IIIT-Delhi establishes a new Center on Quantum Technology

New Delhi, 21st November 2022: The Indraprastha Institute of Information Technology Delhi (IIIT-Delhi) has established a new Center for Quantum Technologies (CQT). The Center will focus on leading the research and development of different aspects of quantum technologies, actively engage with the industries and government bodies for product development, promote interdisciplinary research, collaborate with other research labs in India and abroad, and impart relevant skills to the students to pursue a successful career in quantum technologies. CQT, and the Department of ECE are already conducting a B.Tech. Minor program in Quantum Technologies since August 2022.

Quantum technology has emerged as the key to the future. The general sentiment about this platform is full of surprises and promises. In recent years, leading universities and industries worldwide have engaged in the tireless endeavor of applying principles of quantum mechanics towards revolutionizing computing, bolstering the security of communication networks, and designing materials and circuits with unprecedented efficiencies and capabilities.

CQT is currently led by Dr. Sayak Bhattacharya and involves nine faculty members across different disciplines. The numbers are expected to grow substantially over the coming years. The associated faculty members are highly skilled in all aspects of quantum technologies: theory, design of novel materials, circuits, secured communication networks, and finally, their implementation. The Center will be instrumental in paving the way for an exciting time ahead.

"The **Center for Quantum Technologies** at IIIT-Delhi will be engaged in interdisciplinary research and development in quantum computing, quantum communication, and quantum materials and devices. It will work towards developing 'affordable solutions' with a focus on India-specific opportunities and requirements. It will also help develop skilled workforce at undergraduate, graduate, and post-graduate levels that can advance quantum technologies in India", the Director, Prof. Ranjan Bose, said in an official statement.

Prof. Ravindra Pratap Singh from Physical Research Laboratory (PRL) Ahmedabad, who took part in several discussions with the Center during its inception, congratulated IIIT-Delhi and said, "Quantum technology with its four verticals - Quantum computing, Quantum

Communication, Quantum sensing and metrology, and Quantum materials is going to be disruptive. It will change the way we compute, communicate and measure time and displacement. IIIT-Delhi must be complimented for taking the right step at the right time by forming a Center of Quantum Technology to direct its effort in this exciting area of science and technology and training quality human resources for the industry."