



Shell Global Solutions

For immediate release

DTI funds laser development for oil & gas prospecting

Cross-disciplinary team to develop advanced laser detection system for novel hydrocarbon exploration technique

Glasgow, Scotland, September 22nd

A consortium comprising Shell Global Solutions, Compound Semiconductor Technologies Global (Glasgow, Scotland), Cascade Technologies (Stirling, Scotland) and the Universities of Sheffield and Glasgow, have been awarded funding towards a £2M project by the Department of Trade, under its UK Technology Programme.

The **QCSense** project will develop and incorporate a novel type of micro-chip light source, called a Quantum Cascade Laser, in a spectroscopic detection system that will measure traces of gases naturally escaping from hydrocarbon reservoirs into the atmosphere. The consortium aim to produce the world's most sensitive laser hydrocarbon detector and evaluate its use for exploration in large remote areas.

Dr Bill Hirst, Shell Global Solutions Project Lead comments, "Quantum Cascade Laser technology has the potential to dramatically enhance the LightTouch™ technique we currently use for rapidly screening large areas for signs of oil and gas. In this way we seek to help prioritise exploration activity and focus resources to best effect."

Dr Wyn Meredith, CST Project Lead said, "We are aiming to develop a centre of excellence in the UK for this exciting new technology including semiconductor laser development to gas sensing application knowledge. The baseline expertise is already present in the UK; Technology Programme funding will facilitate development driven by real applications. There are countless applications in Healthcare, Safety and Security that can be addressed with iterative variations to the basic detection approach."

Profiles

Compound Semiconductor Technologies Global

CSTG is a 'pure play' semiconductor foundry specialising in the development, and manufacture of discrete and integrated III-V opto-electronic devices, based in Glasgow, UK. Since 1999, CST has provided specialist foundry services to clients in the Telecommunications, Defence, Medical and Instrumentation markets. CST offers full product support from design to manufacturing, levered off a comprehensive library of qualified fabrication processes and a suite of high performance device platforms. CST serves both fables and vertically integrated customers in UK, US, Europe and Japan, and is recognised as a flagship project for the UK opto-electronics industry.

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Cascade Technologies

Stirling based Cascade Technologies Ltd specialises in the design and manufacturing of spectroscopic gas identification and monitoring systems based on Quantum Cascade Laser (QCL) source technology. Markets for Cascade Technologies' platform include security, military, oil and gas, aerospace, medical diagnostics and laboratory instrumentation.

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Shell Global Solutions

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