

12/10/2023

The Honorable Frank Lucas
Chairman
Committee on Science, Space, and Technology
U. S. House of Representatives

The Honorable Zoe Lofgren
Ranking Member
Committee on Science, Space, and Technology
U. S. House of Representatives

Dear Mr. Lucas and Ms. Lofgren,

Thank you for your leadership in sustaining and advancing federal programs in quantum science and technology. Quantum computing, quantum sensing, and quantum networking and communications have the potential to transform our lives and address societal grand challenges in national security, healthcare, energy, agriculture, finance, and telecommunications. Maintaining U.S. leadership in this important emerging technology is essential. For this reason, I write in support of the bipartisan National Quantum Initiative Reauthorization Act (H.R. 6213).

Specifically, we support maintaining foundational research programs in quantum science while expanding federal support for engineering, technology development, and first use cases to explore early applications. We also support the diverse funding mechanisms granted to the major science agencies, which ranges from early-stage, high-risk exploratory science for single researchers or small groups at research universities to larger-scale, multidisciplinary centers that bring together the best expertise and specialized instrumentation and infrastructure from across academia, industry, national laboratories, and federal agencies. We also support the legislation's emphasis on expanding STEM education and workforce development programs. Growing highly skilled talent in this nascent field of science and technology is critically important to its long-term success.

The type of innovation ecosystem spurred by this legislation parallels Purdue's approach through our Purdue Quantum Science and Engineering Institute, which has a goal of fostering the development of practical and impactful quantum technologies. Our multidisciplinary approach and strong collaborations with private industry accelerate the pace of innovation, development, and deployment. Purdue is also proud to lead the National Science Foundation Center for Quantum Technologies and we are pleased to be a major academic partner in the Department of Energy Oak Ridge National Lab-led Quantum Science Center. Central to our research efforts is also training the next generation of

quantum scientists and engineers through the Quantum Science Center Summer School and the new online Micro master's degree in Quantum Science to meet growing quantum workforce demands.

Thank you for advancing this critically important legislation.

Sincerely yours,

A handwritten signature in black ink that reads "Karen Plaut". The signature is written in a cursive style with a long horizontal flourish at the end.

Karen Plaut, PhD
Executive Vice President for Research
Purdue University