



Centre for Development of Telematics (C-DOT) signs MoU with Indian Institute of Technology, Roorkee (IITR)

C-DOT sets up a Centre of Excellence (CoE) at IIT Roorkee

CoE will serve as a dedicated hub for high-impact R&D in advance communication technologies, fostering joint academic–industry collaboration for a self-reliant and Viksit Bharat in the telecom sector

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The Centre for Development of Telematics (C-DOT), a premier R&D centre of the Department of Telecommunications (DoT), Ministry of Communications, Government of India, signed a Memorandum of Understanding (MoU) with the Indian Institute of Technology Roorkee (IITR), a leading institution of national importance.

As part of the MOU, C-DOT is setting up a Centre of Excellence (CoE) at IIT Roorkee. The primary objective of C-DOT Centre of Excellence (CoE) at IIT Roorkee, is to accelerate indigenous research, innovation and capacity building in advanced communication technologies. CoE will have a strong focus on research in the areas of wireless communication, Quantum technologies, Cyber security and AI based applications. Establishing CoE will promote academia–industry synergy leveraging academic expertise of IITR and industry strength of C-DOT and enable students, researchers, and start-ups to contribute to India's innovation and self-reliance journey, It will strengthen India's leadership position in global telecom innovation. The centre will drive joint research and prototype development in key emerging domains including 5G/6G, RF-Sub-THz integrated circuits, sensors, millimeter wave beamforming antennas with integrated ICs, V2X Communication, data-driven wireless communication technologies, energy efficiency etc.

The MOU was signed in the presence of Prof K K Pant, Director, IIT Roorkee and Dr Rajkumar Upadhyay, CEO, C-DOT. Faculty members from the institute and senior officials from C-DOT were also present during the function. Signing of the MoU was followed by the inauguration of the new Centre of Excellence (CoE) dedicated to advancing communication technologies and high-impact R&D.

Leveraging C-DOT's deep expertise in development of indigenous telecom solutions, the CoE will serve as a dedicated hub for high-impact R&D, supporting start-ups, developing intellectual property, and enabling continuous knowledge exchange through workshops, training programs, and joint academic-industry engagements. This shall strengthen India's leadership position in global telecom innovation and contribute substantially to the nation's technological self-reliance.

During the day, as part of the sixth Prof. A.K. Kamal Memorial Lecture Series, Dr. Rajkumar Upadhyay, CEO, C-DOT also delivered a lecture, on "Building Indigenous Communication Technologies for Viksit Bharat". The talk focussed on India's telecom landscape, Bharat 6G Vision, telecom value chain, standards, and opportunities for India. Dr Upadhyay also highlighted C-DOT's indigenous solutions in the areas of 4G/5G, TRINETRA cybersecurity solutions, secure quantum communication (QKD &PQC), Disaster management, AI-enabled advance telecom applications such as Sanchar Saathi, Fraud detection systems and Mission Critical Communication (MCX).

Describing the vision for the CoE, **Dr. Rajkumar Upadhyay, CEO, C-DOT**, said, *"This collaboration brings together expertise of India's leading academic institute and R&D strengths of C-DOT, to accelerate indigenous telecom innovation. Together, IIT Roorkee and C-DOT will build technologies that reduce dependence on foreign systems and create new opportunities for India to lead in advanced domains such as 5G, 6G, AI and secure communication systems"*.

Speaking on the significance of this partnership, **Prof. K.K. Pant, Director, IIT Roorkee**, said, *"This collaboration marks an important milestone for IIT Roorkee as we join hands with C-DOT to advance India's next-generation telecom capabilities. IIT Roorkee has a strong legacy in communication engineering, semiconductor technologies, and emerging wireless systems that will complement C-DOT's national mission for secure, indigenous and future-ready telecom solutions. The CoE will provide a transformative platform for our faculty, researchers and students to co-develop technologies of strategic national importance and contribute to India's long-term vision of technological leadership."*



Dr. Rajkumar Upadhyay, CEO of C-DOT, and Prof. Kamal.K. Pant, Director, IIT Roorkee at the signing ceremony of the MoU.



Delegation from C-DOT and IIT Roorkee during the ceremony.



Inauguration of CoE by Dr. Rajkumar Upadhyay, CEO, C-DOT and Prof K K Pant, Director , IIT Roorkee



Dr. Rajkumar Upadhyay, CEO, C-DOT addressing students at IIT Roorkee as part of sixth Prof A K Kamal memorial lecture



Students attending the Sixth Prof A K Kamal memorial lecture at IIT Roorkee

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