Indian Institute of Technology Kanpur

Women in Photonics

Event sponsored by

IEEE photonics SOCIETY

Date: 5th Nov 2016
Venue: Lecture Hall Complex (LHC)

Schedule

14.00-14.15	**Registration for non-IITK students (LHC Foyer)**
14.15-14.30	**Introduction to the event (Informal) (LHC Foyer)**
14.30-15.45	**Posters by student volunteers of IIT Kanpur (LHC Foyer)**
15.30-16.00	**Tea (LHC Foyer)**
16.00-17.00	**Signal processing - there is something beyond electronics!** **- Seminar by Dr. Deepa Venkitesh, Department of Electrical Engineering, IIT Madras (L-14)**
17.00-19.00	**Visit to research labs for Demo experiments (Southern Labs)**

Seminar Abstract: For the past few decades, 'signal processing' used to always mean the use of ubiquitous electronic technologies to process and extract relevant information from the available data. The data available and hence the requirements in processing rates in today's electronic world is humongous – thanks to the 4G and 5G cellular technologies, the 4K and higher resolution television transmissions, high speed internet, internet of things, cloud computing and so on. However, the processing capabilities of electronic devices have not scaled proportionately. Thus, there is a paradigm shift in the information processing strategies– processing can be done possibly at the speed of light, when optical technologies are adapted. This talk would give an overview of optical signal processing with some illustrative examples.

Speaker Bio: Dr. Deepa Venkitesh is currently an Associate Professor at IIT Madras. She was the university topper and gold medallist during her undergraduate and post-graduate education from the University of Kerala. She received the best thesis award (2008) from ILA for her Ph.D (Physics) thesis from IIT Bombay. She is the recipient of the Young Faculty Recognition Award for teaching and research at IIT Madras in 2012. Her research interests are in nonlinear optics, optical signal processing for optical communication, optical fiber amplifiers and fiber lasers.

Volunteer assistance: IITK Student chapter of OSA   **All interested members are welcome.**