

# Quantinuum and BMW Group Expand Landmark Quantum Computing Collaboration with New Multi-Year Partnership

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- The companies plan to continue their co-creation partnership to advance future mobility
- BMW to access the latest generations of Quantinuum systems throughout the partnership
- Advanced materials science research supports a range of next-generation technologies

**Broomfield, Colorado, May 5<sup>th</sup>, 2026** —Quantinuum and BMW Group have formally expanded their ongoing collaboration into a multi-year partnership with a mission to unlock future mobility by applying quantum computing toward advanced materials science.

Since 2021, Quantinuum and BMW Group have been collaborating on joint research focused on tackling complex challenges in industrial chemistry to support the advancement of next-generation mobility. The collaboration has progressed from foundational algorithm development to advanced simulations of molecular systems, allowing the researchers to unlock insights into catalytic activity, reaction pathways, and material performance in energy-relevant environments.

The companies have now agreed to extend the work, positioning the alliance to become one of the longest-sustained commitments between a commercial enterprise and a quantum computing provider to date.

“Quantinuum is focused on driving commercial adoption of quantum computing through close collaboration with industry leaders on high-impact applications,” said **Dr. Rajeeb Hazra, President and CEO of Quantinuum**. “Our expanded partnership with the BMW Group underscores this focus, and we’re excited to scale the meaningful work we’ve been advancing together.”

Researchers at BMW Group are utilizing Quantinuum’s trapped-ion architecture, which provides the high-fidelity operations necessary to accurately simulate molecular systems, particularly electrochemical processes that play a critical role across a range of technologies relevant to sustainable mobility and the design and optimization of fuel cells.

Under the terms of the agreement, BMW Group will leverage successive generations of Quantinuum’s quantum computers. This includes the current Helios system and upcoming generations, Sol (planned for 2027) and Apollo (planned for 2029). This will enable the teams to validate progress at each stage while scaling toward industrially meaningful solutions.

“We have been exploring quantum computing for many years,” said **Dr. Martin Tietze, Vice President of New Technologies at BMW Group**. “Together with partners such as Quantinuum, we translate advances in quantum hardware into real-world applications, including materials optimization, supporting the development of future vehicle generations.”

Quantinuum’s progress toward large-scale, fault-tolerant systems helps to ensure that as the hardware reaches milestones in performance, BMW can apply that computational power to catalyst chemistry research, targeting critical oxygen reduction reaction processes at platinum catalysts to potentially lower costs and improve energy efficiency.

The companies broke new ground in 2024, alongside another commercial partner, as the first to simulate catalytic performance using a quantum computer with results [published](#) in *Nature Partner Journal*.

Beyond its technical achievements, the collaboration has evolved into a deeply connected, cross-disciplinary effort, bringing together quantum scientists, chemists, and engineers in a sustained partnership that reflects both the complexity of the challenge and the scale of the ambition.

## About Quantinuum

Quantinuum is a leading quantum computing company offering a full-stack platform designed to make quantum computing deployable in real-world environments. The company has commercially deployed multiple generations of quantum systems built on the well-established QCCD architecture, which it has implemented with novel designs and capabilities to achieve the industry’s highest accuracy levels based on average two-qubit gate fidelity.<sup>[1]</sup> Quantinuum has active engagements with market leaders across pharmaceuticals, material science, financial services, and government and industrial markets.

The company has a global workforce of approximately 700 employees, including top scientists and researchers. Over 70% of its technology team hold PhDs or Master’s degrees. Quantinuum’s headquarters is in Broomfield, Colorado, with additional facilities across the United States, United Kingdom, Germany, Japan, and Singapore.

For more information, please visit [www.quantinuum.com](http://www.quantinuum.com).

<sup>[1]</sup> As of December 31, 2025.