



- Laser R&D Engineer -

Your Mission

As a Laser R&D Engineer at FiberCryst, you will play a key role in developing high power laser architectures and pioneering ultrashort pulse laser technologies for cutting-edge micro-machining and microelectronics applications.

Joining a highly specialized R&D team of PhD-level experts, you will report to the R&D manager and contribute to every stage of the product development cycle—from concept and feasibility studies to advanced prototyping and performance optimization. Your work will be instrumental in delivering high-performance laser solutions that meet and exceed industry standards.

Your Key Responsibilities

- Innovate & Experiment – Conduct experimental research and contribute to product development through hands-on testing. Leverage FiberCryst patented Taranis technology for ultrashort pulse laser, integrate it with other cutting-edge technologies to push the limits of performance and efficiency.
- Prototyping– Contribute to the design, assembly, and testing of ultrashort pulse laser systems within a multidisciplinary team (optics, electronics, mechanics).
- Optimize Performance – Develop, refine, and optimize laser architectures, test protocols, and validation methodologies to enhance system efficiency and stability.
- Project Execution – Drive projects from concept to completion, ensuring adherence to timelines, budgets, and technical specifications while maintaining the highest quality standards.
- Troubleshoot & Support – Identify and resolve laser system malfunctions, working closely with the production team and the customer support when needed.
- Document & Share Knowledge – Maintain professional technical documentation, including test results, experimental findings, and system improvement opportunities, contributing to reports and project proposals.
- Drive Innovation – Propose and implement new laser concepts, system enhancements, and process improvements to advance FiberCryst's technology.
- Stay Ahead of the Curve – Monitor industry trends, emerging laser technologies, and competitive advancements to reinforce FiberCryst's leadership in ultrashort pulse laser development.

Your Profile – Who We're Looking For

We are seeking a highly motivated and technically skilled Laser/Optics Engineer with a passion for innovation and a strong problem-solving mindset.

Required Qualifications & Experience:

- Master's or PhD in Optics, Photonics, or Laser Physics.
- Proven expertise in ultrashort pulse laser development, high-power lasers, and/or harmonic generation.
- Strong technical expertise in optics and laser physics, with hands-on experience in laser system development, testing, and troubleshooting.



- Multidisciplinary mindset, with the ability to collaborate effectively with electronics, mechanics, and software specialists in an international environment.
- Strong analytical and problem-solving skills, capable of addressing complex laser system challenges with precision and creativity.
- Excellent technical writing and communication skills, for documentation, reports, and project proposals.
- Proactive, autonomous, and detail-oriented, with a passion for pushing technological boundaries.
- Fluent in English (French is a plus).

Why Join FiberCryst?

At FiberCryst, we are committed to advancing ultrafast laser technology through innovation, expertise, and collaboration.

- **Agility & Expertise** – As an innovative SME collaborating with a major industrial group, we combine flexibility and strong technical resources to drive ambitious projects.
- **Comprehensive Laser System Development** – From R&D to mechanical design, electronics, industrialization, and patented amplification module production, all laser expertises are represented in-house.
- **Your Ideas Matter** – Have an innovative idea? Want to see your concepts take shape? We encourage creativity, initiative, and hands-on problem-solving. Your role is not confined to a job description—your growth is fueled by your curiosity and ambition.

About the company

Location: Lyon, France

FiberCryst is a pioneering SME specialized in the design, development, manufacturing, and commercialization of ultrashort pulse lasers for high-precision micro-machining applications. Our proprietary single-crystal fiber technology, developed and patented in collaboration with leading French research laboratories, enables us to deliver state-of-the-art laser solutions that complement other advanced laser technologies.

With a strong foundation in agility and technical expertise, we offer customized laser solutions designed to meet the unique performance, efficiency, and reliability needs of our clients.

At FiberCryst, we are driven by a commitment to innovation, high-performance engineering, and tailored solutions, ensuring that our lasers empower the most demanding industrial and research applications.

Other information

- Comprehensive onboarding & training to ensure seamless integration into your role.
- Innovation-driven, high-tech environment.
- Salary based on your experience and expertise.
- Meal vouchers (Tickets Restaurants).
- Occasional international travel to engage with clients and industry leaders.

Recruitment Process

- Step 1: Application review (pre-selection based on your profile)
- Step 2: Video interview (technical discussion and alignment on expectations)
- Step 3: In-person meeting with the team and management



Take the time to tell us about yourself in a cover letter—we'll take the time to read your application carefully!