

Correspondence: Robotics, automation and artificial intelligence

Advice to the Prime Minister on opportunities in robotics, automation and artificial intelligence for the UK.

Correspondence: Improving entrepreneurship education

Advice to the Prime Minister on how to encourage more undergraduates to start innovative enterprises.

UK to lead the way in quantum technologies

A new report explores how the UK could benefit from quantum technologies.

Press release: UK to lead the way in quantum technologies

Sir Mark Walport, Government Chief Scientific Adviser, sets out how the UK could lead in the application of quantum technologies in a [report](#) published today (3 November 2016) by the Government Office for Science.

Quantum technologies have already contributed to lasers, digital cameras, solar cells, GPS, and mobile communication. A new generation of quantum technologies are now emerging, which could allow accurate navigation without the need for GPS, enable detection of buried hazards, provide new methods for imaging the human body without exposure to harmful radiation, and potentially solve problems that would stump existing super computers.

The UK is among the world leaders in quantum research and the report, 'The quantum age: technological opportunities', highlights areas where the UK could maintain and even increase its lead. It highlights the implications of quantum technologies for the UK economy and the ways in which they could improve peoples' lives over the next 15 years.

The report argues that the UK could enhance its international position and capitalise on this comparative advantage by:

- building on the progress made by the [UK National Quantum Technologies Programme](#) with increased coordination and partnership with the private sector, domestically and internationally
- establishing innovation centres bringing together academics and industrial partners to commercialise the technologies
- laying the foundations for a quantum technology industry in the UK

[Sir Mark Walport](#) said:

The UK is playing a leading role in the research and development of quantum technologies. Quantum timekeeping, imaging, sensing, communications and computing have the potential to generate a large array of valuable new products and services.

We must ensure we continue to commercialise the outputs from our excellent research base. We have an opportunity to develop a world class industry, supported by a skilled workforce and stimulated by global demand.

The report has been developed by Sir Mark Walport, the Government Chief Scientific Adviser, and Sir Peter Knight, Emeritus Professor of Quantum Optics at Imperial College London, with contributions from government, industry and academic experts from around the country.

Notes to editors

1. A full copy for the report can be found at: www.gov.uk/government/publications/quantum-technologies-blackett-review.
2. For further information, please contact Emma Griffiths, emma.griffiths@go-science.gsi.gov.uk, 020 7215 3497.

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