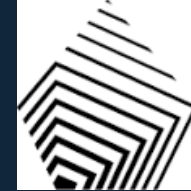




**University of
Nottingham**

UK | CHINA | MALAYSIA



**Royal Academy
of Engineering**

Quantum Sensing

From Research to Reality

Melissa Mather

Faculty of Engineering

University of Nottingham

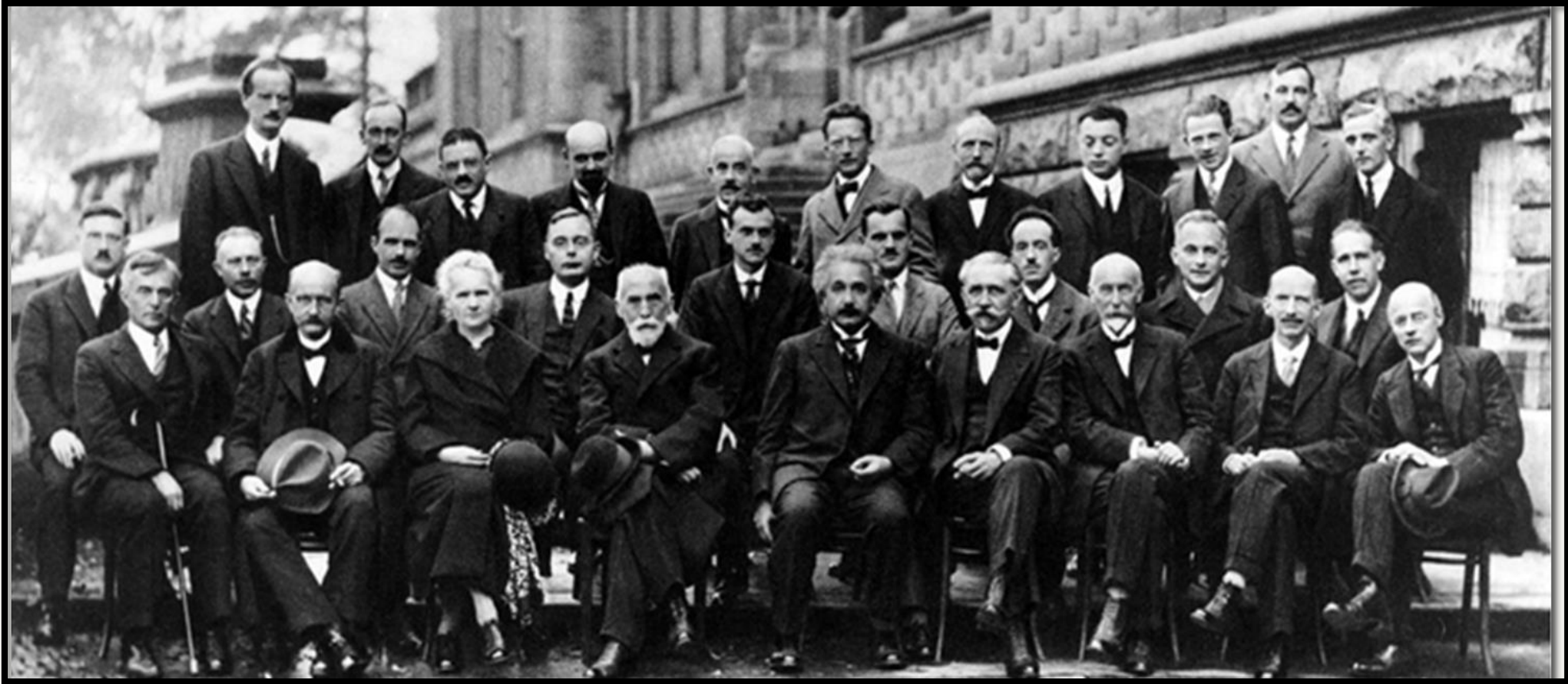
Royal Academy of Engineering Chair in Emerging Technologies





Quantum Physics

Pioneering minds



Fifth conference participants, 1927. Institut International de Physique Solvay in Leopold Park.



