Wednesday, October 12

09:00– 10:00

Venue:Kapok room

Chair: Prof. Samuel Pierre (Ecole Polytechnique de Montreal, Canada)

Keynote 2

The Next Generation CDMA Technology   -
its Opportunities and Challenges

Abstract

The next generation code division multiple access (NG-CDMA) technology was proposed as an evolutional air-link technology from the traditional CDMA techniques which have been widely used in 2G, 3G and 3.5G wireless communication systems. The salient features of the NG-CDMA technology include its interference-resistent performance, support of high-speed bursty traffic, multipath diversity capability, powerful process gain, inherent MIMO application, etc. Those unique features make the NG-CDMA suitable in particular for its applications in futuristic wireless communications. This talk will offer a comprehensive overview on the architecture and design of a wireless communication system based on NG-CDMA technology and show its operational advantages if compared to traditional multiple access schemes, including orthogonal frequency division multiple access (OFDMA) which has been viewed as the main air-link technology in 4G wireless.

Speaker Bio

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  Hsiao-Hwa Chen received BSc and MSc degrees from Zhejiang University, China, and PhD degree from University of Oulu, Finland, in 1982, 1985 and 1990, respectively, all in Electrical Engineering. He has authored or co-authored over 400 technical papers in major international journals and conferences, six books and more than ten book chapters in the areas of communications. Currently, he is serving as the Chair for IEEE ComSoc Communications and Information Security Technical Committee. He served as the Chair for IEEE ComSoc Radio Communications Committee from 2007 to 2008. He served or is serving as conferences/symposia/workshops chair/co-chair of many major IEEE conferences, including VTC, ICC, Globecom and WCNC, etc. He served or is serving as Associate Editor or/and Guest Editor of numerous important technical journals. He is serving as the Editor (Asia and Pacific) for Wiley's Wireless Communications and Mobile Computing (WCMC) Journal and Wiley's International Journal of Communication Systems. He is the founding Editor-in-Chief of Wiley' Security and Communication Networks journal. He is also an adjunct Professor of Zhejiang University, China, and Shanghai Jiao Tong University, China. Professor Chen is a recipient of the Best Paper Award in IEEE WCNC 2008, and a recipient of IEEE Radio Communications Committee Outstanding Service Award in 2008. He is a Fellow of IEEE, IET and BCS.