

# PURDUE QUANTUM SCIENCE AND ENGINEERING INSTITUTE

The Purdue Quantum Science and Engineering Institute fosters the development of practical and impactful aspects of quantum science.



The Purdue Quantum Science and Engineering Institute (PQSEI) convenes leading quantum researchers in state-of-the-art facilities and leverages rich collaborations with industry, government and academia to drive discovery. PQSEI is optimally poised for investigation of new quantum phenomena and development of chip-scale quantum systems ideal for tomorrow's technologies.

**60+**  
FACULTY MEMBERS  
WITH EXPERTISE IN  
QUANTUM RESEARCH

## QUANTUM RESEARCH AREAS

PQSEI researchers advance basic and applied quantum science and engineering in broad quantum areas such as:

- Atomic and molecular science and quantum photonics
- Quantum materials and devices
- Quantum technologies including quantum communication, sensing and computing

## CENTERS AND PARTNERSHIPS

- Center for Quantum Technologies
- Indiana Quantum
- Midwest Quantum Collaboratory
- Quantum Collaborative
- Quantum Science Center (QSC)
- Quantum Economic Development Consortium

## WORKFORCE DEVELOPMENT

Engineers and scientists are needed to develop quantum technologies that promise to revolutionize the way we communicate, compute and sense the world around us. Purdue provides curricula, experiential learning and outreach efforts that are developing the quantum workforce of the future.



Researchers working in the Hybrid Integrated Quantum photonics lab at Purdue University. (Charles Jischke/Purdue University)



During this year's poster session, QSC members presented projects related to ion-trap technologies, dark matter detectors and more. (Dave Mason/Purdue University)

Purdue hosts the Quantum Science Center's annual **Quantum Summer School**, which includes talks from industry, academia and government experts, as well as hands-on and applied exercises. Participants — primarily graduate and postdoctoral students — develop and broaden personal and business networks that will shape their careers and the future quantum workforce.



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