

Heriot-Watt spin out company goes commercial

A new company has been born out of a research project at Heriot-Watt University funded by Scottish Enterprise's (SE) High Growth Spinout Programme.

The business will further develop advanced camera technology to be used in biomedical science, engineering and combustion research. The camera offers consistent full colour HD resolution at millions of frames per second and it is hoped it will revolutionise work in these fields and others like rail transport and quantum photonics.

Most high speed imaging systems can achieve the high frame rate but usually at the expense of the quality of the images produced.

The new camera developed by Heriot-Watt has an advanced mathematical algorithm ensuring high resolution images at all speeds. The lower manufacturing cost of the device will make access to the high speed imaging more affordable.

Dr Xu Wang is the inventor of the technology and an associate professor in the Institute of Photonics and Quantum Sciences at Heriot-Watt University. He said: "The most significant limit of existing high-speed cameras is poor resolution at high-frame rate coupled with high cost. Our ground-breaking camera technology provides an affordable market solution that delivers ultra-high speed without compromising high resolution thanks to its superior design and lower manufacturing cost.

“This funding will accelerate the commercialisation of our research to create a product capable of disrupting existing and new markets. The support of the enterprise team at Heriot-Watt University and Scottish Enterprise provides an incredible opportunity to build a profitable, industry-leading business at pace that is focused on driving further innovation in the field of camera technology in Scotland and beyond.”



Dr Xu Wang

Victoria Carmichael, Director of Strategic Investment at Scottish Enterprise, said: "Our High Growth Spinout

Programme works with leading academics all over Scotland to help turn their innovative ideas into successful business ventures. Scotland has a long history of world-changing ingenuity and the team at Heriot-Watt has, with this camera, created a truly industry-changing and cost-effective product with the potential to deliver enhanced results for both commercial businesses and academic institutions. In Scotland we are very fortunate to have a host of enterprising, world-leading universities that can help drive economic recovery and growth in key sectors.”

David Richardson, Chief Entrepreneurial Executive at Heriot-Watt University, commented: “Heriot-Watt University has an extensive track-record of delivering commercial, strategic and innovation support that drives real-life impact of academic discovery in existing and new industry markets. With the financial backing of Scottish Enterprise, we look forward to developing Dr Wang’s research into a world-class enterprise capable of disrupting the status-quo in high-speed imaging.

“Our GRID facility brings together a diverse range of skills and expertise that fosters a highly collaborative environment where academics can transform their research into innovative, industry-leading businesses. We look forward to working in partnership with all those involved to access a world-class talent pool, R&D opportunities and further investment to help deliver scale at pace.”

Janet Milne, CEO Designate and Director, Genmhor Ltd: “Genmhor is delighted to be working with Dr Wang, Heriot-Watt University and Scottish Enterprise, to bring this exciting new imaging technology to market. This innovative, ultra-high speed camera has the potential to be a game changer in the market, offering full colour, full resolution, megapixel images at millions of frames per second. The potential industrial and academic applications for this novel imaging solution are vast and we are very excited to be leading the commercial development of this opportunity.

“Genmhor has extensive experience of delivering investable propositions for early-stage technologies and making products a reality.”



GRID building at Heriot-Watt where the research has been carried out