Investment in quantum as researchers use sensing to see inside electric car battery

- researchers to find new commercial opportunities for quantum technologies thanks to £94 million government investment
- University of Sussex develops first piece of quantum technology capable of seeing inside a car battery from outside
- government investment will support the work for a further 5 years as it puts emerging technologies at the heart of its modern Industrial Strategy

Quantum researchers will help get new technologies to market, thanks to £94 million of government investment.

From mapping underground conditions to simulating complex molecules for drug design, Quantum Technology Hubs led by the Universities of York, Glasgow, Birmingham and Oxford are developing new applications for quantum technology. Government investment will support this work for a further 5 years as it puts emerging technologies at the heart of its modern Industrial Strategy which aims to make the UK the world's most innovative economy.

The announcement comes as Science Minister Chris Skidmore visits the University of Sussex. Quantum physicists at the university have taken live images of the inside of a working electric car battery from the outside for the first time, using quantum magnetic sensing technology. The University of Sussex is a key academic partner of both the Quantum Sensing Hub, led by the University of Birmingham and the Quantum Computing Hub, led by the University of Oxford.

Science Minister Chris Skidmore said:

Harnessing the full potential of emerging technologies is vital as we strive to meet our Industrial Strategy ambition to be the most innovative economy in the world.

Our world-leading universities are pioneering ways to apply quantum technologies that could have serious commercial benefits for UK businesses. That's why I am delighted to be announcing further investment in Quantum Technology Hubs that will bring academics and innovators together and make this once futuristic technology applicable to our everyday lives.

The Quantum Technology Hubs are the route in for businesses to access skilled experts that can help them to innovate for the future. The hubs are already working with more than 200 businesses and 20 universities and this new

support will see that continue.

Investing in emerging technologies and building future sectors is crucial to the success of the Industrial Strategy and government's ambition to invest 2.4% of GDP in R&D by 2027. By supporting new industries that boost productivity and earning power across the country, these investments will ensure Britain is at the forefront of technological change and home to the businesses of tomorrow.

The announcement follows <u>news during London Tech Week 2019</u> that private and public investment through the National Quantum Technologies Programme is set to pass £1 billion since its inception in 2014.