

Electrical/Electromechanical Engineer (Job Ref: EME)

About the Company

Porotech Ltd (Porotech), the Gallium Nitride (GaN) material technology developer and spin-out from the University of Cambridge, focuses on the development of high performance and energy efficient wide-bandgap compound GaN semiconductors by applying cutting-edge material technologies and solutions to unleash the full potential of GaN to revolutionise the electronics industry.

Porotech's unique production process allows the controlled creation of a new class of nanostructured GaN semiconductor materials providing new opportunities for device engineering. We can control the process to vary the GaN nanostructures and hence engineer a wide range of material properties, such as optical, mechanical, thermal and electrical, and consequently offering an entirely new material platform for semiconductor devices to be built upon.

GaN is the silicon of the future, as it has many more interesting properties, including energy efficiency, than any other semiconductor materials. GaN-based LEDs can save 10% of entire world's electricity consumption. GaN-based transistors can operate 100 times faster than those in silicon whilst consuming 10 times less power.

Porotech's unique and world leading material technologies and device solutions will deliver multifunctional GaN semiconductor wafers with material properties and functionalities tailored and targeted to high impact final device applications. GaN has enormous potential in energy efficient lighting and power management, as well as lasers, quantum light sources, sensors, and energy generation, and our new material technologies will help make that potential a reality.

About the role

We are now looking a skilled Electrical/Electro-mechanical Engineer to design, test and upgrade our special-purpose machinery system. This is an important role in our state-of-art company to revolutionise the future and is responsible for designing and developing tools used to monitor and control machinery, processes and systems.

We are seeking individuals who can:

- Develop electromechanical assemblies for special-purpose test rigs, involving detailed design, test, checkout, fabrication, modification, troubleshooting and assembly of electronics and electro-mechanical systems, experimental design circuitry, prototype models, specialized test equipment, tools and test fixtures.
- Coordinate the procurement and assembly of mechanical components/equipment and identify sources of critical parts and subsystems to resolve technical issues
- Design or modify mechanical engineering layouts/schematics and/or detailed drawings/specifications of moderate scope under general supervision;
- Observe all safety standards, and take responsibility to maintain a secure, safe, clean and healthy work environment;
- Develop and document procedures to install, retrofit and maintain the system;
- Communicate with the internal and external technicians and engineers to promote best practice for technical solutions;

- Troubleshoot of electrical and other technical issues, deviations and breakdowns through collaborative and independent working.
- Work under pressure and to approach technical challenges calmly and effectively to bring about positive outcomes.
- Train additional staff in assembly and test processes.

Essential requirements:

- Demonstrable industrial experience in an engineering team;
- Demonstrable experience of developing and automating test rigs and machinery for manufacturing;
- Demonstrable experience to specify and source components for hardware development;
- Demonstrable experience in performing mechanical, electrical, pneumatic & vacuum and process testing;
- Strong team player with excellent communication skills and confidence to contribute ideas and advice, irrespective of audience level of authority.

Summary:

At Porotech, we would like you to enjoy the success of the company to emerge from the UK and lead the world's III-nitride semiconductor development, which you will be helping to build and be part of. It is an ideal time to join with a business with unique technology and products that are ready to be delivered and going to change the market.

Competitive salary dependent on experience. If you are interested in helping us change the world, send your CV with a cover letter to info@porotech.co.uk. We look forward to making your acquaintance.