

Media Release

Chiefs of Staff, News Directors

Thursday, 24 July, 2014

University licences ground-breaking explosive detection technology

The University of Tasmania has stepped up the fight against terrorism by licensing two technologies, Scantex and CEScan, to Melbourne-based technology commercialisation firm Grey Innovation.

Scantex and CEScan have been developed in collaboration with Australian forensic and policing authorities to detect homemade explosives, such as those used in London, Madrid, Bali, and Boston.

CEScan is the first comprehensive instrumentation in the world to detect the full range of explosives, including military, commercial and homemade inorganic and peroxide explosives, overcoming the limitation of existing screening techniques that struggle to detect modern explosives. CEScan with its breadth of capability is expected to find application in centralised analytical environments such as forensic and customs laboratories.

Using the same base technology, Scantex has been designed as a field deployable version of CEScan system that provides fast detection of homemade explosives, making it ideal for use in airports and similar high-throughput environments.

The technology was invented by Professor Michael Breadmore and his team from the University's Faculty of Science, Engineering and Technology with funding from agencies including the National Security Science and Technology Centre and the US Department of Homeland Security.

"Cracking the problem around separating and identifying inorganic molecules was the breakthrough we needed to create CEScan and Scantex," Professor Breadmore said.

"Now we can detect trace levels of inorganic explosives, as well as the other more routine classes of dangerous materials, in under a minute."

Incorporating these technologies into commercial grade units, and ensuring that those machines can be relied on for such critical information, is the role being taken on by Grey Innovation.

Grey Innovation's Managing Director, Jefferson Harcourt, said as the licensee and co-developer, Grey Innovation would move the technology from the lab to the market place.

"The ability to detect a wide range of modern high explosives with this level of sensitivity, and to do it quickly, is a huge step forward in terms of counterterrorism technologies," Mr Harcourt said.

"Instrumentation in this space has to stand up to significant regulatory scrutiny, needs to be dependable, and has to be cost effective. Initial discussions with potential partners have already commenced."

The University's Director of Business Development and Technology Transfer, Dr Darren Cundy, said there was always an expectation that the research would need to be further developed by private industry.

"As we've been working with Grey on a range of projects that need this type of capability, they were a natural fit when we looked for partners," Dr Cundy said.

"While we recognise that there is still much to do before we see products being sold, this is a natural step in the translation of the University's research outputs and we have high hopes that ultimately it will generate strong returns for us and our commercial partners."

The University of Tasmania is committed to carrying out research that is relevant, impactful and aligned with industry, said the University's Deputy Vice-Chancellor Research, Professor Paddy Nixon.

"We are focused on translating our collaborative research from the lab to the wider world where it can have a real impact for industry and the community," Professor Nixon said.

About Grey Innovation

Grey Innovation is an Australian based technology commercialisation company with a strong track record of identifying and commercialising breakthrough technologies. Their clients and partners include leading research institutions and hospitals, together with global brands such as Intel and Siemens. Grey Innovation has the in-house capability to take technology from research, through product development and certification, clinical trials and production. Today, technologies commercialised by Grey Innovation are sold around the world.

About the University of Tasmania

The University of Tasmania is ranked in the top ten research universities in Australia and in the top two per cent of universities in the world. For 125 years, the University has provided a creative and stimulating environment, providing opportunities for our students to engage in an international learning experience. In addition to the more than 30,000 students, the University's community is strengthened by a network of more than 90,000 alumni spanning more than 120 countries, and is underpinned by

collaborative partnerships with organisations that share its strategic outlook. While maintaining a distinctive Tasmanian identity, University programs and research are international in scope, vision and standards.

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