

## Job offering – laser systems engineer

Monocrom is a consolidated company with more than twenty-five years of experience in the laser field. We focus our activity on the design and manufacturing of low and high-power laser diode devices and advanced solid-state lasers with a unique patented technology in mounting laser diode bars for an outstanding performance.

We are now seeking for qualified individuals to join our R&D department as **laser system engineer**.

**Position reports to:** PMO

**Position summary:** Because all the company behaves as a team some days you'll find yourself performing experiments in the lab or collaborating in unique developments, helping production team improving the processes, assisting purchasing department qualifying new suppliers or developing new machines for our production lines or doing maintenance.

This is an opportunity for someone to participate in the growth of the company and we are looking for a motivated self-starter to help take the company to the next level.

### **Responsibilities:**

- Participate in the design and development of prototype laser and electro-optical systems.
- Design and integrate optical and electro-optical test setups.
- Independently test electro-optic design concepts, analyze data, and report results.
- Support the design and de-bug of test and build fixturing.
- Develop and document build and test procedures.
- Provide progress updates and maintain timelines for multiple projects.
- Support the purchasing department with the selection of suppliers for components and supplier qualification.
- Work with Production team to improve build process issues such as yield and consistency.
- Work with Quality team to troubleshoot issues, provide failure analysis, and incorporate customer feedback into design improvements.
- Work with Sales in the proposal process and as technical expert with the customer
- Occasional travel for projects development.
- Prepare technical papers and dissemination content together with the communication department.
- Be up to date with state of the art of competing technologies.
- Perform preventive and corrective maintenance on our self-developed production systems.
- Design and assemble customized control electronics for our products.
- Support the transition to the manufacturing line.
- Design and implement the new developments and follow up the current ones.
- Work closely with the other project managers for product design and implementation.

### **Desired technical skills:**

- B.S. or M.S in Engineering, Physics, Optics or related scientific/technical area

- Three (3) or more years of hands-on industry or laboratory experience with assembly, alignment, test, and troubleshooting of lasers, electro-optical systems, and complicated optical setups (**less experience considered**)
- Knowledge of general laser principles including diode lasers and DPSS laser technology.
- Knowledge of free-space beam propagation and shaping using reflective and refractive elements, acousto-optics, and electro-optics.
- Ability to independently do comprehensive in-lab hands-on experimentation and data analysis.
- Familiarity with common industry software tools such as Zemax, Excel, BeamGage, LabVIEW, SolidWorks and  $\mu$ C programming.
- Experience with current control electronics
- Knowledge about system reliability and MTBF analysis.

**Other requirements:**

- Performs all other duties as assigned.
- Familiarity with Laser and optical design and modelling basic principles is a plus.
- Familiarity with Laser Safety Protocols is a plus.
- Familiarity with Design for Reliability including process development is a plus.
- Familiarity with Industrialization of products including qualification protocols is a plus.
- Familiarity with project management principles.
- Availability to work flexible time.
- Strong analytical and problem-solving skills.
- Good communication skills.
- Being a team-player with good adaption to a changing environment.
- Applicants must be legally able to work in the EU.

Applications enclosing CV and motivation letter are welcome by e-mail to [fran.ruiz@monocrom.com](mailto:fran.ruiz@monocrom.com)