

## Seminar on

### Metamaterials for Antenna Engineering

by

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**Date** : 17 February 2017 (Friday)  
**Time** : 04:00 pm – 05:00 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

Metamaterials have distinct electromagnetic (EM) properties and have advantages in numerous applications such as antennas, lens, acoustics, and cloaking. Artificial heterogeneous materials can be constructed by adding metallic inclusions arranged in different lattices and this can control the effective EM properties including permittivity, permeability, and losses. Hence engineers can design radio frequency (RF) materials with bespoke EM properties and thickness by changing the metallic inclusions volume fraction.

The talk will introduce and present examples of metamaterials have been used in antennas and microwave applications.

#### Biography

**Yiannis Vardaxoglou** is the Head of the Wireless Communications Research Group (WiCR) researching wide-ranging topics applicable to cutting-edge wireless communications technology. His research focuses primarily on antennas, microwave and mm-wave engineering, and metamaterial structures, with income >£10M (300 publications). He has authored several book chapters and a pioneering book on Frequency Selective Surfaces. WiCR collaborates with many internationally leading companies and universities and is home to the internationally renowned Loughborough Antennas & Propagation Conference (currently in its 13th year).

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

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