

WEBINAR

“TOWARDS A FUTURE OF WDM-POF NETWORK WITH USER AND ENVIRONMENT FRIENDLY FEATURE”

Engineering Education Technical Division (E2TD), IEM



Synopsis

Polymer Optical Fibers (POFs) replace traditional communication media such as copper and glass step by step within short distance communication systems, mostly because of their cost-effectiveness and easy handling. POFs are used in various fields of optical communication, e.g. the automotive sector or in-house communication. The current “state of the art” are single mode communication systems. These systems use only one wavelength for communication, which limits the bandwidth. For future scenarios, this traditional technology is the bottleneck of bandwidth (e.g. for HDTV with IP-TV). One solution to surpass this limitation is to use more than one wavelength over one single fiber, a technique known as WDM (wavelength division multiplexing). This multiplexing technology requires two more technical key elements: a multiplexer, which combines the multi-wavelengths signals into one fiber and a demultiplexer at the end of the network to separate the colored signals. This presentation discusses the overall POF technology for small world communication from device fabrication, device types, configurations and applications. Our solution supports the basis of a wavelength division multiplex (WDM) system in the visible spectrum. Discussion will focus on the technologies that have been developed in our laboratory concerning user friendly approach, ease of maintenance, safety and high-performance solution.

Speaker's Profile

Ir. Prof. Dr. Mohd Syuhaimi Ab Rahman began his career at Universiti Kebangsaan Malaysia (UKM), in mid-2007 as a lecturer and appointed as a senior lecturer in early 2008. In January 2010, he was appointed as Associate Professor in the Department of Electrical Engineering, Electronics and Systems. His specialization is in the field of electronic engineering specifically in optical communication system. He has been involved in many impact researches, academic writing, teaching, supervision, leadership positions, registered prototype and innovation, policy development and community services. He was promoted to full Professor at the age of 33 years old; which is very young and rare in Malaysia. This has demonstrated his outstanding personality and contribution to the field of science and technology. He was a Deputy Dean Academic in Faculty of Engineering and Built Environment before been promoted to Director of Alumni Relation Center, Universiti Kebangsaan Malaysia.

**Free admission for members | Register online
at www.iem.org.my**

**Wednesday
01 July 2020
2.30pm - 4.30pm**

