

दूरसंचार बिभाग PEPARTMENT OF TELECOMMUNICATIONS



ISO 9001:2015



26th June 2025, Thursday (11:30 – 13:00 Hrs)

Link for joining the webinar: https://cdotmeet.cdot.in/vmeet/rooms/4ai-dbm-nsm-c8f/join



Webinar Objective

5G, 6G and beyond wireless technologies have been gaining great interest from academia, industry, users and the policy makers due to its capabilities and use cases that are expected to be supported. Optical x-haul technologies are key enabler to achieve the true potential of 5G and beyond networks to meet the enhanced technical requirements in respect of high data rates, low latency and near zero jitter parameters. The advancements in Optical Transport Networks (OTN) and Optical access technologies such as DWDM, GPON, Radio Over Fibre, etc. strengthen the state of backhaul, midhaul and fronthaul networks to support 5G and future networks.

Webinar focuses on key aspects of optical access technologies and ongoing research in mitigating the challenges expected in 6G and beyond networks. Webinar aims to help the participants to keep them updated in the latest technological advancements in Optical x-haul access technologies and to provide the participants a platform to enhance contributions in global standardization activities. Acclaimed experts from Academia and Industry shall deliver a talk on various topics.

Inaugural Session (11:30 - 11:45 Hrs)				
11:30 - 11:35	Welcome Address	Sh. Jasvir Singh Panesar	Director (FA), TEC	
11:35 - 11:40	Inaugural Address	Sh. Rakesh Desai	DDG (FA), TEC	
11:40 - 11:45	Key Note Address	Ms. Tripti Saxena	Sr. DDG & Head, TEC	

Technical Session (11:40 - 13:00 Hrs)

S.	Time	Name of the Topic	Expert Speakers
No.	(Hrs.)		
1	11:45-12:05 12:05-12:10	-PON for converged Optical Access -Q&A	Dr. Kanwar Jit Singh <i>Vice President of Technology,</i> Tejas Networks Ltd.
2.	12:10-12:30 12:30-12:35	-Passive Optical Network Based Front hauling for Coordinated Multi- Point in Future 6G Networks -Q&A	Dr. Atri Mukhopadhyay Assistant Professor School of Electrical and Computer Sciences IIT Bhubaneswar
3.	12:35-12:55 12:55-12:58	-Analog radio over fiber solution in FR2 band for 5G/6G fronthaul links -Q&A	Dr. Manas Srivastava, <i>Product Specialist, Photonics</i> Avirata Defence Systems Pvt. Ltd.
4.	12:58-13:00	Vote of Thanks -Sh. Deo Pratap, Assistant Director(FA), TEC.	

Expert speakers



Dr. Kanwar Jit Singh holds a Ph.D. from University of California at Berkeley in the area of VLSI CAD and a B.Tech degree from Indian Institute of Technology at Kanpur. As a Principal Investigator in Bell Labs Research, he worked on VLSI CAD systems and several trend-setting VLSI devices: the first Single-Chip Color CMOS Video Camera, a Multi-Processor DSP, and Traffic-Classification Engine. In 2000, he co-founded a startup in the US working to develop high-capacity Core Router, which was acquired by UTStarcom in 2003. KJ relocated to India in 2005 to join Tejas Networks, a leading Indian Telecommuncation Product company focused on Optical Networks. He is currently Vice President of Technology and part of the team setting the technology strategy and working on new growth areas for the company.



Dr. Atri Mukhopadhyay is an Assistant Professor at the Indian Institute of Technology (IIT) Bhubaneswar. He completed his Ph.D. at IIT Kharagpur in 2019 and pursued postdoctoral research at the CONNECT Centre, Trinity College Dublin, Ireland. Before joining IIT Bhubaneswar, he was an Assistant Professor at the Birla Institute of Technology and Science (BITS) Pilani, Hyderabad Campus. During his postdoctoral work, he contributed to the development of Mininet Optical, an extension of the Mininet emulator that supports optical network simulations. He also worked on the CODYSUN project, funded by the European Space Agency (ESA), which focused on spectrum sharing between satellite and terrestrial networks.

His research focuses on access networks, with an emphasis on MAC protocol design and resource allocation. His work has been published in leading journals such as the Journal of Light wave Technology, IEEE Transactions on Wireless Communications, IEEE Transactions on Network and Service Management, Journal of Optical Communication and Networking, and IEEE Systems Journal. Dr. Mukhopadhyay also serves as a Technical Program Committee (TPC) member for conferences such as IEEE International Conference Communications (ICC) and IEEE International Conference on Advanced Networks and Telecommunications Systems and regularly reviews manuscripts for top scientific journals.



Dr. Manas Srivastava received the M.S. (Research) and Ph.D. degrees from the Indian Institute of Technology (IIT) Madras, Chennai, India, in 2013 and 2019, respectively. He was a Postdoctoral Researcher with Photonics Systems and Sensing Laboratory, Dublin City University, Dublin, Ireland. He is currently working with Avirata Defence Systems, Hyderabad. His research interests include radio-over-fiber systems, optical frequency combs, photonic integrated circuits, fiber lasers, all-optical signal processing, and optical communications.