



THE CHINESE UNIVERSITY OF HONG KONG
Department of Electronic Engineering

Distinguished Visiting Professor
Short Course Series



SIW Technology for Antenna Systems

Professor Ke WU
Industrial Research Chair, Dept. of Elec. Engineering,
École Polytechnique (University of Montreal)
Montreal, Canada

Date: 20 Dec (Wed) , 21 Dec (Thu) and 22 Dec, 2023 (Fri)

Time: 2:00-5:00 p.m.

Place: ERB402, William M.W. Mong Engineering Building, CUHK

Abstract

This short course on substrate integrated waveguide (SIW) for antenna systems consists of three parts, which is organized for graduate students and young researchers working in the field of applied electromagnetics and RF/microwave antennas/circuits. The first part is concerned with the introduction and fundamentals of SIW technology for antenna design and developments. The second part is dedicated to the presentation of SIW components and integration techniques for antenna system applications. The third part is a special technical lecture, which discusses the SIW-related state-of-the-art technology developments and advanced system demonstrations for 5G/6G system applications with focus on millimeter-wave and terahertz developments. The total duration for the entire course is about 9 hours, which is delivered over three different periods of time.

Biography

Dr. Ke Wu is the Industrial Research Chair in Future Wireless Technologies and Professor of Electrical Engineering with the Polytechnique Montréal (University of Montreal), where he is also the Director of the Poly-Grames Research Center. He was the Canada Research Chair in RF and millimeter-wave engineering, the NSERC-Huawei Endowed Chair, and the Founding Director of the Center for Radiofrequency Electronics Research of Quebec. He has authored/co-authored over 1400 referred technical papers, and numerous books/book chapters and filed more than 80 patents. Dr. Wu was the principal initiator and organizer of many conferences and events including the General Chair of the 2012 IEEE MTT-S International Microwave Symposium (IMS – the largest IEEE annual conference), the TPC Co-Chair of the 2020 IEEE International Symposium on Antennas and Propagation (APS). He was the 2016 President of the IEEE Microwave Theory and Technology Society (MTT-S). He also served as the two-terms inaugural representative of the North America in the General Assembly of the European Microwave Association (EuMA). He was the recipient of many awards and prizes including the 2019 IEEE MTT-S Microwave Prize, the 2021 EIC Julian C. Smith Medal, 2022 IEEE MTT-S Outstanding Educator Award, and 2022 IEEE AP-S John Kraus Antenna Award. He was an IEEE MTT-S Distinguished Microwave Lecturer. Dr. Ke Wu is a Fellow of the IEEE, the Canadian Academy of Engineering, and the Academy of Science of the Royal Society of Canada, and the German National Academy of Science and Engineering (acatech).

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

For enquiries: Prof. CHENG Kwok Keung (kkcheng@ee.cuhk.edu.hk), Tel: 3943 8269