

## Optical Fibre R&D Engineer

Lumenisity is an established independent company originally spun out from the world-renowned Optoelectronics Research Centre (ORC) at the University of Southampton. We have brought to market novel optical fibre technologies based on Hollow-Core Technology for a variety of end user applications. Our goal is to be the world's premier high-performance hollowcore fibre optic cable solutions provider offering customers reliable, deployable, low latency and high bandwidth connections that unlock new capabilities in communication networks.

Well-funded from a consortium of industrial and private investors and having recently built our own state of the art fabrication facility in Romsey, we are now looking to further expand our team and infrastructure to work both independently and in continued collaboration with the ORC. We have recently announced significant contracts and collaborations with major carriers and end users as well as key companies in the telecom and datacom eco system ( <https://lumenisity.com/news/>).

We seek dynamic candidates with energy and a passion for innovation to join and work with us in a fast growing, multidisciplinary team to bring next generation products to market. This creative environment is one in which we anticipate people will develop professionally within a high growth company. In return we can offer a competitive compensation package and a commitment to exciting product development into a fast-developing field.

### **What you will do:**

The role is based within Lumenisity's Advanced Fibre Technology Group. You will be working at the forefront of optical fibre research, contributing in first person to designing and demonstrating new fibre fabrication technologies for next generation hollow core fibres, including glass preform manufacture, optical fibre drawing, and new materials and processes. Key challenges will be in the development of novel and reliable fabrication strategies for highly innovative fibre designs, leading to substantial performance improvement over currently available fibre technology.

The work environment will involve a close interaction with the fibre design team and the research teams and with Lumenisity's engineering and production team to successfully transfer products into volume manufacturing in our state-of-the-art fibre fabrication facility.

**Key day to day responsibilities will include:**

- Have direct responsibility for the design and demonstration of novel manufacturing processes for preform fabrication and optical fibre drawing
- Manage projects to identify novel, reliable and scalable manufacturing methods for optical fibre preforms and hollow core optical fibres
- Have key responsibilities in the development of next-generation fibre products and novel materials for optimum performance
- Develop and deploy process control tools and analyse measurement data to identify trends and correlations, whilst operating state-of-the art equipment in a safety conscious environment
- Collaborate with equipment suppliers on new technology development
- Contribute to create and manage documentation, operating procedures and process control requirements, in support of technology transfer to engineering and production team
- Contributing in first person, and visibly support, the establishment and maintenance of a safe work environment
- Supporting the establishment of Lumenisity's new fibre fabrication facility in Romsey

**Key knowledge and skills sought are:**

- A qualification in a science or engineering subject area (Physics, Chemistry, Mechanical or other Engineering) at MSc or PhD level, or equivalent experience in an industrial environment
- Demonstrated ability in innovative development of manufacturing processes
- Previous experience in R&D and/or development of manufacturing processes in photonics, semiconductor, sensing technologies or related area preferred
- Knowledge of cleanroom working environment and disciplines preferred
- Experience in the operation and use of high value capital equipment
- Practical knowledge of optical fibres and their properties preferred but not essential
- Capability to arrange, analyse and interpret data to identify trends and correlations
- Knowledge of statistical process control methods and their application

**Key attributes sought are:**

- Self-motivated and self-reliant
- Creative and inventive hands-on problem solver
- Strong interest fabrication and manufacturing R&D engineering
- Excellent attention to details
- Logical and scientific attitude when dealing with problems
- Fast learning, adaptable and flexible
- Capability to clearly communicate ideas, issues, and proposals
- Excellent teamwork and collaboration, develops positive working relationships
- Willing to accept challenges

**Location:**

The role will be initially based within the Zepler Cleanroom facilities of the ORC, University of Southampton (SO17 1BJ) but will move to Lumenisity's optical fibre manufacturing facilities in Romsey (SO51 9DL) by the end of 2022. Both sites are conveniently located within a few minutes from the M27.

**Interested?**

Please send your CV/Resume with a covering email in confidence to [recruitment@lumenisity.com](mailto:recruitment@lumenisity.com). We shall respond to all enquiries.