

**Prof. Dr. Tharek A. Rahman, UTM**

**Title :**

- 1. 5G Mobile Communication : Evolution towards Networked Society**
- 2. MIMO and Beamforming which enable 5G Mobile Communication**

### Biography

Prof. Dr. Tharek A. Rahman currently is a professor in wireless communication at faculty of electrical engineering, Universiti Teknologi Malaysia. He obtained his BSc (Hons) (Electrical Engineering) from University of Strathclyde, UK , MSc in Communication Engineering from UMIST, Manchester, UK and PhD in Mobile Communication from University of Bristol, UK. He is the Director of Wireless Communication Centre (WCC), Faculty of Electrical Engineering, Universiti Teknologi Malaysia and currently conducting research related to mobile communications, antenna and propagation. He has also conducted various short courses related to mobile and satellite communication to the telecommunication industry and government agencies since 1988. Prof. Tharek has published more than 200 scientific papers in journals and conferences and obtained many national and international awards. He is also a consultant for many communication companies and an active member in several research academic entities.

### Abstract

Over the past few decades, there has been significant progress made to mobile communication networks. The promise of LTE Advanced (4G) as next generation of mobile broadband offers huge potential to service providers, application developers and wireless consumers. Beyond LTE Advanced which also known as 5G will enable the long term Networked Society and realized the vision of unlimited to information and shared data available anywhere and anytime to anyone and anything. The first part of the presentation will cover the evolution of mobile communication towards 5G that will support massive traffic volume and massive connected devices which enable to realize the Networked Society. The second part of the presentation is related to MIMO and Beamforming which enable 5G Mobile Communication.