

Senior Level Electro-Optical Systems Engineer

Join a global leader in high power electro-optical medical devices. From products that treat psoriasis, chronic wounds, and acne to the full range of aesthetic applications, Aerolase in Tarrytown, NY has a reputation of uncompromising dedication to excellence that will propel your career to new heights. Our products require leading edge technology and solutions to complex engineering problems spanning diverse engineering disciplines. Aerolase is seeking outstanding individuals to invent and enable next-generation technologies.

Position Overview

We are seeking a senior level ELECTRO-OPTICAL SYSTEMS ENGINEER. This position offers an intellectually fascinating, engaging environment working with enthusiastic and dedicated team members deeply knowledgeable in their respective fields. The broad application portfolio of Aerolase ensures new and intriguing problems are always waiting. Small development teams provide you opportunities for increased responsibility and the ability to directly impact the final product. Your knowledge and skill will play a significant role in driving the company's vision and the development of state-of-the-art products.

There are no direct reports in this position. However, you may be responsible for directing a small engineering team in the development of electro-optical systems. Your role will be to:

- Perform systems engineering of medical laser systems through all stages of the product lifecycle.
- Solve difficult electronics, interconnect and integration challenges, with a special emphasis on:
 - Electrical and electronics design
 - Miniaturized power supply engineering
 - Mechanical/electrical packaging and interface
 - Electronic circuit design and layout
 - Thermal analysis and modeling
 - Design to spec
- Execute a majority of tasks independently without significant guidance from senior personnel.
- Collaborate in multi-disciplinary teams to define and develop system architectures and concepts, identify and perform trade studies, and direct and/or conceive system performance analyses and models.

Education

- Bachelor's degree or higher in physics, electrical engineering, optics, or related field.

Preferred Experience/Qualifications

- Minimum of 10 years' relevant work experience
- Experience in the development and/or operation of EO systems.
- Ability to assess the optical performance of non-imaging EO systems.
- Experience working across engineering disciplines (e.g., electrical, optical, structural).

- Experience in systems engineering of complex EO systems throughout the product life cycle including requirements and verification management.
- Experience writing requirements specifications, verification plans, and verification reports.
- Experience in EO system modelling and analysis.
- Proficient written communication skills including technical writing.
- Proficient verbal communication skills including technical presentations.

Preferred Skills

- Experience in aerospace or medical device companies
- Assessment of optical designs.
- Experience with the integration and test of EO systems.
- Understanding of laser emitters and associated electronics.
- Experience in an academic research environment

To apply:

Send your resume and cover letter to Art Efremkin, Director Process Optimization, ae@aerolase.com
914-345-8300 x123