Quantum Technologies

Beyond physics



1st Physics of Computation Conference, 1981, MIT, Boston



Quantum Technologies

Beyond physics



Quantum Sensing & Quantum Metrology, Indian Association for the Cultivation of Science and Indian Institute of Science, Education and Research 2023



Quantum Technologies

Beyond physics



Quantum Biology, Gordon Research Conference, USA, 2023



Quantum Technologies

Beyond physics



Quantum World Congress, USA, 2024

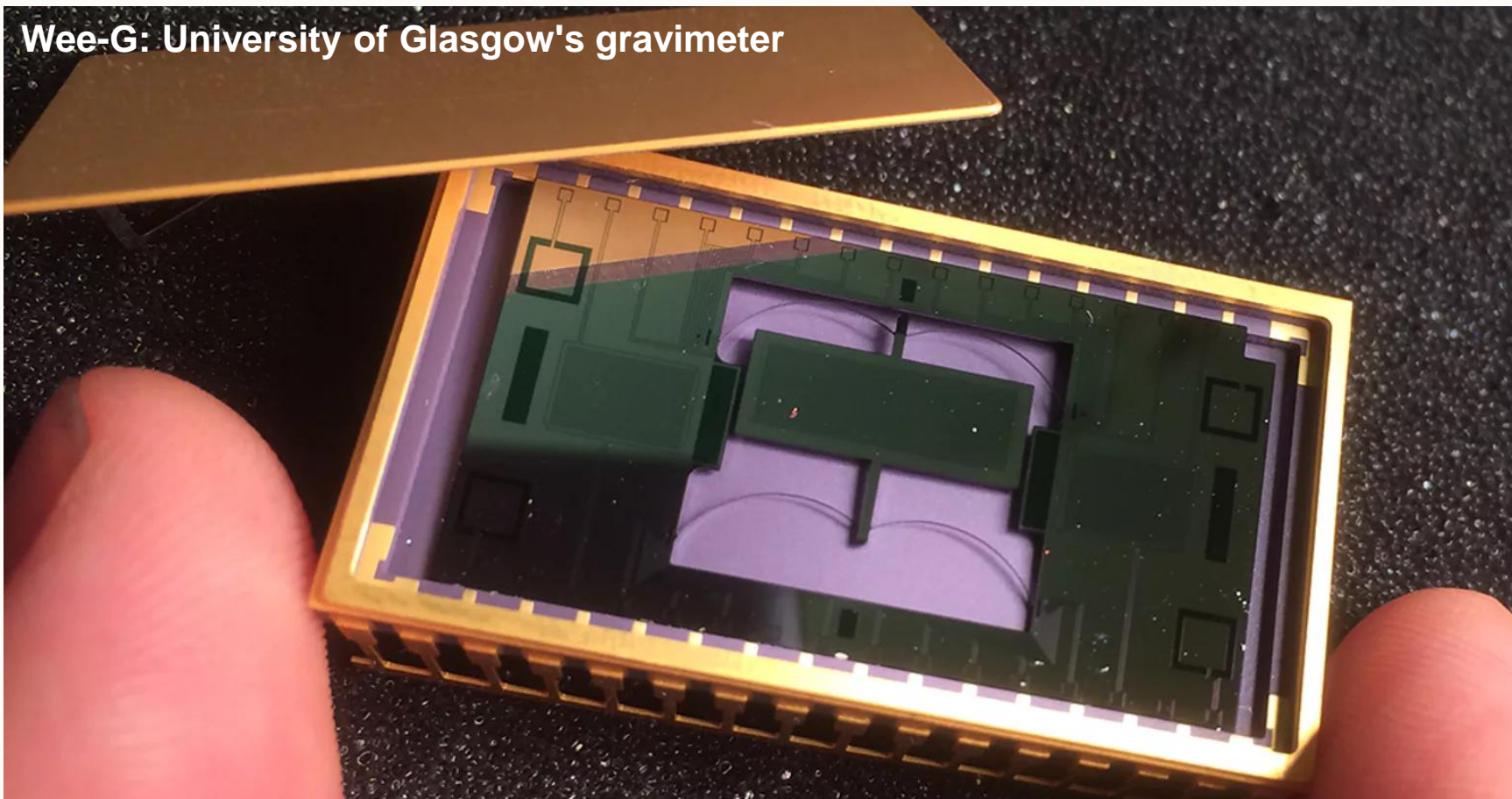


UK Strengths in Quantum Sensing

Research and Development



Wee-G: University of Glasgow's gravimeter



