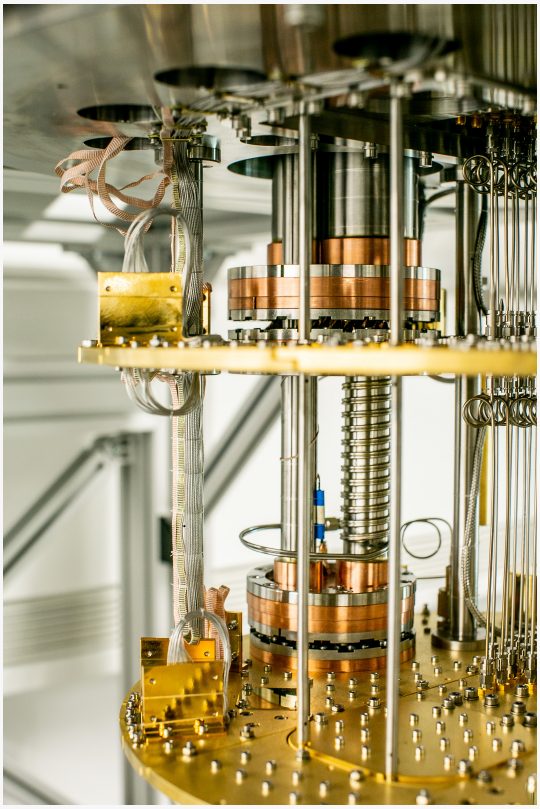
Uptime Maximised by Oxford Instruments – OQC's Lucy Cold For A Year

LONDON, UNITED KINGDOM, February 10, 2023 /EINPresswire.com/ -- Uptime Maximised by Oxford Instruments – OQC's Lucy Cold For A Year

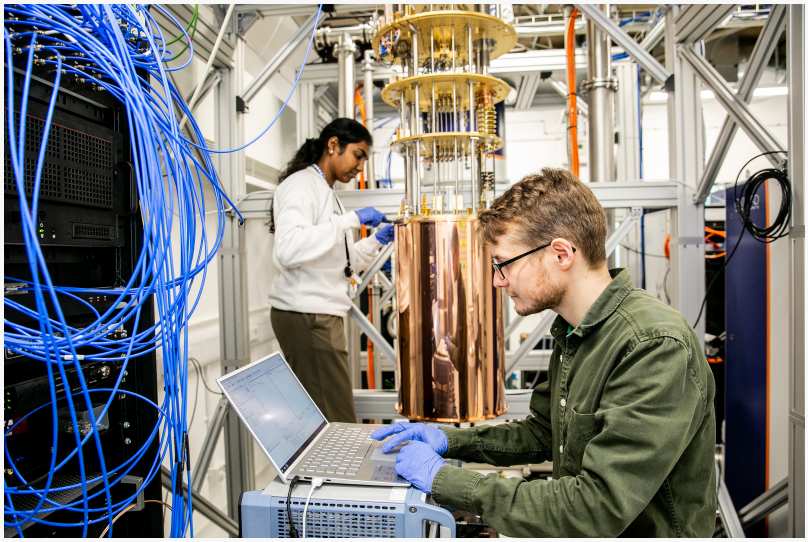


Oxford Quantum Circuits (OQC), Europe's leading quantum computing company, has been running Lucy, its 8-qubit quantum computer for a year, reliably supporting customers through its private and public Quantum Compute-as-a-Service (QCaaS) platform. A consistently cold quantum computer for a year is a significant milestone not only for OQC and Oxford Instruments, but also for the UK quantum industry as it accelerates toward quantum computing commercialisation.

The cryogenic environment for Lucy, the ProteoxMX, supplied by Oxford Instruments NanoScience, global pioneer in dilution refrigerator technology, has been a dependable and unfaltering partner in this achievement. In February 2022, OQC became the first company to be featured on Amazon Web Services (AWS) in Europe following the launch of Lucy. AWS is the world's most comprehensive and broadly adopted cloud platform, offering over 200 fully featured services from data centres globally. On AWS, OQC Lucy has achieved 98+% uptime across the entire year.

The key challenge of superconducting circuits for quantum computation is the ability to scale qubit numbers whilst maintaining qubit quality and control to reach a commercially useful level

of processing power. Many 'traditional' 2D quantum circuits require increasingly intricate engineering to route control wiring across the chip to the qubit. Lucy, named in honour of Lucy Mensing, German physicist and pioneer in quantum mechanics, uses OQC's patented 3D architecture, the Coaxmon, which solves this challenge by combining unparalleled scalability with world-class performance.



Oxford Instruments' dilution refrigerator has been a reliable partner to OQC not only keeping Lucy cold but leveraging the Coaxmon technology with ProteoxMX's Secondary Insert architecture, facilitating easy integration of signal conditioning components, wiring, and insert-modularity.

Stuart Woods, Managing Director of Oxford Instruments NanoScience, said, "That Lucy has been up and running for a year, accessible to customers globally, is significant not only for what it shows we can already achieve but for what it promises for the future of quantum scaling and deployment."

Ilana Wisby, CEO of Oxford Quantum Circuits, said, "With Lucy, we have pushed the boundaries of what is possible and taken important steps to bring quantum computing to the enterprise mainstream."

Both Lucy and the ProteoxMX are helping move quantum computing closer to mainstream data centre use, proving that quantum computing can exist as a cloud service side-by-side with storage, and classical and graphical processing. In September 2022, OQC announced a partnership with Cyxtera, a global leader in data centre colocation, to mark the world's first integration of a quantum computer in a colocation data centre to enable access to thousands of customers worldwide. The cryogenic environment for an OQC next-generation device is the ProteoxLX, specifically designed for quantum computing high-growth scale-ups such as OQC.

About Proteox

Proteox is a next-generation Cryofree system that provides a step change in modularity and adaptability for ultra-low temperature experiments in condensed-matter physics and quantum computing industrialisation. The Proteox platform has been developed to provide a single, interchangeable modular solution that can support multiple users and a variety of set-ups or experiments while also enabling remote management. To find out more, visit nanoscience.oxinst.com/proteox.

About OQC

OQC is Europe’s leading quantum computing company. We bring quantum to our customers’ fingertips and enable them to make breakthrough discoveries. Our quantum computers are available via private cloud and on Amazon Braket. For more information: www.oxfordquantumcircuits.com

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Issued for and on behalf of Oxford Instruments NanoScience.

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