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Quantum India Bengaluru 2025 to focus on 5 sectors including healthcare

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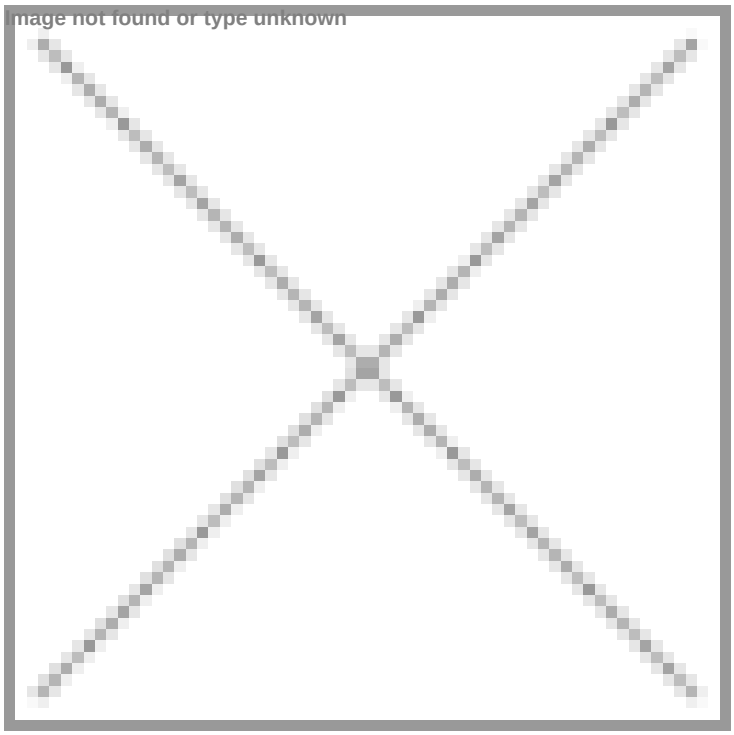
Karnataka to host India's first Quantum India Bengaluru Summit 2025 on July 31



"Quantum India Bengaluru 2025 has been thoughtfully designed to unite innovation with real-world impact. Moving beyond conventional academic silos, we have identified five priority sectors of healthcare, strategic security, computing and AI, quantum hardware, and societal engagement, where quantum technologies can create both immediate and long-term value," said Prof. Arindam Ghosh, Professor, Indian Institute of Science (IISc) & Quantum India Bengaluru (QIB) 2025 Conference Chair.

Prof. Arindam Ghosh further said "The summit actively builds an ecosystem where collaboration between academia, startups, industry, and strategic sectors begins at the foundational level. Our vision is to drive inclusive, application-focused quantum development that delivers meaningful economic and technological outcomes aligned with national priorities".

With a mission to lay a solid foundation for the field of quantum technologies, and to establish a framework to promote collaborations between physicists, material scientists, computer scientists and engineers, IISc launched its Quantum Technology Initiative (IQTI) in September 2020.

A year later Quantum Research Park (QuRP), a Hub for Quantum Computing and related technologies is a project administered by Foundation for Science Innovation and Development (FSID), IISc with support from Karnataka Innovation and Technology Society (KITS), Government of Karnataka was set up at IISc. The state government has announced a grant of Rs 48 crore for the 2nd phase of QuRP.

“QuRP will encourage scientific inventions & innovations in the field of Quantum Computing and related technologies. We envision creating QuRP to foster skill development, mentorship, and industry/startup collaborations in the domain of quantum technologies,” Prof. Arindam Ghosh added.

It may be noted that the Union Cabinet had approved the National Quantum Mission (NQM) on April 19, 2023 at a total cost of Rs 6003.65 crore from 2023-24 to 2030-31, aiming to seed, nurture and scale up scientific and industrial R&D and create a vibrant & innovative ecosystem in Quantum Technology (QT). This will accelerate QT led economic growth, nurture the ecosystem in the country and make India one of the leading nations in the development of Quantum Technologies & Applications (QTA).

As part of this mission, four Thematic Hubs (T-Hubs) have been set up, bringing together 14 Technical Groups across 17 states and 2 Union Territories. These hubs focus on technology innovation, skill development, entrepreneurship, industry partnerships, and global collaborations, ensuring a truly national impact. Women scientists from every corner of the country are actively encouraged to participate and benefit from the mission’s exciting programmes.

The four T-Hubs have been established across leading institutions in India: Indian Institute of Science (IISc) Bengaluru; Indian Institute of Technology (IIT), Madras in association with the Centre for Development of Telematics, New Delhi; Indian Institute of Technology (IIT), Bombay and Indian Institute of Technology (IIT), Delhi.

These hubs were selected through a rigorous competitive process and each hub focuses on a specific quantum domain, driving advancements in Quantum Computing, Quantum Communication, Quantum Sensing & Metrology, and Quantum Materials & Devices.