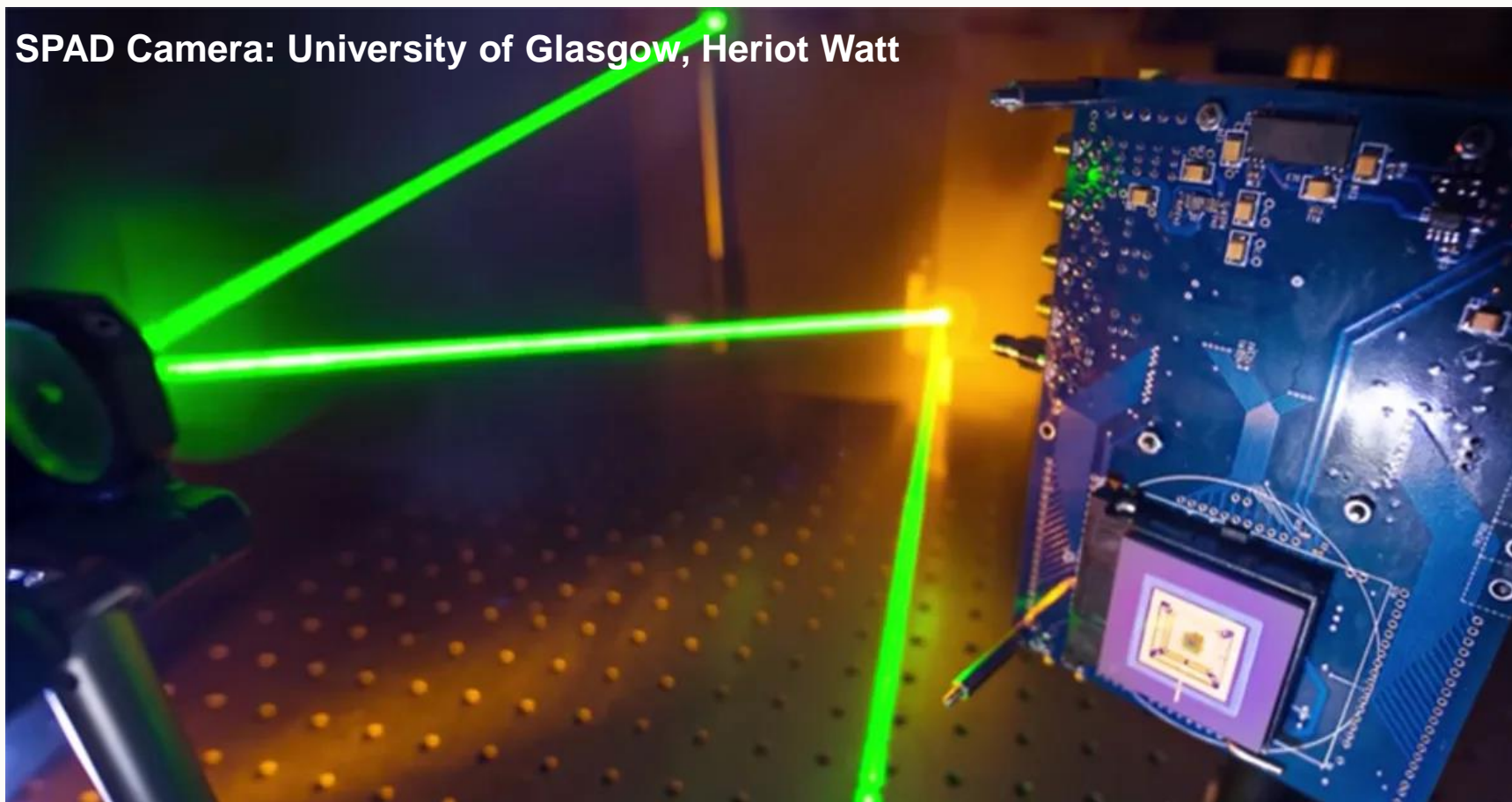


UK Strengths in Quantum Sensing

Research and Development



SPAD Camera: University of Glasgow, Heriot Watt





UK Strengths in Quantum Sensing

Research and Development



Gradiometry: University of Birmingham, Delta G



