# Research Engineer/Scientist, Senior Research Engineer/Scientist or Principal Research Engineer/Scientist

#### Illinois Plasma Institute

### The Grainger College of Engineering

### **University of Illinois at Urbana-Champaign**

The Illinois Plasma Institute (IPI) exists to do translational research, injecting University technology into actual products from its industrial partners. Industry partners place personnel and equipment at IPI and Illinois faculty, graduate and undergraduate researchers perform research with the industrial personnel on the industrial equipment, bringing in innovations and new techniques. The incumbent will work to fulfill IPI's technical statement of work with these companies in conjunction with our students and the company's personnel.

The University of Illinois is an Equal Opportunity, Affirmative Action employer that recruits and hires qualified candidates without regard to race, color, religion, sex, sexual orientation, gender identity, age, national origin, disability or veteran status. For more information, visit <a href="http://go.illinois.edu/EEO">http://go.illinois.edu/EEO</a>.

**RESEARCH ENGINEER OR SCIENTIST** - This is an entry-level/early career Research Scientist/Engineer position that will work closely with the Illinois Plasma Institute Director to provide direct assistance on experiments taking place at the Illinois Plasma Institute.

#### Specific Duties and Responsibilities:

- Under the supervision of the IPI Director, work closely with the IPI affiliated graduate students and company assignees to accomplish their Statements of Work and academic goals.
- Under the supervision of the IPI Director, collaborate with IPI affiliated graduate students and company
  assignees to synthesize their work into periodic presentations, ensuring information is accurate and
  relevant. Regularly participate in presentations to IPI sponsors.
- Working closely with the IPI Director, create and innovate new solutions to the sponsors' technical problems, strategize solutions, and work closely with the team to implement these.
- Assist IPI affiliated students and company assignees in drafting, editing and finalizing reports to ensure they are suitable for publication.
- Responsible for managing safety and compliance at IPI.
- Assisting the IPI Director in research duties as directed.
- Other duties as assigned.

## **Minimum Qualifications:**

- PhD in a technical field such as Plasma Engineering, Physics, Electrical Engineering, Chemical Engineering, or a related field.
- Able to assist graduate students in the laboratory with vacuum and electrical systems.
- Ability to formulate experimental action plans to accomplish goals.
- Ability to trouble shoot experimental systems.
- US Citizenship.

**SENIOR ENGINEER OR SCIENTIST** - Under the limited supervision of the Director of the Illinois Plasma institute, this position will be assisting with leadership duties of the Institute.

## **Specific Duties and Responsibilities:**

- Work closely with the graduate students and company assignees to accomplish and augment their Statements of Work and the students' academic goals.
- Collaborate with IPI affiliated graduate students and company assignees to synthesize their work into periodic presentations, ensuring information is accurate and relevant. Regularly participate in presentations to IPI sponsors.
- Independently and in conjunction with the IPI Director, create and innovate new solutions to the sponsors' technical problems. Act as the team's co-lead to strategize and implement these solutions.
- Assist IPI affiliated students and company assignees in drafting, editing, and finalizing reports ensure they
  are suitable for publication.
- Responsible for managing safety and compliance at IPI.
- Assisting the IPI Director in research duties as directed.
- Other duties as assigned.

### **Minimum Qualifications:**

- PhD in a technical field such as Plasma Engineering, Physics, Electrical Engineering, Chemical Engineering, or a related field.
- 5 years or more of experience in semiconductor technology industries or other plasma-related industries.
- Able to assist graduate students in the laboratory with vacuum and electrical systems.
- Ability to formulate experimental action plans to accomplish goals.
- Ability to trouble shoot experimental systems.
- US Citizenship.

#### Preferred Qualifications:

- Experimental experience.
- Published refereed journal papers.

**PRINCIPAL ENGINEER OR SCIENTIST** - This position will be assisting with leadership duties for the Illinois Plasma Institute.

## Specific Duties and Responsibilities:

- Work closely with the graduate students and company assignees to create and accomplish their Statements of Work and the students' academic goals.
- Collaborate with IPI affiliated graduate students and company assignees to synthesize their work into periodic presentations, ensuring information is accurate and relevant. Regularly participate in presentations to IPI sponsors.
- Take a lead role in creating and innovating new solutions to sponsors' technical problems and act as the team lead to strategize and implement these solutions.
- Serve as the primary editor of reports, assisting IPI affiliated students and company assignees in drafting and finalizing these documents to ensure they are suitable for publication.
- Responsible for managing safety and compliance at IPI.
- Assisting the IPI Director in research duties as directed.
- Other duties as assigned.

## Minimum Qualifications:

- PhD in a technical field such as Plasma Engineering, Physics, Electrical Engineering, Chemical Engineering, or a related field.
- 10 years or more of experience in semiconductor technology industries or other plasma-related industries.
- Able to assist graduate students in the laboratory with vacuum and electrical systems.
- Ability to formulate experimental action plans to accomplish goals.
- Ability to trouble shoot experimental systems.
- US Citizenship.

## **Preferred Qualifications:**

- Experimental experience.
- Managerial experience.
- Multiple published refereed journal papers.

This position is a full-time, benefits-eligible academic professional position appointed on a 12-month service basis (See <a href="https://www.hr.uillinois.edu/benefits">https://www.hr.uillinois.edu/benefits</a> for details). The expected start date is as soon as possible after the closing date. Applicants may be interviewed before the closing date; however, no hiring decision will be made until after that date. Salary and position level are commensurate with experience and qualifications.

To apply for this position, please create your candidate profile at <a href="http://jobs.illinois.edu">http://jobs.illinois.edu</a> and upload your cover letter, CV/resume, and names/contact information for three references by December 16, 2021. In your cover letter, please indicate which title (Engineer or Scientist) you would prefer. Full consideration will be given to complete applications received by the closing date. For further information regarding application procedures, contact Christine Gipson at cgipso2@illinois.edu or 217-244-4921.

The University of Illinois conducts criminal background checks on all job candidates upon acceptance of a contingent offer. Convictions are not a bar to employment. As a qualifying federal contractor, the University of Illinois System uses E-Verify to verify employment eligibility. The University of Illinois System requires candidates selected for hire to disclose any documented finding of sexual misconduct or sexual harassment and to authorize inquiries to current and former employers regarding findings of sexual misconduct or sexual harassment. For more information, visit Policy on Consideration of Sexual Misconduct in Prior Employment.

The University of Illinois must also comply with applicable federal export control laws and regulations and, as such, reserves the right to employ restricted party screening procedures for applicants.

University of Illinois faculty, staff and students are required to be fully vaccinated against COVID-19. If you are not able to receive the vaccine for medical or religious reasons, you may seek approval for an exemption in accordance with applicable University processes.