

**TOPTICA Photonics AG** is a worldwide leading, medium-sized high-tech manufacturer of laser systems for science, biotechnology and measurement technology with more than 400 employees worldwide. High motivation and personal responsibility in the service of the customer characterize the company philosophy of the privately managed "hidden champion", which is jointly lived by the employees with great commitment. Customers include renowned industrial companies as well as numerous Nobel Prize winners.

Become part of our growing **design and technology team** for optoelectronic components such as laser diodes and amplifier chips at our locations in Munich (Gräfelfing) or Berlin, Germany.

**TOPTICA Photonics AG** and its subsidiary **eagleyard Photonics GmbH** are characterized by strong growth. As a key component, laser diodes greatly contribute to the success and are a major driver of promising photonics applications, such as quantum technologies. The job in the area of **research & development** covers a broad spectrum from simulation and design of the chips to supervising the fabrication at institutes or foundries. Moreover, the characterization of the devices and subsequent derivation of the gained knowledge for further improvement of the simulation are part of this opportunity.



## Development Engineer\* Design & Technology of Laser Diodes

### Your main tasks:

- enhancement of our capabilities in the design of optoelectronic devices such as laser diodes and amplifier chips
- simulation and design of III-V epitaxial structures, especially GaAs-based ones
- geometry optimization and electro-optical simulation of GaAs-based semiconductor devices under consideration of thermal properties
- perspective the integration of PICs (Photonic Integrated Circuits) into the simulation of active devices
- selection and acquisition of suitable simulation programs or own programming
- close cooperation with institutes and foundries concerning the production of novel laser diodes
- actively driving further developments of our laser diodes and amplifier chips
- comparison of experimental results with the simulation and derivation of suitable measures for further optimization of the designs
- collaboration in (partly publicly funded) research projects

### You have...

- a university degree in physics, electrical engineering, photonics or similar fields of study, preferably with a doctoral degree
- relevant experience in the design of optoelectronic semiconductor devices such as laser diodes
- ideally hands-on experience in epitaxy and / or wafer processing
- very good knowledge in semiconductor physics, optics and laser physics, with a strong theoretical background
- experience with common simulation programs for electro-optical and thermal design of optoelectronic devices
- ideally programming skills
- enjoyment of working independently, enthusiasm, high willingness to learn and perform, analytical approach, good English skills and ability to work in a team
- interest in an exciting field of work with many internal and external contacts
- the motivation to try out new things and drive innovation
- willingness for occasional business trips between both locations and to foundries

### We offer...

- a very exciting environment in a growing company with the opportunity to help building new capabilities in the group
- independent and diversified work combined with a salary that allows you to participate in the company's success
- a transparent company philosophy and short decision-making processes
- a familiar working atmosphere with regular employee events (summer and Christmas parties, company outing, Wies'n, wonder.me, ...)
- flexible organisation of your work through mobile working
- various free drinks and fresh fruit
- 30 vacation days per year and additionally two days off on 24.12. and 31.12.
- company pension scheme and other social benefits such as capital-forming benefits, etc.
- individual training with a mentor system

\*(m/f/d)

### Interested? That makes us happy!

Become part of our team! We look forward to receiving your online application as Development Engineer\* Design & Technology of Laser Diodes.

Jetzt online bewerben

**We want to keep our application process secure, fast and simple.**

Please understand that we can only accept online applications due to the applicable basic data protection regulation and will delete e-mail or postal applications.