



**OXSENSIS**

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## Job Description

**Title: Mechanical Development Engineer**

Reporting to: Mechanical Design Manager

## The Company

The company is a small high technology company specialising in the development of cutting edge harsh environment optical sensors. It operates in the global energy and aerospace markets and has developed strong relationships with large blue chip multi-nationals throughout the world. After going through a period of trials with customers the company is seeking to win 'design-in' opportunities within its core Gas Turbine market (a precursor to volume sales) and pursuing adjacent applications in other industries to expand its technical offering.

## The Role

To work with a small multidisciplinary R&D team of technicians and engineers. This role is primarily concerned with sensor head development but there is some crossover into the development of the optoelectronic interrogator which, with the sensor head, forms the complete sensor system. Oxsensis also develops many of its own test and manufacturing facilities as 'off the shelf' rigs are not generally available.

The successful candidate will also be involved in new projects including working with customers in the proposal and specification of optical sensing systems.

The main duties of the Mechanical Development Engineer will be:

- Design of sensor element and high temperature packaging including
  - Analytical and numerical modelling and analysis
  - Mechanical design
  - Working with the process engineering team to develop assembly processes
- Analysis, design, construction and commissioning of new test equipment
- Support for customer applications including
  - Specification of new sensor applications
  - Fixture design and analysis for existing sensor products
- Assist in development of IP for the company

## Skills and Qualifications

The company is looking for a dynamic and enthusiastic individual capable of quickly learning new skills and using his/her initiative to solve problems. You will have a good first degree or other higher level qualification in engineering or a related discipline with a good grounding in physics and maths. You should have experience of FEA stress and thermal analysis, high temperature materials and applications, design for manufacture and harsh environment packaging. Proficiency with mathematical software (e.g. Matlab or MathCAD) is a requirement. Knowledge of Solidworks will be a distinct advantage, although training will be provided including the use of the SolidWorks Simulation FEA add-on.

Good communication skills are a must since you will be working with a wide range of Oxsensis staff from technicians to senior management as well as having some customer and supplier interaction. This will include technical writing and presentations.

Please forward your responses to Mrs Donna Mackett [donna.mackett@oxsensis.com](mailto:donna.mackett@oxsensis.com)