

## Distinguished Seminar on

Basic Researches on 300GHz-Band Millimeter-wave/THz-wave

by

Dr Keren Li

National Institute of Information and Communications Technology

**Date : 27 November 2015 (Friday)**

**Time : 10:50 am – 11:50 am**

**Venue : Room 15-202, 15/F, meeting room of State Key Laboratory of Millimeter Waves, 15/F, Academic 3, City University of Hong Kong**

### Abstract

Recently, a new frequency range has been opened to our researchers. New Question ITU-R 237/1, "Technical and operational characteristics of the active services" was developed and approved in 2013 to encourage administration to study the technical and operational characteristics of active services in the frequency range 275-1000 GHz. The first band in this range is 300 GHz-band: from 275 to 320 GHz. This talk will present our recent research activities on this band, such as investigation of the properties of dielectric substrates, characteristics of transmission lines, propagation of the wave, antennas and their integration with the active circuits, as well as the measurement techniques for this band, focusing its application in future high-speed wireless communication. (ITU-R: International Telecommunication Union, Radio communication)

### Biography

**Dr Keren Li** received the Ph.D. degree in optical communications from the University of Tokyo, Tokyo, Japan, in March 1991. He joined the University of Electro-communications (UEC) as a Research Associate from April 1991, and became a Lecturer in April 1994, and an Associate Professor in February 1997. Since April 1997, he joined National Institute of Information and Communications Technology (NICT, former Communications Research Laboratory: CRL), Tokyo, Japan, in April 1997, and became a senior researcher. His research interests include electromagnetic theory, microwave engineering, wireless communications (UWB radio system and millimeter-wave system), optical communications and photonic devices such as optical modulators and photodetectors for high-speed optical communications, microwave photonics, antennas, and high-speed wireless communication systems using millimeter-wave and THz-wave.

Dr. Li is a member of the Institute of Electrical and Electronics Engineers (IEEE), a member of the Institute of Electronics, Information and Communication Engineers (IEICE) of Japan, a member of the Institute of Electrical Engineers (IEE) of Japan. He was an editorial board member of IEICE Journal since May 1999 to May 2001, and is a councilor of the Institute of Electronics, Information and Communication Engineers (IEICE) since May 2001 to April 2005. He serves as IEEE MTT-S Japan Chapter Secretary, since May 2005 to April 2009.

**\*\*\* ALL ARE WELCOME \*\*\***

### Enquiries:

Prof Chi Hou Chan, State Key Laboratory of Millimeter Waves

Tel.: 852-3442 9360 Fax: 852-3442 0353 E-mail: [eechic@cityu.edu.hk](mailto:eechic@cityu.edu.hk)