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## Research Scientist – Semiconductor Device Modeling Aerius Photonics, LLC

Aerius Photonics, LLC is seeking a research engineer who specializes in device modeling to join the engineering team. Aerius Photonics is a growing engineering company providing optical products for industrial and military applications.

### **Summary**

The research engineer will design new devices and initiate improvements on existing devices designs through theoretical methods. The scientist will focus on high power VCSEL lasers and low dark current detectors. The scientist will work closely with the growth engineer and test engineer to improve device performance. Modeling includes optoelectronic, electrical, and thermal properties. The responsibilities and experience for the job are shown below.

### **Education:**

- Ph.D. in Electrical Engineering, Physics, or Mechanical Engineering with 3 years experience in semiconductor device modeling

### **Skills**

- Familiar with FEA modeling software (such as ANSYS or COMSOL)
- Familiar with Matlab or Mathematica
- Familiar with LabView
- Familiar with a programming language such as VB or C (or its variants)
- Strong in semiconductor device physics
- Experience with growth, wafer processing, packaging, and testing is a plus

### **Duties and Responsibilities**

- Model optical, thermal, and electrical properties of GaAs and InP semiconductor based devices (lasers and detectors)
- Provide feedback on existing devices in order to improve critical metrics of devices
- Work with other engineers in a team to improve and understand device properties

Competitive salary and benefits package offered including bonus program, and 401(k) match.