

<p>Vescent Photonics 14998 W 6th Ave # 700 Golden, CO 80401</p>		<p>Ph: 303-296-6766 Fax: 303-296-6783 www.vescent.com</p>
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## Staff Scientist – Laser Development

Vescent Photonics seeks a creative and highly driven laser scientist to join our Research & Development team in Golden, CO. The right candidate will work on the development of state-of-the-art laser and optoelectronic systems, ranging from frequency-stabilized lasers to ultrafast frequency combs for next-generation quantum technologies. The successful candidate will also help lead the development of emergent quantum sensors. The candidate will be efficient in their work ethic, highly self-motivated, and enthusiastic about laboratory research in an industrial setting. The candidate will also manage research projects as a principal investigator and seek out new funding opportunities for next-generation research and development. This position is >85% on-site and in-laboratory. All candidates will need to abide by Vescent’s on-site COVID-19 policy.

Vescent Photonics develops and manufactures high-performance electro-optics, tunable lasers, and electronics for precision laser control. Being a recognized leader in laser control systems and centrally located in the Denver area allows for frequent collaborations with nearby academic and private institutes to further Vescent’s product line and research goals. R&D is a central part of Vescent’s mission, fueling technology innovations that turn into world-class products. The work environment is fun, fast-paced, challenging, and interdisciplinary, involving a high degree of coordination between electrical, mechanical, and optical systems. The Vescent team takes pride in its work, is energetic and agile, and enjoys celebrating milestones. Vescent offers a competitive salary and a full benefits package, including four weeks PTO, health/dental insurance, retirement plan, and a profit-sharing plan. The anticipated salary range for this position is between \$85,000 and \$110,000.

### Job Duties:

- Analyze, model, design, assemble, and test lasers and associated electro-optical systems.
- Conduct research both as an individual and in a team environment.
- Manage contract research projects to be on time and within budget, including effectively communicating with customers, industry/academic partners, and vendors.
- Transition assembly and testing of optical systems to engineers and technicians as needed.
- Write effective proposals to secure funding through government and commercial contracts.

### Required Qualifications:

- Ph.D. or M.S. in Physics, Optics, Optical Engineering, Electrical Engineering, or equivalent degree in relevant field.
- At least 3 years performing hands-on R&D in an optics/laser laboratory.
- Demonstrated technical writing experience.
- U.S. citizen or permanent resident.
- At least 3 years of direct experience developing technologies in at least one of the following areas:
  - Quantum sensors including optical atomic clocks, magnetometers, atomic interferometers, etc.;
  - Quantum technologies based on nitrogen-vacancy crystals;
  - Ultrafast laser systems;
  - Quantum dot laser development;
  - Or micro-optic assemblies using millimeter sized optics and single mode fibers.

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Desired Skills:

- Expertise in laser frequency stabilization and servo feedback control of electro-optical systems.
- Proficiency in designing and troubleshooting electronic circuits, especially with opto-electronic components such as diode lasers and photodetectors.
- Electro-optical product development experience
- Proposal writing experience
- Experience designing and building laser systems, including mode-locked ultrafast systems and CW narrow linewidth lasers. Experience with fiber lasers and semiconductor-based lasers is particularly sought.
- Experience with wavelength conversion via nonlinear optics.
- Demonstrated proficiency in computer programming, data analysis tools, and physical simulations (Python preferred)
- Experience modelling optical systems (Zemax preferred)
- Computer-aided design experience (Solidworks preferred)

Please send your resume and a cover letter to [jobs@vescent.com](mailto:jobs@vescent.com). Your cover letter should express how your skills, qualifications, and interests address the job description. Applications without a resume and cover letter will not be considered. Vescent Photonics is an Equal Opportunity Employer.