Research Engineer Holonyak Micro and Nanotechnology Laboratory The Grainger College of Engineering University of Illinois Urbana-Champaign

University of Illinois seeks a Research Engineer in Urbana, IL.

Duties:

- 60% Utilize and apply progressive research expertise and education to assist HMNTL cleanroom
 users to conduct research activities. Advise users on the design and redesign of research
 experiments and development of research techniques and participate in and provide feedback
 during research focused meetings. Facilitate the maintenance, repair, and upgrade of the
 following to ensure research goals are satisfied (this includes consultation with other engineer
 staff to review issues and improve performance related to recommended solutions):
 - Semiconductor processing equipment.
 - Plasma etching equipment including reactive ion etching (RIE), and inductively coupled plasma reactive ion etching (ICP-RIE).
 - o Deposition equipment including plasma enhanced chemical vapor deposition (PECVD).
 - Optical lithography equipment including spinners, mask aligners, and UV exposure systems.
- 20% Develop and update equipment processes to include the following:
 - New processes, calibrating processes, and process equipment.
 - Acquire knowledge and experience as processes change in order to provide the most upto-date information
 - Qualify processes on new equipment, document processes, tool performance, laboratory procedures, and add to a process recipe database.
 - Perform administrative work such as the creation, distribution, and processing of laboratory forms, log sheets, etc.
- 15% Enhance the user experience by identifying the training needs in addition to evaluating strengths and weaknesses to advance research goals. Train users on laboratory procedures and safety on existing processes and equipment.
- 5% Assume additional appropriate related research engineer duties to further the mission of the laboratory.

Requirements: Bachelor's in Electrical Engineering, Materials Science and Engineering, Mechanical Engineering, or a related field with a focus on semiconductor manufacturing technologies, including advanced photolithography and reactive ion etching. Four years' experience working in process development and troubleshooting related to etch and plasma deposition and/or other processing tools.

This is a 100% full-time Academic Professional position, appointed on a 12-month basis. The expected start date is as soon as possible after the closing date. The budgeted salary range for this position is \$87,506.00. Salary is competitive and commensurate with qualifications and experience, while also considering internal equity. This position will be expected to work at the University of Illinois Urbana-Champaign campus on a full-time basis per the University's Workplace Flexibility policy.

Application Procedures and Deadline Information: Apply for this position using the Apply Now button at the top or bottom of this posting. Please upload your cover letter, resume, and names/contact information for three references. Applications not submitted through https://jobs.illinois.edu will not be considered. For further information about this specific position, please contact Jill McKenna at glawe1@illinois.edu. For questions regarding the application process, please contact 217-333-2137.

The University of Illinois offers a very competitive benefits portfolio, depending on the position. Click for a complete list of Employee Benefits.

The University of Illinois System is an equal opportunity employer, including but not limited to disability and/or veteran status, and complies with all applicable state and federal employment mandates. Please visit Required Employment Notices and Posters to view our non-discrimination statement and find additional information about required background checks, sexual harassment/misconduct disclosures, and employment eligibility review through E-Verify.

Applicants with disabilities are encouraged to apply and may request a reasonable accommodation under the Americans with Disabilities Act (2008) to complete the application and/or interview process. Accommodations may also be requested on the basis of pregnancy, childbirth, and related conditions, or religion. Requests may be submitted through the reasonable accommodations <u>portal</u>, or by contacting the Accessibility & Accommodations Division of the Office for Access and Equity at 217-333-0885, or by emailing <u>accessibility@illinois.edu</u>.