Three- Day Workshop on

QUANTUM TECHNOLOGIES: FUNDAMENTALS, COMPUTATION AND APPLICATIONS

Date: 19-21, January 2026 | [Monday- Wednesday]
Venue: KSTA Auditorium | Time: 10.00 am - 05.30 pm

ABOUT THE PROGRAM:

Quantum Technologies are emerging as a transformative force with the potential to redefine computation, communication, sensing and intelligent systems. Rapid advancements in quantum computing, quantum communication, quantum sensing, and quantum-enabled artificial intelligence are expected to significantly impact science, industry, national security, healthcare and sustainability.

Recognizing the growing importance of quantum technologies and the need to build foundational knowledge and capacity, KSTA organizing this Three-Day Lecture Series to provide participants with a comprehensive understanding of the fundamental principles, computational frameworks and real-world applications of quantum technologies. This program aims to bridge the gap between theoretical concepts and practical perspectives, while also introducing participants to emerging research directions, national initiatives and career opportunities in the quantum domain.

The lecture series will benefit PG students, research scholars, and faculty members from science, engineering, and interdisciplinary backgrounds who wish to familiarize themselves with quantum technologies and their future potential.

TOPICS COVERED:

- Introduction to Quantum Technologies: Concepts, Ecosystem and Global Landscape
- Fundamentals of Quantum Mechanics and Mathematical Foundations
- Quantum Computing Architectures, Qubits and Hardware Platforms
- Quantum Algorithms and Computational Models
- Quantum Programming Models, Tools and Simulations
- Quantum Machine Learning and Hybrid Quantum–Classical Systems
- Quantum Communication, Cryptography, Sensing and Imaging
- Quantum Research, Industry Applications, National Initiatives and Career Opportunities

TARGET GROUP

PG Students/ Research Scholars/ Faculty Members who are interested in Quantum Technologies and its applications

REGISTRATION

The program will be held offline at KSTA, Bengaluru.

Registration fee

- Faculty and Industry participants - **Rs. 750/-**
- PG Students - **Rs. 299/-**
- Research Scholars - **Rs. 499/-**
- KSTA Associates /Institutional Members - **Rs. 399/-**

- Participation is limited to 80 members on a first-come, first-served basis. The First registration of 35 participants will get the free accommodation.

REGISTRATION OPEN: 20.12.2025
LAST DATE FOR REGISTRATION: 15.01.2026
CONFIRMATION OF PARTICIPATION: 16.01.2026

SCAN & PAY

https://forms.gle/UiyoxJXhxVzDdzGg9

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