LUMENISITY®

Connect. Light. *Faster.*

Optical Systems 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.

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:

You will be responsible for characterising and optimising data transmission over Lumenisity's CoreSmart® hollowcore fibre products and assisting in relevant R&D activities that are directed towards application fields and performance of Lumenisity's product line.

This role requires a professional engineer with prior hands-on experience of high-speed optical transmission systems. The candidate must have the ability to work effectively in both customer facing and internal roles within a multi-disciplinary engineering team and be capable of motivating and inspiring others.

Key responsibilities:

- Configuration, optimisation and support for the deployment of Lumenisity's CoreSmart® hollowcore fibre (HCF) technology in DWDM optical transmission systems for various network topologies
- Contribute to both internal and external R&D / engineering projects aimed at improving Lumenisity's product lines in the optical systems domain
- Configure, setup and operation of state-of-the-art optical system characterisation systems
- Develop and implement detailed and efficient models which can enable simulation of data transmission over novel optical fibres

- Understand the systems aspects and trade-offs associated with differing transceivers, transmission data rates, modulation formats, amplification requirements, ROADM, channel monitoring and software control etc.
- Support all stages of systems development from lab prototype, system testing and qualification through to field trials
- Liaise with glass fibre design and cable teams, development and qualification functions to ensure link design and performance is optimised for the intended application
- Forge strong technology partnerships with optical equipment manufacturers and suppliers to modify and/or customise solutions to enable the full potential of Lumenisity HCF to be exploited
- Support collaborative programmes with suppliers on technology development
- Ensure compliance with international and industry/sector specific regulatory requirements and co-ordination of internal/external product compliance testing
- Actively ensure the establishment and maintenance of a safe work environment

Key experience and skills sought are:

- Proven experience in telecoms systems engineering, ideally gained within a leading Networking Equipment Manufacturer or Telecommunications Carrier
- Strong technical knowledge of fiber optics transmission systems, OTN, Coherent/non coherent transmission systems, telecoms networks and network management
- Knowledge of link design for deployment across data center, metro and long-haul applications
- Sound understanding of theoretical aspects relating to optical data transmission over single mode fibres and novel fibres and their implementation and use for simulation purposes
- In-depth understanding and experience of optical fiber system setup and characterization
- Practical skills with a ‘hands on approach’, to define, develop, construct and test trial systems in the lab and in the field
- Prior experience with coding in languages such as Python and MATLAB
- Be able to apply state-of-the-art methods to complex problems
- Have proven success in working internationally with dispersed technical teams, customers and resources
- Ability to analyze new technology trends and standards
- BSc or higher degree (preferably PhD.) in Optical Science / Engineering, Electrical Engineering or Physics from a recognized academic institution

Key attributes sought are:

- You will need to be results focused and structured in your approach with the ability to support a culture of open communication
- You will need to be a natural team player, with the ability to engage and direct highly talented technical staff within Lumenisity, and external partners or customers
- Ability to work efficiently and multitask while working under pressure and tight deadlines
- Strong written and spoken English is essential
- Self-motivated and service-minded
- Excellent communication and interpersonal skills with the ability to operate across global time zones and cultures
- Demonstrate tactful, consultative approach when dealing with team members and senior management
- Ability to extend and develop existing designs with original thinking
- Be able to operate with high integrity and professionalism

Location:

We are located in Hampshire between Southampton and Romsey within a few minutes of the M27.

Interested?

Please send your CV/Resume with a covering email in confidence to recruitment@lumenisity.com. We shall respond to all enquiries.