

Optical Engineer

Location: Rochester NY, United States

Company Description

RAM Photonics has its headquarters in San Diego CA, with facilities in San Diego CA and Rochester NY. The company portfolio includes specialty optical and optoelectronic systems for defense, commercial, and industrial applications, including advanced signal processing, high-power laser, and instrumentation systems. RAM Photonics seeks capable, creative, and driven contributors skilled at communicating and performing within a technical team composed of leading photonics, electronics, and software engineers.

Job Description

The Optical Engineer will be responsible for and will contribute to the development of a new class of optical technology for high-power laser systems. The candidate is expected to: contribute to overall system specifications; design and analyze complex optical systems with strict aberration cancellation targets; and work with suppliers and manufacturers to design for manufacturability and take technology to production. The exact title and level assigned to the position will depend on the candidate's experience and capability.

Experience Requirements:

- B.S., M.S., or Ph.D. in Optical Engineering or related field.
- At least 5 years of experience in optical system design.
- Track record of designing and producing complex non-sequential optical systems with extensive experience in aberration correction.
- Relevant experience in optical system architecture and design, including broad technical knowledge in optics, diffraction, laser beams, diffraction gratings, optical coatings, thermo-optic effects, optical fiber, and optical damage.
- Experience in the aberrations of single surface optics, prisms, diffraction gratings in physical optical systems.
- Experience in performing multi-parameter tolerance analyses in non-sequential physical optical systems.
- Experience in designing for optical fibers and modeling thermal effects in large-scale optics.
- Experience in schematic capture tools, version control, and conversion to CAD files for manufacture.
- Structured modeling and hands-on capabilities in optical design and development.
- Comfortable in the lab with NIR optical alignment and measurement as needed.
- A self-starter and team player with excellent communication skills.

Desired Skills:

- Modeling and simulation experience in Zemax, FRED, VirtualLab, or similar software.
- Familiar with at least one CAD package, preferably Solidworks.

Qualified applicants should submit resumes with a cover letter to: employment@ramphotonics.com