

### Distinguished Seminar on

Post-Moore THz Electronics, Circuits, and Modes

by

Prof Ching-Kuang Clive Tzuang

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Tianjin University

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

**Time** : 09:30 am – 10:30 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

The Moore's law stalls and may retire in the next decade, when the scaling rule approached its limit in device speed and density. The talk points to a possible path utilizing the band-gap engineering that extends the speed of of integrated circuit which eventually erodes the THz gap (300 GHz to 10 THz), thereby, opening the gateway of microwave electronics for integrating THz electronic systems. The talk will show the effects of microwave fields and waves on THz electronics, leading to a better and useful integrated THz electronics system design.

#### Biography

**Ching-Kuang Clive Tzuang** received his B.S. degree in electronic engineering from National Chiao Tung University, Hsinchu, Taiwan, R.O.C., in 1977, the M.S. degree from the University of California at Los Angeles, in 1980, and the Ph.D. degree in electrical engineering from the University of Texas at Austin, in 1986. From 1981 to 1984, he was with TRW, Redondo Beach, CA. He became an associate professor at the Institute of Communication Engineering, National Chiao Tung University in 1986, and a full professor in 1991. In February 2004, he joined the Department of Electrical Engineering, National Taiwan University, where he conducted research on advanced guiding structures for RF sensor system-on-chip technology development. Dr. Tzuang retired from National Taiwan University and became Professor Emeritus in 2012. He was invited to Tianjin University, China, to found a THz research laboratory; since February 2015, he led a research center, Millimeter-Wave and THz Technologies Transcend, in Beijing. Dr. Tzuang served the editor-in-chief of the IEEE Microwave and Wireless Components Letters (2010-2012), editorial board member of the IEEE Proceedings (2013-to date), MTT-S Publication Committee (2015-to date). He is an IEEE Fellow.

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

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