

# Winners of 2019 Scottish Knowledge Exchange Awards announced in Edinburgh

Some of the most ground-breaking and potentially life-changing innovations developed by businesses and academics were unveiled at the Scottish Knowledge Awards 2019 on Thursday evening.

Ivan McKee MSP and Minister for Trade, Investment and Innovation presented the awards at a ceremony in The Studio. Mr McKee said : “It is hugely promising to see such forward thinking and successful partnerships between Scottish companies and academia.

“These partnerships will help to drive a thriving and dynamic innovation ecosystem that is essential for improved productivity, competitiveness and growth. The Scottish Government increased the grant for university research and innovation via the Scottish Funding Council by 6.4% to £296 million for 2018-19, with the aim to strengthen Scotland’s status as a key player in research, innovation and technology and to encourage more of these important partnerships.

“I want to congratulate all of the winners for their collaborative efforts. I hope this will inspire further innovative partnerships in the future.”



Scottish Knowledge Exchange Awards 2019 – all the winners with their trophies

PHOTO | Greg Macvean

The winners announced this evening included :

**Innovation of the Year** G-Hold, Edinburgh, and the University of the West of Scotland's Institute for Clinical Exercise & Health Science for product testing and proving ergonomic benefits for a patented handhold which reduces wrist strain when holding tablets and other handheld devices.

The data generated elevated the product's positioning within the highly competitive tablet accessory industry, supported the patent process and helped gain new customers, such as Microsoft and Apple.



Scottish Knowledge Exchange Awards 2019 – pictured with some of the finalist entries in tonight's awards are Siobhán Jordan (Director of Interface), Professor Alan Wolstenholme (Chair of Scottish Distillers Association) and Rachel Mirfattahi (Sector Engagement Executive at Interface). Companies represented in the image: the Botanicals library at Heriot-Watt University (Edinburgh), G-Hold (Edinburgh), Sunamp Ltd (East Lothian), RIGOCAL (Aberdeen), who were all finalists in the awards.  
PHOTO | Greg Macvean

**Knowledge Exchange Champion of the Year** – Professor David Lane, Heriot-Watt University, is an international scientist, engineer, innovator and investor in Robotics and Artificial Intelligence. In his 35-year career David has established Heriot-Watt's Ocean Systems Laboratory with an international reputation in marine robotics, publishing nearly 300 top-cited publications and co-ordinating major EU/EPSRC/MoD projects. David has led the development of the UK's Robotics2020 strategy resulting in over £550m investment including founding the £100m Edinburgh Centre for Robotics, a joint venture between Heriot-Watt and University of Edinburgh.

**Making a Difference** – Scene Connect Ltd, Edinburgh, and Heriot-Watt University's School of Energy, Geoscience Infrastructure and Society and Institute for Infrastructure and Environment, for creating a new software-hardware system,

called Water-Hand, for farmers in India to control the volumes of water given to crops through irrigation schedules, with “staggering results” – a 70% reduction in water and energy usage, 30% crop yield increase and 10% labour decrease.

The system combines localised weather forecasting and electricity availability with a sophisticated modelling technique to calculate precise water needs for crops based on type, location and soil.

**Multiparty Collaboration** – Heriot-Watt University’s International Centre for Brewing & Distilling with the Scottish Distillers Association and five distilleries has developed a unique library of over 40 botanicals grown in Scotland for distillers to create new gins and botanical liqueurs and support export activity.

The library is used to ensure Scottish gin meets import standards of countries like the USA. With 70% of the UK’s gin produced in Scotland, and sales expected to hit £1.5billion by 2020, the library is good news for producers who are eyeing the domestic and international markets.

**Powerful Partnerships**, sponsored by SCI Scotland Sunamp Ltd, Tranent, and the University of Edinburgh’s School of Chemistry. Since 2010, this partnership has grown from a small consultancy project into a vibrant and robust partnership, that has delivered substantial benefits to both partners, society and the wider economy through the development of high performance, long lasting heat storage solutions. The partners have been successful in joint bids for millions of pounds of funding, new business and research opportunities, strengthened links to UK facilities, job creation and access to international markets.

**Rising Star of the Year** – Dr Maizura Mokhtar, Knowledge Transfer Partnership Associate (KTP) from Heriot-Watt University, undertook a collaborative project with Scottish

Power Energy Networks to analyse the large amount of data available from nationwide smart meters and transform it into meaningful information to inform important network planning and operational decisions. Dr Mokhtar delivered several projects as part of the KTP, from applying new techniques to predict energy consumption, to rolling out a new system platform and presenting outcomes to the company. Her work has been presented at two major international energy meetings.

**Spotlight Award**, sponsored by The Royal Bank of Scotland A new category introduced to celebrate a partnership which has come together from a different business sector and academic discipline to provide an innovative solution to a challenge. The award was chosen from all the applications received. The Spotlight Award was presented to Dynamic Coast, a project led by Scottish Natural Heritage with the University of Glasgow's School of Geographical & Earth Sciences. The project aimed to improve predicting coastal planning through assessing changes over 130 years of 21,000km of coast.

The resultant public web-based maps, reports and videos provide easy to interpret maps of the past and anticipated changes on all of Scotland's erodible shorelines has achieved 13,000 hits from 8,000 users globally.

This project has revolutionised the public, industry and the public sector's appreciation of coastal change.

The judging panels were made up of representatives from; Scottish Funding Council, Entrepreneurial Scotland, College Development Network, Zero Waste Scotland, Scottish Enterprise, Highlands and Islands Enterprise, Scottish Government, Knowledge Transfer Network and the Interface Strategic Board.

The awards partners were Marks & Clerk, the Royal Bank of Scotland and Business Insider.