

# Laser Development Engineer (Levels I or II)

## **Job Description And Responsibilities**

### **About The Role**

We have an immediate opening for a detail-oriented development engineer to become part of the R&D team responsible for the design of our cutting-edge laser systems. We are looking for a well-motivated self-starter who can take general instructions and seek out all the elements needed to complete the assigned tasks. You will have responsibility for achievement of both personal and team-based goals delivering project focused outputs. You will be able to adapt quickly to changing requirements and understand critical needs and prioritise tasks and workload. You will have access to a local and worldwide talent pool with expertise in fundamentals like optical fibre design, and processing or laser crystal growth through to world class manufacturing expertise and collaborations are encouraged. You will work within a team where guidance and training will be provided. You will typically work with a product development through the entire product lifecycle from feasibility experiments through to production transfer and will have exposure to all aspects of the business in this journey.

### **Responsibilities Will Include**

- Conducting technical feasibility studies in the design ultrashort pulse fibre lasers and their use in laser systems.
- Building, assessing and qualifying prototypes based on these feasibility studies.
- Troubleshooting laser performance issues.
- Providing detailed and technically thorough reports/presentations to the engineering team.
- Providing technical support to the laser manufacturing teams.
- Working within a multi-disciplined engineering team to design laser systems.
- Collaborating with local and international experts
- Defining specifications and sourcing of laser parts and components

### **Education And Work Experience**

- PhD or equivalent in a solid state or fibre laser-based area or demonstrable experience in a laser manufacturing or development environment.
- In depth understanding of the principles of optics and lasers, and in particular a knowledge of ultrashort laser pulses, mode-locking techniques, optical nonlinearities and dispersion is desirable.
- Ideally demonstrable practical ability in the creation of breadboard laser systems.
- Ideally experienced in taking a product through some part of the engineering life cycle from feasibility to production.
- Experienced in the use of test equipment, both optical (power meters, spectrometers, auto-correlators, etc.) and electrical (oscilloscopes, signal generators, spectrum analysers, etc.).
- Proficiency in LabVIEW for data acquisition and instrument control would be an advantage.
- Ideally experienced in the use of optical modelling software packages (for example Zemax) and/or the development of optical models via custom code.
- General understanding of electronics and control systems.
- Good communication skills.
- Ability to work on multiple tasks and manage priorities.
- Ability to work from general instructions for new assignments either in isolation or as part of a wider team.
- Occasional travel will be required.
- Eligibility to work in the UK is an essential requirement.