



State Key Laboratory of  
Terahertz and Millimeter Waves  
(City University of Hong Kong)



### Seminar On

## Liquid Antennas for Wireless Communications

By

Prof Yi Huang

The University of Liverpool, UK

**Date** : 08 January 2019 (Tuesday)

**Time** : 11:00 am – 12:00 noon

**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

Antennas are essential elements of radio/wireless systems. They are normally made of metal in order to achieve high radiation efficiency.

Unlike metal antennas, liquid antennas are a new type of antenna which has some unique features and gained a lot attention recently. The University of Liverpool has been working in this area for many years. In this talk, the advantages, disadvantages and challenges of using such a liquid antenna for real work applications will be discussed at the beginning, and then the latest development on the liquid material and the liquid antenna designs will be reported. A new concept of using gravity on making liquid antennas for beam-stirring and GPS applications will be presented at this talk.

### Biography

**Prof Yi Huang** received DPhil in Communications from the University of Oxford, UK in 1994.

He has been conducting research in the areas of wireless communications, applied electromagnetics, radar and antennas since 1987. His experience includes 3 years spent with NRIET (China) as a Radar Engineer and various periods with the Universities of Birmingham, Oxford, and Essex in the UK as a member of research staff. He worked as a Research Fellow at British Telecom Labs in 1994, and then joined the Department of Electrical Engineering & Electronics, the University of Liverpool, UK as a Faculty in 1995, where he is now a full Professor in Wireless Engineering, the Head of High Frequency Engineering Group and Deputy Head of Department.

Prof Huang has published over 350 refereed papers in leading international journals and conference proceedings, and authored *Antennas: from Theory to Practice* (John Wiley, 2008) and *Reverberation Chambers: Theory and Applications to EMC and Antenna Measurements* (John Wiley, 2016). He has received 5 best paper awards from conferences and many research grants from research councils, government agencies, charity, EU and industry, acted as a consultant to various companies, and served on a number of national and international technical committees and been an Editor, Associate Editor or Guest Editor of four of international journals. He has been a keynote/invited speaker and organiser of many conferences and workshops (e.g. WiCom 2006, 2010, IEEE iWAT2010, LAPC2012, and UCMMT2017, EuCAP 2018). He is at present the Editor-in-Chief of *Wireless Engineering and Technology*, Associate Editor of *IEEE Antennas and Wireless Propagation Letters*, UK and Ireland Rep to European Association of Antenna and Propagation (EurAAP) and a Fellow of IET.

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

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