



Opening Statement of Chairman Brian Babin

Full Committee Hearing
Assessing U.S. Leadership in Quantum Science and Technology
January 22, 2026

Thank you for joining us for today's hearing, "Assessing U.S. Leadership in Quantum Science and Technology." I would like to thank our esteemed panel of witnesses for being here this morning and for their continued service to the federal science enterprise.

The Trump Administration has identified quantum science, technology, and engineering as a top research and development priority and a core pillar of U.S. scientific leadership. President Trump's first term marked a turning point in federal quantum policy, with the enactment of the National Quantum Initiative Act elevating quantum to a national focus.

These investments reflect a long-term strategy for American innovation in quantum science, technology, and engineering, and I remain committed to working closely with the Administration to carry these priorities forward.

The federal government plays a central role in supporting fundamental research, large-scale infrastructure, and addressing the long-term challenges that drive innovation in quantum science. These investments lay the foundation for breakthroughs in quantum computing, sensing, and communications. The private sector then plays a vital role in translating those breakthroughs into scalable and commercially viable applications.

As quantum technologies mature, maintaining U.S. leadership will require sustained investment in fundamental research, progress on key engineering challenges, and development of the enabling technologies that support the broader quantum ecosystem. This includes strengthening research consortia, expanding testbeds and infrastructure, improving advanced manufacturing, and ensuring quantum systems can be deployed in real-world environments.

Quantum science also has direct implications for national security and cybersecurity. Preparing for post-quantum cryptography and defending against emerging cyber threats will be essential as these technologies evolve. With adversaries around the world investing heavily in quantum capabilities, the United States cannot afford to fall behind in the global race to quantum supremacy.

The National Institute of Standards and Technology (NIST) has played a leading role in securing our post-quantum future. In August 2024, NIST published its first set of post-quantum cryptography standards to safeguard a wide range of digital information—from sensitive government communications to everyday e-commerce transactions—against quantum-enabled cyber threats. This milestone builds on decades of expertise in measurement science and

information technology and provides essential tools and standards for a secure, quantum-enabled future.

While the National Aeronautics and Space Administration (NASA) is not a formal member of the National Quantum Initiative, the agency has made meaningful contributions through targeted investments. NASA has pursued quantum-enabled technologies for space science and precision measurement, developing tools and instruments that push the boundaries of fundamental physics and address complex computational challenges.

The Department of Energy (DOE) is also driving progress in quantum science through initiatives such as the Genesis Mission and the newly established Office of Artificial Intelligence and Quantum, while supporting research across quantum computing, sensing, materials science, and fundamental physics.

Like many emerging technology sectors, the quantum industry faces a growing demand for skilled talent. The National Science Foundation (NSF) and DOE quantum centers established under the National Quantum Initiative Act have made significant strides in developing educational programs, training initiatives, and industry partnerships to help meet workforce needs. These efforts depend on sustained federal support, and I welcome the opportunity to hear from our witnesses about the work underway.

Both my staff and Ranking Member Lofgren's staff are working collaboratively on a bipartisan reauthorization of the National Quantum Initiative. This effort seeks to reinforce U.S. leadership in quantum science, technology, and engineering, address workforce challenges, and accelerate commercialization.

Today's discussion will inform and guide our legislative work, and I am interested in our witnesses' recommendations on how Congress can strengthen the National Quantum Initiative over the next five years.

Thank you again to our witnesses for being here today. I look forward to a productive discussion.

I yield back.