher in the NIST Materials Science and Engineering Division for a term of 1 year, with options to renew. Associate researchers are NOT Federal Employees, but they work along with NIST researchers and with NIST's often world-class instrumentation. Relocation expenses will not be provided. U.S. Citizens hired into associate positions may have the opportunity to seek longer-term Federal Employment.

Salary: \$82,000 to \$90,000 annually, commensurate with the candidate's qualifications and experience

How to express interest: Interested persons (U.S. Citizens preferred) who meet all of the required qualifications are invited to express their interest by sending an email that briefly describes their qualifications along with a CV to 643assoc@nist.gov. U.S. Citizens should note "US Citizen" and the opportunity title in the email subject line. All others should note "Non-US Citizen" and the opportunity title in the email subject line.