PENDAR
TECHNOLOGIES

## Photonics Engineer

Pendar Technologies (*www.pendar.com*) has an exciting opportunity for an Engineer to join our Infrared Photonics Team. The Engineer will work on the development of semiconductor optoelectronic devices such as quantum cascade lasers (QCLs) and integrated photonics solutions from proof-of-concept prototyping all the way through manufacturing. The candidate will be involved in all development steps, including device design, fabrication, and characterization and contribute to the integration of those devices into laser systems and spectroscopic instrumentation. This position involves working with a multi-disciplinary team of engineers including mechanical engineers, electrical engineers, software/database engineers, manufacturing personnel, and other electro-optic engineers to ensure that designs and manufacturing techniques will yield products that meet the customer's specifications.

**Essential Job Functions include the following, but are not limited to:**

- Modeling, designing, prototyping, and debugging novel lasers, photonic devices and optical systems.
- Development of characterization setups, methods, and procedures to test new designs.
- Characterize and analyze device performance and create performance reports.
- Hands-on involvement in semiconductor processing and packaging.

**Qualifications**

*Education and Experience:*

- PhD or Master's degree in Physics, Photonics, Electrical Engineering, or related field(s).
- 3 + years of experience in optoelectronic device development or related subjects either in industry or academia.
- US citizen or Green Card holder.

*Specialized Knowledge and Skills:*

- Knowledge of optoelectronic semiconductor device physics, processing, characterization, and reliability issues.
- Familiarity with commercially available photonic design tools (e.g. COMSOL, BEAMPROP, Lumerical, Zemax).
- Experience with photonic device testing. Experience with automated data acquisition and analysis tools (e.g. LabVIEW, Python, MATLAB).
- Experience with semiconductor processing. Ability to work in a Clean Room Environment.
- Experience with optomechanical design software such as SolidWorks.
- Flexibility/adaptability in a fast-paced & dynamic environment.
- Strong analytical skills applied to real problem solving.
- Excellent written and oral communication skills.

If you are interested in this position, please submit your resume to
**qclcareers@pendar.com**