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Readout of White House Summit on Quantum Industry and Society

Earlier this week, the White House Office of Science and Technology Policy (OSTP) convened industry stakeholders from across the country to discuss how quantum computers and quantum sensors will benefit American society. Challenges and opportunities for increasing United States competitiveness in this critical industry of the future were also discussed.

The summit included a roundtable discussion with Executive Office of the President representatives and leaders from quantum information technology companies. The roundtable focused on understanding the applications of quantum information science, the barriers for transitioning quantum R&D concepts into products or services in a global market, and the potential societal impact of quantum technologies.

Presidential Science Advisor and OSTP Director Dr. Eric Lander gave opening remarks highlighting the benefits of past investments in science and technology on our health, economy, and national security. He commented on the potential for quantum information technology to impact many areas, including biology and medicine. Dr. Lander also stressed the need to work together on understanding the applications and roadblocks for realizing the full potential of this technology.

“Focusing on the hardest, most important problems; making and investing in the right technical bets; and building and growing the scientists, engineers, and entrepreneurs of tomorrow – all in our unique American model of fair and free-market competition *and cooperation* is how we will continue to lead,” said Presidential Science Advisor and OSTP Director Dr. Eric Lander.

Lander spoke about the importance of growing the American high-tech workforce and expanding its diversity by, “not just cloning the people who are in it but expanding to include everybody in this country who wants to be

part of it." The Q-12 Education Partnership was highlighted as a great example of something many of the companies are already doing together to engage students early and broaden the future workforce.

Dr. Jason Matheny, OSTP Deputy Director for National Security, reinforced the Administration's commitment to the National Quantum Initiative and discussed the means OSTP brings to bear for coordination across the U.S. Agencies and with industry and academia.

"The Biden-Harris administration is committed to accelerating fundamental and applied uses of quantum information science, and bringing quantum technologies to fruition," said OSTP Deputy Director Dr. Jason Matheny. "That is why we have an Assistant Director for Quantum Information Science (QIS) in OSTP, two White House Subcommittees focused on quantum, and the National Quantum Coordination Office right here in the building."

Dr. Charles Tahan, OSTP Assistant Director for Quantum Information Science and Director of the National Quantum Coordination Office, highlighted the need for accelerating this technology while finding creative solutions to protect our investments from those who would otherwise take advantage of our open system. He also discussed the release of a report from the White House Subcommittee on Economic and Security Implications of Quantum Science on the vital role foreign talent and international cooperation plays in the U.S. quantum ecosystem. A link to that report is here.

During the panel discussion moderated by OSTP Assistant Director for QIS Dr. Charles Tahan, industry representatives shared their understanding of the applications and associated timelines for useful quantum information technology, and ideas on accelerating while protecting its development. Participants also reinforced the need for continued international cooperation, the development of a future quantum-ready workforce, and the opportunities this field will create for the American people.

Focus sessions included industry presentations on the societal impact of quantum technology and the technical challenges that must be overcome to realize these applications. The urgent need for more STEM education and

high-tech internships was a recurring theme, based on the growing demand from industry to fill jobs in this field. Increasing America's capacity to test quantum technologies was roundly considered a prerequisite for maintaining U.S. leadership. Industry representatives highlighted actions they are taking in this direction and pathways to partner with the Federal government to enable and support a global market energized by fair competition.

The event concluded with an address from U.S. Senator Jack Reed (D-RI), who thanked the companies for coming together and emphasized the great opportunities quantum technologies offers, and also the challenges that must be overcome in this increasingly global enterprise:

"America's success is built on innovation, challenging the status quo, and investing in paradigm-shifting ideas. That is why it is so important we make smart national investments here, because quantum technologies are poised to be the next game-changing opportunity," said U.S. Senator Jack Reed (D-RI).

Roundtable Participants:
Amazon Web Services
Boeing
ColdQuanta
D-Wave
Google
Honeywell
HRL
IBM
Intel
IonQ
Microsoft
Northrup Grumman
PsiQuantum
QC Ware
Quantum Economic Development Consortium
Rigetti Computing
Vector Atomic
Zapata Computing

More on the National Quantum Coordination Office (NQCO): Legislated by the National Quantum Initiative Act of 2018, the NQCO coordinates QIS activities across the U.S. federal government, industry, and academia, including the dissemination of findings and recommendations of the NSTC Subcommittee on Quantum Information Science and the NSTC Subcommittee on the Economic and Security Implications of Quantum Science, including most recently, **The Role of International Talent in Quantum Information Science.**

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