

Seminar On

**IEEE AP-Society Distinguished Lecturer Talk:
Comprehensive Analysis of Commercial 5G mmWave AiP Designs
Prof. Chow-Yen-Desmond Sim
IEEE AP-S Distinguished Lecturer
Feng Chia University, Taiwan**

Date : 23 May 2024 (Thursday)
Time : 2:30 pm – 3:30 pm
Venue : Room 15-202, 15/F, State Key Laboratory of Terahertz and Millimeter Waves,
Lau Ming Wai Academic Building, City University of Hong Kong

Abstract

This presentation will begin by discussing the current trends in 5G millimeter-wave (mmWave) antennas and the challenges faced by antenna engineers in this area. To enhance the audience's understanding of mmWave array antenna design within the context of commercial mmWave Antenna-in-Package (AiP), we will conduct a comprehensive analysis of a selected series of commercial mmWave AiP designs, starting with the QTM 052. The session will explore the different design techniques used by these commercial AiP solutions, comparing them with recent findings from scholarly literature. Finally, the presentation will conclude with a brief overview of future 6G communication.

Biography



Prof. SIM Chow-Yen-Desmond was born in Singapore in Feb. 1971. He received a B.S. degree in electrical and electronic engineering from the University of Leicester, Leicester, UK, in 1998, and a Ph.D. degree in the radio system group from the University of Leicester, in 2003. Since 2003/07, he has been with the Feng Chia University, Taiwan, where he is currently a Distinguished Professor since 2017/08. His research interests mainly include small antenna designs and RFID applications, focusing on 5G sub-6GHz/mmWave antenna, RFID antenna, antenna array, and laptop antenna. He has published over 200 SCI journal papers based on the abovementioned research. Prof. Sim is a Fellow of the Institute of Engineering and Technology (FIET), a Senior Member of the IEEE Antennas and Propagation Society (APS), and a Life Member of the IAET. He was an Associate Editor (AE) of the IEEE Access during

2015/08-2022/01, and has served as the AE of IEEE AWPL during 2017/08-2023/08. He is now serving as the AE of IEEE Journal of RFID, IEEE Open Journal of Antenna and Propagation, and International Journal of RF and Microwave Computer-Aided Engineering. He has served as a member of organizing committees of many conferences, such as General Chair/Co-Chair and TPC Chair/Member, etc. He was recently invited to serve as the Workshop/Tutorial/Invited Speaker in many conferences. He has served as the Chapter Chair of the IEEE AP-Society, Taipei Chapter (2016/2017) and the founding Chapter Chair of the IEEE Council of RFID, Taipei Chapter (2017-2020). He received the IEEE APS Outstanding Reviewer Award (IEEE Transaction Antennas and Propagation) for eight consecutive years between 2014 and 2021. He also received the Outstanding Associate Editor Award from the IEEE Antennas Wireless and Propagation Letters in July 2018. Prof. Sim has recently been appointed as the Distinguished Lecturer of the IEEE AP-Society, serving from 2024 to 2026.

*** ALL ARE WELCOME ***

Enquiries:

Prof. Wei Lin, Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University
Email: w.lin@polyu.edu.hk