

## Seminar On

### Antenna Collaborative Design with Additive Manufacturing and Its Measurement Techniques

Professor Guan-Long Huang

School of Electronics and Information Engineering

Foshan University

**Date** : 22 January 2025 (Wednesday)

**Time** : 10:30 am – 11:30 am

**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

How to realize product verification and practical application of high-complexity design more efficiently has always been a challenge in the R&D progress of microwave devices and antennas. In the past, electromagnetic model design and fabrication/production were relatively independent, and the design ideas were frequently limited by the actual processing techniques. This report will present the speaker's years of R&D experience in microwave components and antennas based on new processing techniques for radar and satellite communication system, and discuss how to introduce a variety of new design solutions to better integrate advanced additive manufacturing technology with high-complexity microwave devices and antennas for collaborative design, so that the developed products have more advantages in electromagnetic performance, structural properties (conformal/lightweight), multi-function, and high-level of integration. Also, recent progress in advanced antenna measurement techniques will also be included in this presentation.

#### Biography



**Guan-Long Huang** received the B.E. degree in electronic information engineering at Harbin Institute of Technology, Harbin, China, in 2011, and the Ph.D. degree in electrical and computer engineering at National University of Singapore, Singapore, in 2015. He is now a Professor and the Vice Dean of School of Electronics and Information Engineering in Foshan University, and the Director of Smart Antenna and Microwave & Millimeter-Wave Engineering Technology Research Centre of Foshan City. He is a Fellow of IET, a Senior Member of IEEE and the China Institute of Communications. Prior to join the current university, he has been with Shenzhen University as an Associate Professor, PengCheng Laboratory as an Adjunct Researcher, Southern University of Science and Technology as an adjunct lecturer, Nokia Solutions and Networks System Technology as a Senior Antenna Specialist, and Temasek Laboratories at National University of Singapore as a Research Scientist from 2011 to 2020. He was the TPC member and special session organizer of several international conferences, and served as the General Co-Chair of IEEE IWSA 2023/2024. He is also the initiator of Foshan Workshop on Antenna and Microwave Technology. He has authored and co-authored 3 books and more than 200 papers in peer-reviewed journals and international conferences. He was the recipient of the Raj Mittra Travel Grant (2021), the Best Reviewer Award of IEEE AWPL (2019) and Top Reviewer of IEEE TAP (2020/2021/2023/2024), all from IEEE Antenna and Propagation Society, and the recipient of the Young Scientist Award in 2021 from the Applied Computational Electromagnetics Society, and the Fok Ying-Tong Education Foundation Award in 2020 from the Ministry of Education of the People's Republic of China. He has supervised students to obtain several academic competition awards including the only "Cool Antenna Award" in ISAP-2020, the Best Student Paper Awards in ICEICT-2023 and iWEM-2023. His research interests include design and implementation of high-performance antenna arrays, base-station and mobile RF front-end devices/antennas, millimeter-wave antennas, 3-D printed antennas, and antenna measurement technique.

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

#### Enquiries:

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