

FRAUNHOFER INSTITUTE FOR PHOTONIC MICROSYSTEMS IPMS

# PRESS RELEASE

PRESS RELEASE

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## Saxony launches network for quantum technologies – starting signal for “Quantum Saxony”

Quantum sciences and applications are rapidly advancing as key technologies for secure communication, high-performance computing, new materials, and ultra-precise sensing. To strategically advance these future technologies and transfer them into industrial applications, the Saxon research network for quantum technologies, SAX-QT “Quantum Saxony”, is being launched today. The aim is to strategically pool, further develop, and make internationally visible the expertise in quantum technologies within the Free State of Saxony. The network is coordinated by Zittau/Görlitz University of Applied Sciences, the Fraunhofer Institutes for Photonic Microsystems IPMS and for Machine Tools and Forming Technology IWU, and the Leibniz Institute for Solid State and Materials Research IFW Dresden.

The EU and the Free State of Saxony are supporting the network’s establishment phase with three million euros in ERDF funding until the end of 2027. This setup period will create a sustainable structure that ensures national and international visibility and enables close integration with European pilot lines.

At the launch of the network on 17 December 2025, Saxon State Minister for Science Sebastian Gemkow emphasized: “Quantum technologies had been classified as a topic of particular strategic importance within the White Paper for research in public scientific institutions in the Free State of Saxony. They have also been identified as key technologies of the High-Tech Agenda Germany and are thus becoming more important than ever within a scientific context, and, above all, economically. Consequently, Quantum Saxony is establishing a network right at the center of national, European, as well as global developments and strategic processes.”

### Strengthening Saxony’s position in the quantum sector together

Quantum Saxony connects expertise from universities and non-university research institutions and involves associations, start-ups, and industry partners. The goal is to develop quantum technologies across all fields and to transfer them into industrial applications.

The network is an open platform that continuously integrates additional partners and intensifies exchanges among researchers, industry, and policymakers. Saxony’s interdisciplinary strengths - which range from materials science and micro- and nanoelectronics to software development - are thus specifically driven toward economic utilization.

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#### Editor

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Another key objective is the development of qualified specialists: through targeted education and continuing training programs, young quantum experts will be trained for careers in research and industry.

Another central aspect of the network is the qualification of the new generation: through targeted education and training programs, young quantum experts will be trained for research and industry.

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### About Fraunhofer IPMS

Fraunhofer IPMS is a leading international research and development service provider for electronic and photonic microsystems in the application fields of Smart Industrial Solutions, Bio and Health, Mobility as well as Green and Sustainable Microelectronics. Research focuses on customer-specific miniaturized sensors and actuators, MEMS systems, microdisplays and integrated circuits as well as wireless and wired data communication. The institute develops systems and components on 200 and 300 mm wafers in their state-of-the-art clean rooms. Services range from consulting and design to process development and pilot production.

### Fraunhofer IPMS' role in the network

Fraunhofer IPMS plays a central coordinating role within SAX-QT. As an interface between microelectronics, semiconductor technology, and quantum technologies, Fraunhofer IPMS contributes its many years of experience in application-oriented research, industrial cooperation, and technology transfer. IPMS's expertise enables a fast track "from lab to fab," i.e., from the research laboratory to industrial production. This allows scientific findings to be directly translated into market-ready solutions, making Fraunhofer IPMS a key driver of the network.

"Our industry-grade clean room enables us to test new quantum materials and components under real production conditions and transfer them to pilot production," says Dr. Benjamin Lilienthal-Uhlig, Head of Next Generation Computing at Fraunhofer IPMS. "This is a unique selling point that significantly strengthens Saxony's innovative power. Start-ups and small to medium-sized companies in particular benefit from the fact that we can offer them pilot production at the wafer level."

In SAX-QT, Fraunhofer IPMS combines its expertise with partners from science and industry, including Infineon, GlobalFoundries, RWTH Aachen University, imec, CEA-LETI, VTT, and Forschungszentrum Jülich. This creates synergies along the entire innovation chain – from basic research and technology development to industrial application.