

Job Opportunity
Researcher Associate
CHIPS R&D Metrology Program
National Institute of Standards and Technology
U.S. Department of Commerce

Summary

The National Institute of Standards and Technology is seeking one or more full-time Researcher Associates for the CHIPS R&D Metrology Program. The CHIPS R&D Metrology Program emphasizes measurements that are accurate, precise, and fit-for-purpose for the production of microelectronic materials, devices, circuits, and systems. This work leverages NIST's proven measurement science expertise, foundational communications and computing research capabilities, standards development contributions, and stakeholder engagement practices to address the highest priority metrology challenges identified across industry, academia, and government agencies. NIST is expanding upon its strong track record of supporting the semiconductor technology and manufacturing ecosystem by developing, advancing, and deploying standards, reference materials, best practices, and measurement methods. Researcher Associates will perform advanced research related to the CHIPS R&D Metrology mission, introduce the latest university research results and techniques to CHIPS R&D Metrology programs, strengthen mutual communication with CHIPS R&D community. Postdoctoral Research Associates will have access to NIST unique research facilities and opportunities to collaborate with the U.S. scientific and engineering communities.

The Researcher Associate is a full-time physical scientist (Series 1301) ZP-III position with a salary range of \$82,440 - \$131,826 per year. The full performance-level for this position is GS-12. The position will report to a principal investigator in the CHIPS R&D Metrology Program. Position opportunities are available at NIST duty stations in Boulder, CO and Gaithersburg, MD. The duties of this position are suitable for some telework with supervisor approval. The Department of Commerce is an Equal Opportunity Employer.

Description

The Researcher Associate is a core member of the CHIPS R&D Metrology team contributing to research. The Researcher Associate will be responsible for:

- advancing the state of the art in measurements supporting semiconductor technologies and manufacturing ecosystem, providing support for American industry through measurements;
- performing research independently and as a member of a team to improve measurements for the research and development microelectronic materials, devices, circuits, and systems;
- validating and improving measurements through comparisons with other national metrology laboratories and by other methodology; and
- interacting with NIST staff and external stakeholders and develop external collaborations with leading scientists to identify the best methods for achieving the highest performance.

The key skills of the Researcher Associate include demonstrated ability to:

- plan and carry out difficult and complex assignments in a scientific, engineering, mathematics or information technology discipline;
- develops new methods, approaches, and procedures usually in cooperation with coworkers or advisors with limited supervision;
- analyze, research, and use judgment to research, select, interpret, modify, adapt and apply available guidelines to specific problems or issues related to semiconductor technologies and/or manufacturing ecosystem;
- assess risk in a practical and responsible manner and make well-reasoned decisions as well as to think creatively;
- ability to build and maintain effective working relations with stakeholders and colleagues and to work effectively in teams;

- maintain professional integrity and use sound judgment in handling confidential information;
- exhibit excellent communication skills and the capacity to present both written and oral ideas clearly, concisely, and persuasively; and
- carry out assignments independently with minimal supervision.

Required documents:

A complete application consists of the following:

- **Cover letter.** Address demonstrated interests and qualifications as it relates to the position.
- **Resume showing relevant experience.** Your resume should list your educational and work experience, including the dates (mm/dd/yyyy) and provide the hours per week, if less than 40. For work in the Federal Service, please include the pay plan and grade level for the position(s).
- **Copy of graduate school transcript.** Unofficial copy is sufficient at this time, but official copy must be submitted before appointment.

Qualifications

An Applicant must have a degree in physical science, engineering, or mathematics that included 24 semester hours in physical science and/or related engineering science such as mechanics, dynamics, properties of materials, and electronics.

Or

Combination of education and experience -- education equivalent to one of the majors shown in A above that included at least 24 semester hours in physical science and/or related engineering science, plus appropriate experience or additional education.

In addition, applicants must meet the following specialized experience requirements: at least 1 year (52 weeks) of specialized experience equivalent to at least the GS-9 (ZP-II at NIST) level. Specialized experience is defined as: experience developing and/or applying measurement methods related to semiconductor technologies and/or manufacturing technologies

Or

Master's equivalent graduate degree.

Conditions of Employment

- U.S. Citizenship is required.
- Suitable for Federal employment, as determined by background investigation.

How To Apply

Qualified candidates should send their cover letter and resume to researchjobs@chips.gov research with the subject line "CHIPS R&D Metrology Researcher Associate - [Full Name]." All other required documents (e.g., copy of transcript) will be required if hired. Applications will be reviewed on a rolling basis.

When a position is available, a vacancy announcement will be posted on WWW.USAJOBS.GOV.