



Scottish Technology News - March 2005

[Laser firm sets its sights on US market.](#)

Glasgow's Cascade Technologies has unveiled the first commercial version of its new portable laser gas sensor which could be used in the international fight against terrorism.

The company demonstrated the capabilities of an early version of its portable, real time sensor at the Photonics West conference in California, the first time it has been shown outside the laboratory.

The portable sensor, which will go into production within the next few months, is capable of measuring in parts per trillion a million times a second, and has industrial processing, security and medical diagnostics applications.

It can also be used to detect the presence of explosives, drugs and hazardous compounds, for example in luggage at airports.

Richard Cooper, Operations Director, said: "We demonstrated analysing the atmosphere at the conference and picked up traces of methane and nitrous oxide in the air in parts per billion – this demonstrates the power of our technology.

"We have carried out an extensive development programme for this product and it was good to be able to show it working. We are proud to have achieved this on time and within budget.

"As well as interest from the oil and gas, defence and security sectors, there was a lot of interest from the medical diagnostic community as the sensor could be used to detect gases in the breath which can indicate illnesses such as schizophrenia.

"While in the US, the Cascade team visited defence and security companies in Washington and Cooper says they have developed a number of potential leads.

The company also used the trip to showcase its first product, a quantum cascade laser system, controlled directly from a PC's USB port.

Since its launch in September, Cascade has sold a number of the laser systems and is putting the finishing touches to agreements with distributors in its key markets – the UK, Europe, US and Japan.

A business created from a research project at the University of Strathclyde, Cascade was launched in January 2003. It received early stage funding from UpStarts UK Ltd, the business investment vehicle set up by Strathclyde University Incubator Ltd to support technology start-up companies.

It has also received private funding and grants from the Scottish Executive, investment from The Synergy Fund managed by Scottish Equity Partners, and Scottish Enterprise's Business Growth Fund. And the finance has come from the Bank of Scotland's Business Start-Up team through the Small Firms Loan Guarantee Scheme, in addition to a number of private individuals.

Cooper said Cascade is currently working to raise a further £3.5m to develop the laser gas sensor for new applications including monitoring environmental emissions from ships and oil rigs.