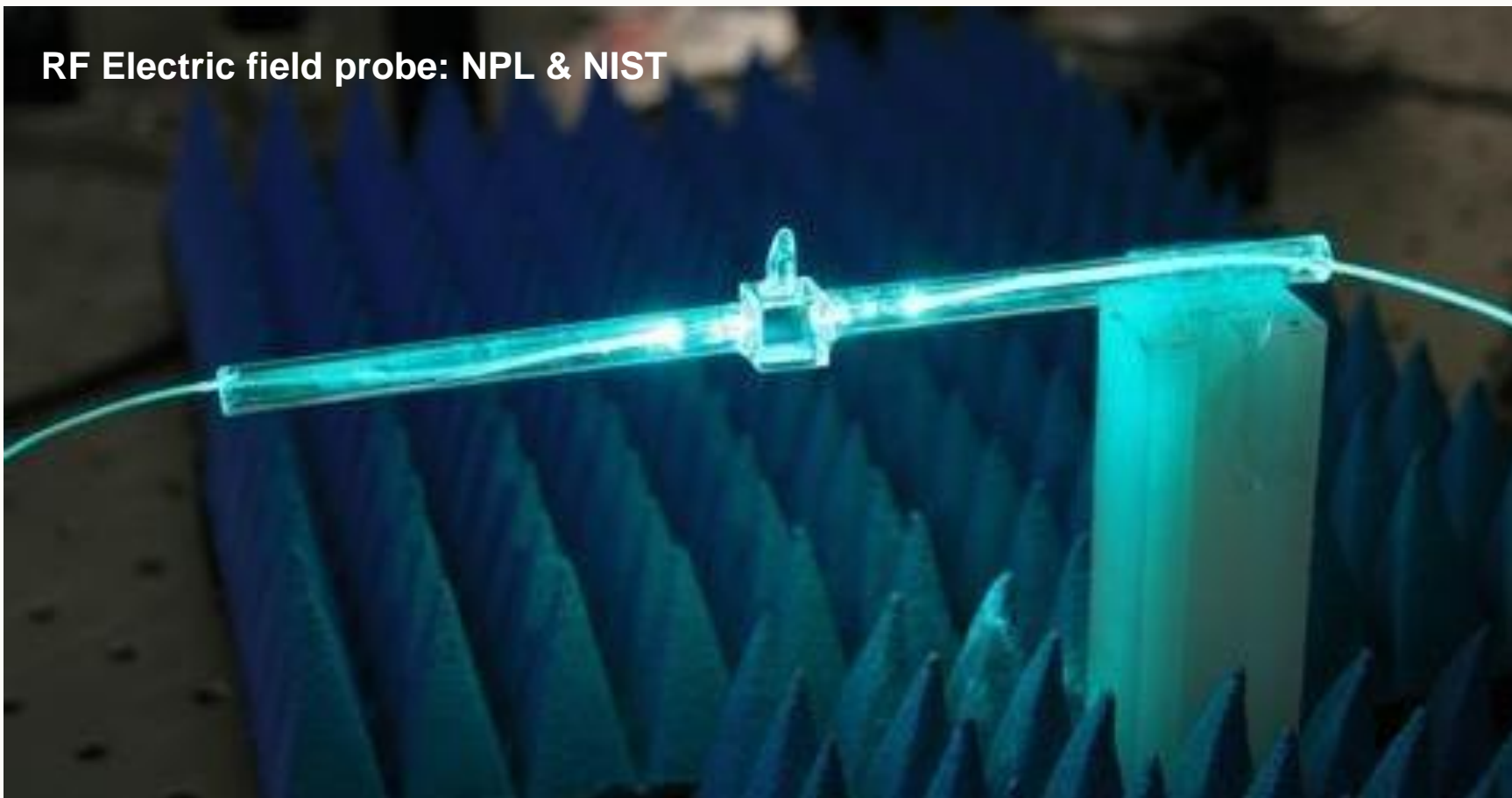


UK Strengths in Quantum Sensing

Research and Development



RF Electric field probe: NPL & NIST





UK Strengths in Quantum Sensing

Research and Development



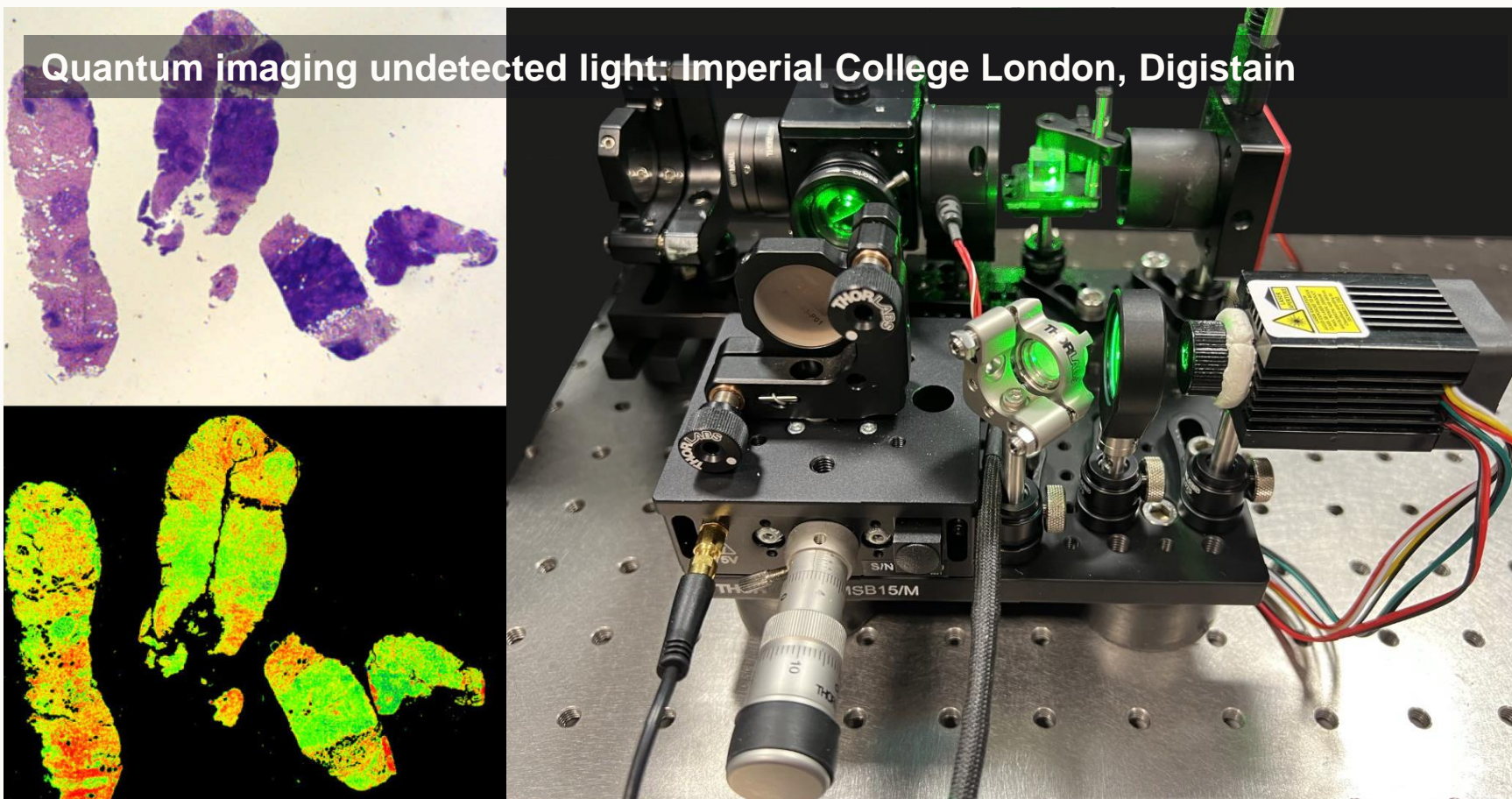
OPM-MEG Neuroimaging: University of Nottingham, Cerca Magnetics





