KITS KKR & KSR Institute of Technology & Sciences



(Approved by AICTE New Delhi, Affiliated to JNTU Kakinada, Accredited by NAAC with "A" Grade) Department of Electronics and Communication Engineering

WORKSHOP REPORT

DATE: 15th and 16th February 2019 EVENT: WORKSHOP TIME: 9.30 AM to 3.30 PM VENUE: ECAD Lab& MWOC LAB ORGANIZED BY: SPACE, E.C.E Dept. FACULTY INCHARGE: Mrs. K.Sowjanya



EVENT DESCRIPTION:

The ECE association "SPACE" conducted a two day workshop on "OPTICAL FIBER **TELECOMMUNICATIONS**" by **SHAIK RAHIMAN**, M.Tech, Telecom Engineer, saudi arabia, from 15th to 16th February 2019 from 9.00AM to 3.40 PM. This workshop was conducted to boost the student's knowledge towards Optical Communications.



SESSION ACTIVITIES: Day 01 15th February 2019:

The Department of E.C.E has made proper arrangements for transportation for the resource person to the campus. As per the given instructions by the **Dr. Siva Ganga Prasad**, **HOD ECE dept**., the faculty incharge **Mrs.K.Sowjanya** made proper arrangements for this event. The program started with opening remarks of HOD. One of the student of IV ECE introduced the speaker to the students. Exactly at 9.30PM the Workshop was started.



In this session the resource person covered the following topics

- Optical communication
- Advantages of optical communication
- Basic concepts of optical communication
- Color codes of optical communications
- Optical connectors

Optical communication, also known as optical telecommunication, is communication at a distance using light to carry information. It can be performed visually or by using electronic devices. An optical communication system uses a transmitter, which encodes a message into an optical signal, a channel, which carries the signal to its destination, and a receiver, which reproduces the message from the received optical signal. When electronic equipment is not employed the 'receiver' is a person visually observing and interpreting a signal, which may be either simple (such as the presence of a beacon fire) or complex (such as lights using color codes or flashed in a Morse code sequence).

Free-space optical communication has been deployed in space, while terrestrial forms are naturally limited by geography, weather and the availability of light. This article provides a basic introduction to different forms of optical communication. In the afternoon session the practical session was conducted in the microwave and Optical Communication Lab



Day 02 16th February 2019:

On the second day completely engaged with preparation of OFC Splicing and tools required for OFC Splicing. Student presented good interest in practical session.



He explained FTTH concept with zeal. Fiber to the home (FTTH), also called "fiber to the premises" (FTTP), is the installation and use of optical fiber from a central point directly to individual buildings such as residences, apartment buildings and businesses to provide unprecedented high-speed Internet access. FTTH dramatically increases the connection speeds available to computer users compared with technologies now used in most places.

While FTTH promises connection speeds of up to 100 megabits per second (Mbps) -- 20 to 100 times as fast as a typical cable modem or DSL (Digital Subscriber Line) connection -- implementing FTTH on a large scale will be costly because it will require installation of new cable sets over the "last links" from existing optical fiber cables to individual users. Some communities currently enjoy "fiber to the curb" (FTTC) service, which refers to the installation and use of optical fiber cable to the curbs near homes or businesses, with a "copper" medium carrying the signals between the curb and the end users.



The speaker shared his knowledge with the students. All IV year students actively participated in the work shop. In the valedictory function, he was honored by the Prof. K.Madhusudhan sir with a Shalv and Memento. Finally the session ended with NATIONAL ANTHEM.

Edited By: Mr. Maduguri Sudhir Ms. K.Leela Rani