
Job Title	Cleanroom Technician/Engineer
PVN ID	RC-2407-006370
Category	Research
Location	CUNY-ADVANCED SCIENCE RESEARCH CENTER
Department	Nanofabrication Facility
Status	Full Time
Annual Salary	\$60,000.00 - \$70,000.00
Hour(s) a Week	35
Closing Date	Dec 17, 2024 (Or Until Filled)

General Description

The Nanofabrication Facility at the Graduate Center at the ASRC seeks a full-time cleanroom technician/engineer. The principal responsibilities of this position include the maintenance, repair and troubleshooting of nanofabrication equipment. This position reports to the Laboratory Manager of the Nanofabrication Facility. This is an in-person job position. Responsibilities include, but not limited to:

- Maintaining, and repairing highly technical nanofabrication tools, (lithography, etching, deposition and metrology equipment)
- Facility maintenance as it pertains to tool usage
- Interfacing with vendors for equipment service repairs and troubleshooting
- Participating in routine lab upkeep functions
- Assist with training users in appropriate and safe equipment use

The Advanced Science Research Center (ASRC) at the CUNY Graduate Center, a 200,000 square-foot facility in upper Manhattan, designed to promote collaboration among scientists in five areas of global research and innovation: nanoscience, photonics, structural biology, neuroscience, and environmental sciences.

The ASRC operates as a center of development of an integrated research network that brings together faculty, students, and post-doctoral fellows to perform cutting-edge science. The goal is to educate trainees in becoming the new leaders of tomorrow, by providing growth in increasingly inter-related disciplines of applied science.

Other Duties

- Provide day-to-day support to the nanofabrication facility to ensure that equipment is maintained and repaired
- Help to maintain chemical waste disposal

- Keep tool logs and maintenance schedules
- Maintain accurate records of inventory of chemicals, parts and supplies
- Assist the nanofabrication facility staff in training the facility users on proper use of nanofabrication equipment and proper chemical hygiene
- Participate in updating equipment and maintenance procedures
- Enforce all safety guidelines, respond to alarms, and identify areas of improvement as related to safety
- Help to maintain the cleanliness of the nanofabrication facility
- Keep storage and chase areas in a clean and orderly state
- Respond to user requests for chemicals and lab supplies
- Monitor and maintain specified inventory levels of chemicals and lab supplies
- Provide support in all areas of the facility maintenance and lab operation
- Performs other duties as assigned
- Identify and perform all required preventive maintenance needs and maintain appropriate records of the maintenance procedures
- Other duties as assigned

Qualifications

MINIMUM QUALIFICATIONS

- Bachelor's degree in engineering, physics, chemistry or related technical field or equivalent years of experience
- Experience repairing and maintaining electronic equipment, with demonstrated mechanical and / or electrical troubleshooting skills
- Ability to work in cleanroom, chemical, and measurement laboratory environments. Will work around compressed gasses, acids, solvents, vacuum pump oils, and other chemicals
- Ability to read and comprehend drawings, correspondence, and documents such as work instructions, safety rules, maintenance instructions, manuals, mechanical drawings, and / or electrical schematics
- Ability to execute complex processes, carefully following written procedures with great attention to detail
- Ability to lift up to 50 pounds
- Ability to safely work with hazardous materials
- Demonstrated ability to follow written and verbal instructions
- A willingness to learn nanofabrication protocols, principles of vacuum science, equipment maintenance techniques, and chemical safety guidelines as related to this position
- Ability to troubleshoot equipment, record test results, and communicate the relevant findings
- Demonstrated ability to work effectively as part of a diverse project team and communicate with all team members in a timely and a professional manner

PREFERRED QUALIFICATIONS

- 1-2 years of experience working with a broad range of micro and/or nanofabrication equipment at either an academic or industrial research laboratory
- Knowledge and extensive experience with cleanroom tools and procedures.
- Knowledge of safety procedures for handling chemicals and toxic gasses
- Knowledge of vacuum pump operation and different types of vacuum systems

- Experience and expertise in electrical and electronic, mechanical, pneumatic, and vacuum components as related to semiconductor/device fabrication
- Demonstrated aptitude for operating, calibrating, and repairing complex equipment.
- Hands-on experience in one or more process areas, including thin-film deposition, wet and dry etching, photolithography and e-beam lithography
- Ability to troubleshoot control electronics at board level
- Experience in nanofabrication process development and troubleshooting; data analysis, CAD software, and device design experience