

Optical Communication Networks and Patenting Rights

The third technical talk by the Dept. of ECE for this even semester was conducted on 3rd March 2018 by **Dr. Muralidhar Kulkarni, Professor, Dept. of ECE, NITK Suratkal** on the topic “**Optical Communication Networks and Patenting Rights**” for the students of sixth semester. The formal inaugural function was graced by the presence of Head of the Dept. Dr. D V Manjunatha and Dr. Richard Pinto, Professor, Dept. of ECE.

Dr. Kulkarni has served in various capacities in industry and teaching for the last 35 years. He has held



the positions of Scientist in Instrumentation Division at the Central Power research Institute, Bangalore, Aeronautical Engineer in Avionics group of Design and Development team of Advanced Light Helicopter (ALH) project at Helicopter



Design Bureau at Hindustan Aeronautics Limited (HAL), Bangalore, Assistant Professor at the Electrical Engineering Department of UVCE, Bangalore and as an Associate Professor in ECE Department at the Delhi College of Engineering (DCE), Delhi. He also established the IIIT, Dharwad to take forward IIIT as an

institute of excellence in 2015 as its OSD Presently he is Prof Incharge of Training and Placements at NITK.

The talk began with briefing the evolution in information systems, fundamentals of Optical Fiber Communication. He stressed on the need for optical communication to satisfy the exploding demand for bandwidth in multiservice network which includes remote access outsourcing, wireless voice/data services, business extranet service, e-commerce, banking and entertainment are few amongst numerous applications. The talk continued by discussing the technology behind OFC like WDM, Bit Error Rate, Dispersion in Fiber Optics and challenges faced in this field. The talk proceeded by highlighting the advances in OFC which SONET, Fiber Distributed Data Interface, Dual Queue



Distributed Bus and more advanced systems like Trans Atlantic Telecommunications. The expert made the students to realize the growing demand of OFC and necessity to understand this niche area being an electronics and communication engineer. The students were encouraged to pursue

their final year academic projects in the area of Fiber optics and patenting rights.

The talk concluded by discussing few ongoing research in NITK and also the interested students were invited to the campus to make use of the available resources.