

## **Report on Institution Visit to CUSAT – 13th November 2025**

A team of **20 students and 3 faculty members** from the Department of Physics visited the Cochin University of Science and Technology (CUSAT) on 13 November 2025 as part of an institutional exposure programme. The visit aimed to provide students with hands-on understanding of modern research facilities and current advancements in physics and allied fields.

The programme began in the morning with a visit to the International School of Photonics (ISP). Students were divided into three groups and guided through five advanced research laboratories. They received detailed demonstrations and interactions from research scholars and faculty members. Major equipment and experimental setups introduced during the visit included the RF sputtering unit, thin-film coating systems, thermal lensing experimental setup, laser speckle photography unit, optical fiber design instruments for sensing applications, UV–Visible spectrometer, and photoluminescence spectrometer. Through these demonstrations, students gained valuable exposure to thin-film fabrication, optical characterization techniques, laser-based measurements, and photonic sensor design.

After lunch, the team visited the Quantum Century Exhibition organized at CUSAT. The exhibition presented the historical development and evolution of quantum theory, covering major milestones, fundamental experiments, and applications. Exhibits included sections on the Raman Effect, quantum computing, quantum biology, quantum dots, and interactive models explaining various quantum phenomena. The volunteers provided engaging explanations, making complex concepts accessible and interesting.

Students particularly enjoyed the puzzle corners, where quantum-themed problem-solving stations were set up. Displays featuring early computers and pre-transistor-era devices generated curiosity about the technological evolution leading to modern electronics. The virtual reality room, offering an immersive 3D tour of CERN, was another major highlight. The “QD Shop” at the venue offered puzzles, books, souvenirs, and Quantum Year T-shirts, adding an enjoyable element to the learning experience.

Overall, the visit provided an enriching experiential learning opportunity for both students and faculty. It helped bridge theoretical knowledge with real-world applications in photonics, spectroscopy, and quantum science. The team concluded the visit and returned by 5:30 PM, carrying valuable insights and renewed enthusiasm for scientific exploration.





