

Photovoltaics Development Engineer

Company Description

Mesodyne is an exciting emerging startup company commercializing breakthrough technology initially developed at MIT. Mesodyne's LightCell is a new class of power generator that provides efficient, silent, reliable, long-endurance power from any fuel and enables a 10X order of magnitude improvement in run time for a variety of vehicles, wearable and other equipment. Mesodyne is developing products for the industrial, scientific, and defense sectors. Based in Somerville MA, Mesodyne has multiple existing contracts and business, and more business opportunities are imminent. You will be joining a growing, dynamic, and motivated team.

Position Summary

As Mesodyne's lead Photovoltaics Engineer your responsibilities will lead all aspects of PV cell development from structure design through integration and testing of prototype arrays: including design, fabrication, and packaging. Additionally, you should have the ability to test, measure, model, and characterize the devices. As a self-starter, you should be able to design, develop and build your own test setups and prototypes. Prior hands-on experience with semiconductor device engineering and fabrication is highly desirable. Ability to interact with outside vendors and fab partners required.

Qualifications and Skills

- PhD in electrical engineering, material science, physics/applied physics, or a related field with a focus on semiconductor devices.
- Several years of industrial development experience desired.
- Prior hands-on experience with semiconductor/optoelectronic device engineering, including design, fabrication, and testing.
- Deep understanding of PV cell physics, behavior, modeling, and loss mechanisms.
- Prior experience with III-V materials for thermophotovoltaics, concentrator, multijunction, space or other high performance PV devices is particularly relevant.
- A dynamic self-starter able to tackle new challenges as they arise in a highly fluid, dynamic, small company environment. Wearing many hats is an enjoyable aspect of any role for you. Adaptability to new challenges and projects is key to this position.
- Proficiency with programming for data acquisition, data analysis, and modeling, preferably in Python. Ability to write custom code to explore design tradeoffs (grid finger optimization, series/parallel interconnection, etc) is particularly desirable.
- Prior experience building optical and electrical test setups as well as prototyping is highly desired.

Mesodyne is an equal opportunity employer. If you are a member of a group that is underrepresented in the tech sector, we encourage you to apply!

Apply

Email your resume to careers-pv@mesodyne.com.