Seminar on

Millimeter-wave Identification, Sensing and Tracking (MIST) Systems for Future Internet of Things and Smart Environment

by

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Date : 27 November 2017 (Monday)
Time : 02:30 pm – 03:30 pm
Venue : Room 15-202, meeting room of State Key Laboratory of Millimeter Waves, 15/F, Lau Ming Wai Academic Building, City University of Hong Kong

Abstract

Emerging millimeter-wave Identification, Sensing and Tracking (MIST) technology is set out to exploit the smaller structure size and the larger available bandwidths in order to alleviate the limitations of low-frequency RFID. The successful development of MIST into markets is strategically critical for future smart living and better life in terms of green environment, efficient energy and secure information. In this work, the state-of-art of innovative techniques, which allow propelling the MIST technology in the front line of future innovative wireless systems will be presented. Two recent developments in our group will be highlighted with hardware demonstrations. Interestingly, the MIST concept is fully compatible with upcoming and future wireless requirements and architectures such as 5G technologies. The great potentials and exciting prospects of MIST systems as well as their technological challenges will be discussed.

Biography

Dr. Ke Wu is Professor of Electrical Engineering at Ecole Polytechnique (University of Montreal). He is also the NSERC-Huawei Industrial Research Chair in Future Wireless Technologies (the first Huawei endowed Chair in the world). He is also leading a 3315 Project in the Faculty of Information Science and Engineering at University of Ningbo. He has been the Director of Poly-Grames Research Center. He was the Canada Research Chair (2002-2016) in RF and millimeter-wave engineering and the Founding Director (2008-2014) of the Center for Radiofrequency Electronics Research of Quebec. He has authored/co-authored more than 1100 referred papers and a number of books/book chapters and more than 50 patents. Dr. Wu was the general chair of the 2012 IEEE MTT-S International Microwave Symposium. He was the 2016 President of the IEEE Microwave Theory and Techniques Society (MTT-S). He serves as the inaugural North-American representative in the General Assembly of the European Microwave Association (EuMA). He was the recipient of many awards and prizes including the Queen Elizabeth II Diamond Jubilee Medal, the 2014 IEEE MTT-S Microwave Application Award, and the 2014 Marie-Victorin Prize (Prix du Québec – the highest distinction of Québec in the Natural Sciences and Engineering). He is a Fellow of the IEEE, a Fellow of the Canadian Academy of Engineering (CAE) and a Fellow of the Royal Society of Canada. He was an IEEE MTT-S Distinguished Microwave Lecturer.

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

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