

# Gas Data Ltd

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## About the company

Gas Data Ltd designs and manufactures an extensive range of portable and fixed gas-analysis instrumentation solutions. These are used in diverse applications world-wide, including waste disposal, bioenergy, air-quality, food storage, security and odour monitoring.

Gas Data Ltd has embarked on a Knowledge Transfer Partnership (KTP) with academics from the Aston Institute of Photonic Technologies (AIPT) in the School of Engineering & Applied Science to help develop and implement state of the art sustainable gas monitoring solutions.

## Aim

The aim of this KTP project is to develop a range of gas monitoring solutions, utilising optical fibre technologies, for difficult-to-detect gases. Current technologies have proven successful in certain markets such as landfill and early biogas, but as renewable energy markets grow, Gas Data Ltd recognise that the company's future depends on developing more sophisticated products that deliver greater accuracy and have higher tolerance to contamination, as well as the ability to operate in hostile environments.

Aston's School of Engineering & Applied Science has a long track record of successful collaborations with companies both large and small, and AIPT is one of the largest photonics research groups in the UK, possessing a world-recognised record of achievement in this area.

## Benefits

This partnership with the AIPT will lead to the development of optical fibre based devices for detecting gases such as hydrogen, carbon dioxide and hydrogen sulphide. As early adopters of optical fibre technologies in this field, Gas Data Ltd will gain a clear competitive advantage across Europe.

The application of optical fibre to sensors will open opportunities to reduce susceptibility to contamination by mixed gases, offer greater accuracy and sensitivity, and be well suited to challenging environments. Furthermore, it will enable Gas Data Ltd to simplify systems and therefore reduce overall costs.

Matthew Humphreys, Managing Director of Gas Data Ltd said of the project: "The immediate impact will be the introduction of optical fibre technologies into the company. This change in Gas Data's technical capability will increase its competitive advantage in the current market and enable the launch of unique products into emerging markets. Collaboration with the Aston Institute of Photonic Technologies, an acknowledged centre of excellence for research in optical systems, will enable Gas Data to become a leader in innovative detection technologies."

## Aston

For the academic team at Aston, the KTP project will provide a unique opportunity to translate their research to industry as well as enhance their existing research in this area. Professor David Webb, Deputy Director of the AIPT, said of the project: "The relationship with Gas Data will enable future collaboration on more advanced sensing concepts which offer opportunities that cannot be addressed by current sensing technology."