



# THE INSTITUTION OF ENGINEERS, MALAYSIA

Bangunan Ingenieur, Lot 60/62, Jalan 52/4 Peti Surat 223. 46720 Petaling Jaya, Selangor Darul Ehsan  
Tel: 603-7968 4001/2 Fax: 603-7957 7678 E-mail : sec@iem.org.my IEM Homepage : <http://www.myiem.org.my>

## Talk on “Emerging Trends and Opportunities in Biomedical Engineering

Organised by: the Electrical Engineering Technical Division, IEM  
BEM approved CPD Hours: 2 Ref No.: IEM16/HQ/477/T

Date : 10<sup>th</sup> December 2016 (Saturday) **POSTPONED UNTIL FURTHER NOTICE**  
Time : 9.00am to 11.00am  
Venue : CS & TUS Lecture Hall, 2<sup>nd</sup> Floor, Wisma IEM, PJ  
Speaker : Prof Ir Dr Ahmad Fadzil, FASc., FIEM

### PRESENTATION SYNOPSIS

Biomedical engineering (BME) is the application of engineering principles and techniques to the medical field. This field seeks to close the gap between engineering and medicine and combines the design and problem solving skills of engineering with medical and biological sciences to improve healthcare diagnosis and treatment. In this talk, an overview of biomedical engineering phenomenon with respect to academic and industrial aspects is discussed. The focus is made to the current perspective of biomedical engineering growth, market size and significant trends in academia. In addition, current and prospective research trends are discussed followed by the discussion on biomedical industry segments that divide into pharmaceutical, biotechnology, medical device and diagnostic segments that warrants the need of distinctive forces including the need for specialized human capital, a formidable regulatory approval process, complex financing structure, science risks, and a range of ethical and political issues. Special focus is made to future prospects and opportunities for young engineers in biomedical engineering domain that is followed by the discussion on job market at international level as well as in Malaysia. This talk concludes that biomedical engineering is an emerging field to be studied with the immense opportunities in academia and industry for the betterment of health and social impact.

### Speaker's Biodata

**Prof Fadzil** is an elected Fellow of the Academy of Sciences, Malaysia (ASM), and also of the Institution of Engineers Malaysia (IEM). Prof Fadzil has been a Professional Engineer registered with Board of Engineers Malaysia (BEM) since 1994 and a Senior Member of the Institution of Electrical & Electronic Engineers Inc (IEEE) since 1998. In industry, he sits in Board of Directors of ViTrox Corporation Bhd and Prince Court Medical Centre Kuala Lumpur. He has over 30 years working experience in the academic profession and currently Senior Professor at the Department of Electrical and Electronics Engineering, UTP.

He is an expert in the area of image processing and computer vision. His research activities range from fundamental pattern recognition to developing vision and imaging applications in the biomedical area. He has published over 70 articles in peer reviewed journals (48 are indexed SCOPUS and ISI) and over 130 articles in conference proceedings mainly in image analysis for biomedical applications. In addition, he holds several intellectual property rights.

**Ir. Yau Chau Fong**  
Chairman  
Electrical Engineering Technical Division, IEM

### ANNOUNCEMENTS TO NOTE:

- Preferential admission to talk shall be accorded to IEM members (**pre-registration and online registration are NOT required**).
- **Non members** may also attend the talk but will need to pay a registration fee of **RM50** and an administrative fee of **RM15**. GST is inclusive.
- Members of affiliated organisations upon producing their membership cards will be exempted from paying registration fee. Administrative fee is nevertheless applicable.
- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- All members are reminded to produce membership cards for confirmation of attendance (CPD purpose) failing which a fee of RM25 will be imposed. GST inclusive.

### ADMINISTRATIVE FEE

- Kindly be informed that an administrative fee of **RM15** is payable for talks organized by IEM. GST is inclusive.
- The fee would be used to cover overhead costs, building maintenance expenses as well as contribute to Wisma IEM Building Fund.
- All contributions will be deeply appreciated by IEM.
- Student Members are however exempted.

### PERSONAL DATA PROTECTION ACT

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal data as set out in the said notice.

### CPD HOURS CONFIRMATION

Name: .....

Membership No: .....

Signature: .....