

IBM and Yonsei University Unveil Collaboration to Bring IBM Quantum System One to Korea

- **Korea set to become the fourth country to have a co-located IBM Quantum System One**
- **The Yonsei - IBM Quantum Collaboration aims to grow the quantum workforce and foster economic opportunities in Korea, a critical step for building a quantum industry**



SEOUL, November 16, 2021 -- Today at the [IBM Quantum Summit](#), IBM (NYSE: [IBM](#)) and Yonsei University announced that Korea is expected to become the fourth country in the world to have an on-premises IBM Quantum System One after the [United States](#), [Germany](#), and [Japan](#).

Expected to be deployed at the Songdo International Campus, this milestone ushers in a new era of quantum workforce development in Korea, which is also driven by the Korea Ministry of Science and ICT to foster about 1,000 researchers and scientists by 2030 . According to the IBM Institute for Business Value's "[The Quantum Decade](#)" report, "only about 3,000 skilled quantum workers exist today, and that base needs to be doubled or quadrupled."

As part of the planned collaboration, Yonsei intends to work with IBM to advance quantum computing and grow the pool of quantum talent, with a goal to make quantum computing practical for the benefit of industry, science and society. IBM and Yonsei University plan to bring together industry, academic, and research institutions in Korea, establishing a local ecosystem to focus on strategically significant research and development activities, and fostering economic opportunities in Korea.

As part of this effort, a high priority will be placed on building quantum programming, application and technology development skills and expertise. This next-generation national quantum competency will follow Korea's already established model in building previous competencies in the semiconductor, electronics, and automobile technology areas.

"IBM brings decades of research to advance quantum computing across three key areas: hardware, software

and ecosystem development. We are committed to the growth of the global quantum ecosystem and fostering collaboration between research communities," said Jay Gambetta, IBM Fellow and VP of Quantum Computing. "IBM is pleased to partner with Yonsei University in Korea to advance the local quantum workforce and we look forward to working closely with the University's team and broader ecosystem."

The announcement is also aligned with the initiative of the Korean Government to develop and grow national competency in quantum technology. The Korea Ministry of Science and ICT announced "[The investment strategy on research and development of quantum technology](#)" this year to increase investment in establishing foundation of quantum study, fostering talent and expanding global collaboration as well as promoting industry innovation based on quantum technology.

Yonsei University joins more than 170 members of the IBM Quantum Network, a global community of Fortune 500 companies, start-ups, academic institutions and research labs working to advance quantum computing and explore practical applications. In Korea, Yonsei will be the second Hub in the region, in addition to the first Hub at Sungkyunkwan University. Samsung Advanced Institute of Technology and Korea Advanced Institute of Science and Technology (KAIST), among others, are also working with IBM Quantum to establish an important foundation for securing national competitiveness in quantum computing.

Seoung Hwan Suh, President of Yonsei University, said, "I believe that quantum computing is the next generation technology that can bring a breakthrough to the high-tech material and bio technology industries. IBM is truly the world leader with hardware and software technology, development roadmaps and clear vision for quantum computing. Yonsei University, which has the largest medical network and research manpower in Korea, expects to be able to create synergy in research and education based on quantum computing through collaboration with IBM. We look forward to partners joining us to help establish Yonsei University as Korea's quantum computing hub."

Sung Shik Won, GM of IBM Korea, continued, "IBM believes that building a global ecosystem and open adoption for quantum computing is key to advancing development and application of quantum computing in science and business. Korea already has outstanding capabilities across various industries and research fields - from bio technology and medical to manufacturing and financial services. This cooperation between IBM and Yonsei University to establish a Quantum computing ecosystem will only serve to further strengthen the country's capabilities."

The IBM Quantum System One at Yonsei is expected to be online in 2023.

Statements regarding IBM's future direction and intent are subject to change or withdrawal without notice and represent goals and objectives only.

About IBM Quantum

IBM Quantum is an industry-first initiative to build universal quantum systems for business and science applications. For more information about IBM's quantum computing efforts, please visit www.ibm.com/quantum-computing/

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