



European School of
Antennas



EUROPEAN SCHOOL OF ANTENNAS
presents a course on

Antennas and Propagation for Body-Centric Wireless Communications

20 – 24 April 2009

Queen Mary, University of London
Mile End Road, London, UK



Queen Mary
University of London

This course will cover:

- Introduction to Antennas & Propagation for Body-Centric Networks
- Fundamentals of antennas related to body-centric communication
- Fundamentals of radio propagation related to body-centric antennas
- Fundamentals of antenna measurement
- Narrow band on-body antennas and propagation
- UWB on-body antennas and propagation
- Numerical modelling of on-body antennas and propagation
- System issues of body-centric wireless communications

**The course registration will include a one-day IET Seminar on
Antennas & Propagation for Body-Centric Wireless
Communications**

Monday 20th April 2009, IET Savoy Place, London, UK

Contributing institutions:



EUROPEAN SCHOOL OF ANTENNAS COURSE ON

Antennas and Propagation for Body-Centric Wireless Communications

WHO SHOULD ATTEND?

This course is aimed at postgraduate research students and industrial engineers who are interested in theoretical and practical aspects related to body-centric wireless communications and its applications in mobile communications, medical and healthcare technologies, ubiquitous computing.

VENUE

School of Electronic
Engineering and Computer
Science

Queen Mary, University of
London

Mile End Road
London E1 4NS
United Kingdom

Information on how to get
here and detailed maps can be
found on:

[http://www.qmul.ac.uk/about/
campus/mileend/index.html](http://www.qmul.ac.uk/about/campus/mileend/index.html)

**The one-day seminar
on Antennas &
Propagation for Body-
Centric Wireless
Communications is
organised by The IET
(Monday 20th April
2009) and it is
inclusive with the
course registration**

INTRODUCTION

The course addresses the main issues related to body-centric wireless communications from antennas and radio propagation perspective including measurement techniques, statistical analysis, analytical and numerical studies and system-related aspects of such communication networks. The course will introduce the current state-of-the-art and potential development in the area including challenges and theoretical limitations. Concepts such as diversity antennas, MIMO systems, UWB communications, etc. will be covered in this course with relation to theoretical and practical aspects.

CONTENTS

- Introduction to body-centric wireless communications.
- Fundamentals of antennas related to body-centric antennas.
- Fundamentals of radio propagation related to body-centric antennas.
- Fundamentals of antenna measurement.
- Narrow band on-body antennas and propagation.
- UWB on-body antennas and propagation.
- Numerical modelling of on-body antennas and propagation.
- System issues of body-centric wireless communications.
- Current vs. Future

Lecturers

Prof. Peter Hall, University of Birmingham

Prof. Yang Hao, Queen Mary, University of London, ([Course coordinator: y.hao@elec.qmul.ac.uk](mailto:y.hao@elec.qmul.ac.uk))

Dr. William Scanlon, Queen's University Belfast

Prof. Clive Parini, Queen Mary, University of London

Dr. Akram Alomainy, Queen Mary, University of London

Dr. Yuri Nechayev, University of Birmingham

COURSE GENERAL INFO

- Schedule
 - 16 hours of teaching
 - 4 hours of practical sessions
 - 1 labs and facilities tour
- Prerequisites
 - Basic antennas and radio propagation theory
 - Basic electromagnetic
- Availability: 25 students
- Credits:

REGISTRATION FEE

Non-profit institution: €600

Profit institutions: €1000

Registration fees include the one-day IET seminar on Monday 20th April 2009

Grants will be offered for 2 students after the end of the course based on performance and contribution!