

**Title: VLSI for Wireless Communication**

**Speaker:**

Professor B. Leung  
University of Waterloo,  
Ontario, Canada

**Date:** Wednesday, 12 January 2011

**Time:** 11:00 am

**Venue:** Room 603, Chow Yei Ching Building

**Abstract:**

This talk is on some of my research results at Waterloo on CMOS VLSI chip implementation for software radio. A/D converters, both implemented in sigma delta modulators and pipelined ADCs are presented. I, Q mismatch techniques (dynamic quadrant based) implemented to reduce their crosstalk are presented. Oscillator and PLL implementation, together with theory on their phase noise (time scaling based and verified on chip experimentally) are presented.

**Biography of the speaker:**

Bosco H. Leung is Professor in the Department of Electrical and Computer Engineering at the University of Waterloo, where he has taught since 1988. Prior to 1988, he completed a Master's degree in California Institute of Technology, and a Ph.D. in University of California, Berkeley, all in Electrical Engineering. He is author of the textbook VLSI for wireless communication, Prentice Hall and numerous papers/patents in circuit design/theory and has served on the editorial board of the IEEE Journals.

**Organizer:** Dr. G.K.H. Pang