UK Strengths in Quantum Sensing

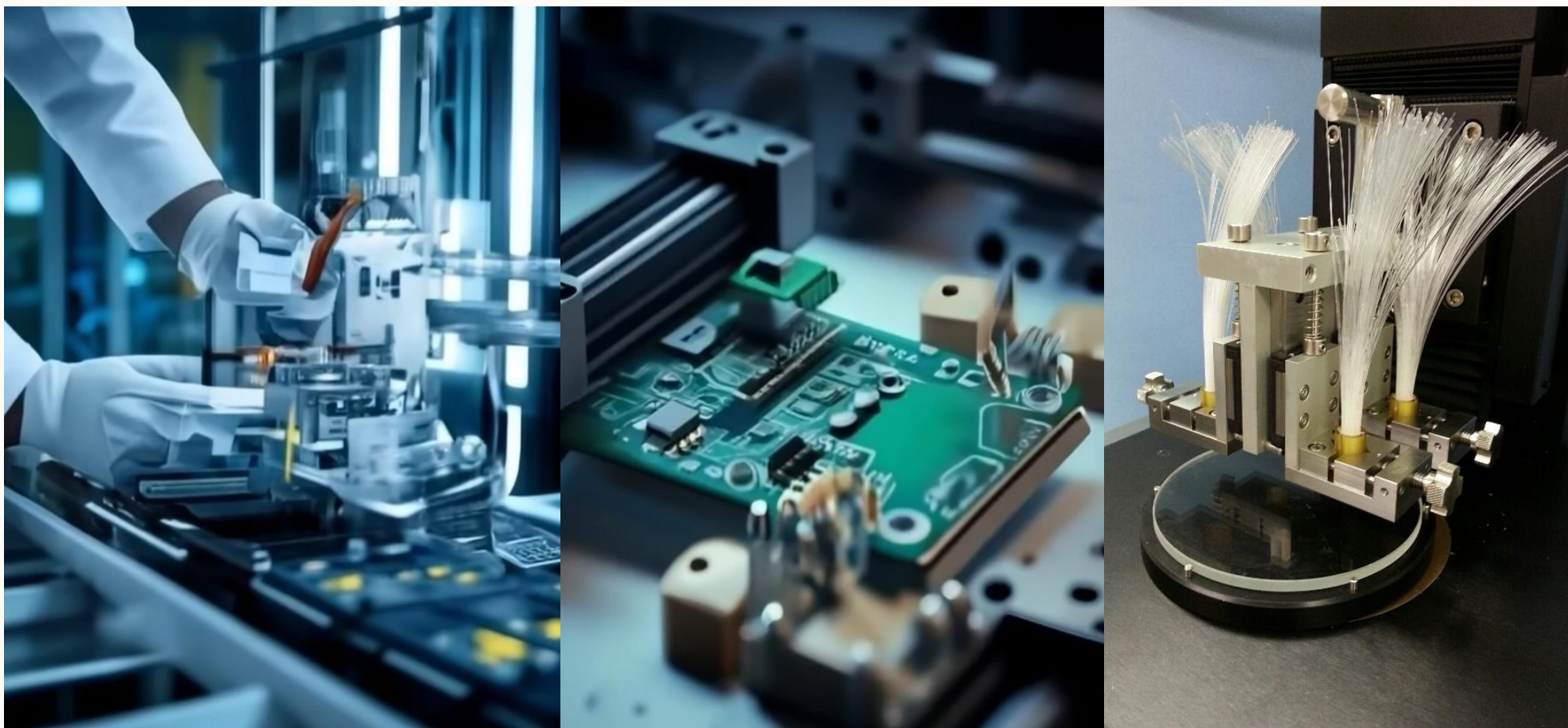
Research and Development





Expanding the Quantum Ecosystem

Embracing adjacent technologies





Upskilling the Existing Workforce

A quantum-ready workforce





Unlocking a Quantum Future

Call to Action

