

Job Opening – Semiconductor Device Engineer**Position Type: Full time****Apply: Send resume to info@adventdiamond.com**

Advent Diamond wants you to help us change what's possible in the world of electronics. We are making semiconductor devices using lab-grown diamond and seek an R&D engineer interested in working on a variety of projects. As a start-up company, we seek a team player who enjoys learning, growing and adapting to changing opportunities. Our company values making technology that benefits society and maintaining a positive workplace culture.

Responsibilities:

Contribute to the development of Advent Diamond products, specifically to the research and development of next generation high power devices and radiation detectors:

- Design:
 - Physical design and modeling of semiconductor devices to meet target specifications
 - Developing a manufacturable fabrication process supporting physical design and models
 - Documenting device and process designs
- Implementation
 - Hands on work in cleanroom to pattern devices and develop process flow
 - Implement electrical characterization data feedback to modulate material properties
- Characterization/Qualification
 - Perform industry standard electrical characterization and qualification of devices
 - Analyze and present electrical data
 - Create datasheets and support writing of other marketing materials
 - Understand material properties and device designs that impact device performance
 - Provide documentation in support of the patent application process

May guide technicians and/or interns and carry out other research, fabrication, design, and testing responsibilities as needed.

Experience and Skills:

2+ years' experience in semiconductor device design and fabrication preferred

Preferred skills (please apply if you have any of the below):

- Semiconductor research and development skills: theoretical and practical understanding of device design, particularly high-power devices, preference for experience in semiconductor power electronics components and/or detectors.
- Clean room fabrication skills: photolithography, material deposition techniques, UHV systems, mask design
- Electrical bench testing skills: IV measurements, CV measurements, etc
- Mentoring/Teaching of technical skills



1475 N Scottsdale Rd, Ste 200
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Education:

PhD in Electrical Engineering or MS with (3+ years) equivalent experience

Critical Physical Requirements:

Must be able to perform relevant physical activities that include working in a cleanroom for an extended period with good manual dexterity and high visual acuity.

Other Requirements:

- Extremely careful and detail oriented
- Strong communication skills
- Strong teamwork skills essential
- Commitment to health and safety
- A willingness to grow and learn

Benefits:

- Health and dental insurance
- Get in on the ground floor of a growing technology startup
- Schedule is flexible, may have to work evenings and weekends occasionally

Advent Diamond is a start-up company with a strong commitment to maintaining a healthy and inclusive workplace, is an equal-opportunity employer.