

The Institution of Engineers, Malaysia (Penang Branch)

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BEM Approved
CPD/PDP Hours: 3
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InspireMe Talk - Engineering Career Development as Techno-Entrepreneur, Academic and Individual Contributor

Date : 08th December 2016 (Thursday)

Time : 2.00 pm-5.00 pm

Venue: KDU Penang University College

32, Jalan Anson, 10400 Georgetown, Penang

Introduction

Declining trend of science student population in secondary and tertiary level will lead to work force shortage in science, technology, engineering and mathematics (STEM) in future. This implies that we will face shortage of engineers as well. IEM eETD recognizes importance to inspire students and young engineers to pursue engineering course or career to keep engineering talent pool growing to meet future demand. Therefore, eETD organizes InspireMe Talk by inviting three distinguished speakers from different professions - techno-entrepreneur Mr. Ng Sang Beng, CEO of Aemulus Corporation Sdn. Bhd., Dr. Raymond Ooi Chong Heng, Professor of Universiti Malaya and Mr. Ooi Eng Hun, Principal Engineer of Intel Corporation will share their fascinating engineering and scientific career path in entrepreneurship, academic and individual contributor.

Talk and Biodata of Speakers

Talk by Mr. Ng Sang Beng - The Missing Subject

We know the world through the eyes of historians, scientists, philosophers, and artists. We learn each trade through books and guidance from teachers. Schools and universities have framed our mindset to be a successful person. But how to be successful remains a question for many.

Biodata of Mr. Ng Sang Beng

Creative, Enigmatic, Observant – three words that best describe Sang Beng who believes in miracle. However, miracle does not come cheap, he had left no stone unturned in making impossible possible. Sang Beng started his journey of entrepreneurship with a headful of ideas and strategies but empty handed. Howbeit, he has a strong like-minded team. Every road taken for the past 15 years prowling in the semiconductor industry has enriched him as a son, father, leader and an entrepreneur. Ng Sang Beng graduated with a Bachelor of Electrical Engineering from University of Technology Malaysia in 1999. He has been involved in the semiconductor industry for more than 15 years and has vast knowledge in the area of design and development of

semiconductor tester which focuses on radio frequency (RF), analogue/digital/mixed-signals, input/output buffer information specification (IBIS), boundary scan description language (BSDL), signal integrity and custom field programmable-gate-array (FPGA) designs.

Talk by Prof. Dr. Raymond Ooi Chong Heng - Fascinations of doing Science and Engineering

Everyday, fascinating scientific discoveries and engineering feats are reported in research journals. We are fortunate to be living in an exciting time to be able to witness the marvels of science and engineering transform human imaginations into real products. Speaker will share his experience and discuss recent progress that makes science fictions into reality.

Biodata of Professor Dr. Raymond Ooi Chong Heng

Prof. Dr Raymond Ooi graduated from USM in 1997 with B.Sc (Hon) in Physics and worked at Hewlett-Packard (Malaysia) as process and product engineer before accepting an offer to do M.Eng in Nanyang Technological University. After completing his master studies, he went to Universitat Konstanz, Germany to pursue his Dr.rer.nat (PhD) in quantum optics and laser cooling of molecules in 2003. He worked with Marlan O. Scully (a distinguish physicist in quantum coherence) in Texas A&M University as a post-doctoral Research Associate for three years. During this time, he was also a Visiting Scientist at Princeton University and Max-Planck Institut fuer Quant enoptik and had close encounters with many Nobel Laureates and distinguished scientists. He then joined Korea Advanced Institute of Science and Technology (KAIST) as a Research Professor and Korea University as Assistant Professor. He was with the School of Enginering at Monash University (Sunway) before joining University of Malaya as an Associate Professor in 2010. Prof Raymond Ooi leads the "Quantum and Laser Science" group. His research has produced more than 100 ISI papers (mostly in top ranking journals, with more than 500 citations covering the frontiers of quantum and laser science, particularly quantum optics, nonlinear optics and laser spectroscopy, electromagnetic field scattering, generation, interactions and propagation of intense laser fields, artificial optical structures (e.g. photonic crystals, metamaterials), plasmonics, and statistical physics of Bose-Einstein condensates. He is a fellow of the Academy Sciences Malaysia. He won the Malaysian Toray Science Foundation 2013 Science & Technology award for his seminal works on several challenging scientific problems in quantum optics, laser and molecular physics, and photonic materials, in particular, for the development of theoretical framework to study nonclassical photons, pioneering a laser cooling technique for molecular gas, and introducing a new class of artificially engineered photonic materials using superconductors. Prof. Ooi is concerned about the development of scientific education in Malaysia and has contributed to workshops on science policies and exhibitions on science and engineering.

Talk by Mr. Ooi Eng Hun - Storage Technology, Solution and Evolution - Experience Sharing of Malaysian Technical Individual Contributor

Speaker will share 20 years of experience in personnel computer (PC) platform and high quality track record in many generations of PC chipset, System on Chip (SoC) and high speed input output (IO) architecture with strong foundation in micro-architect, design and development. He will talk about his career development from a fresh graduate to present day defining some of these latest storage technologies. Currently he is focusing on next generation novel memory and

storage architecture such as OptaneTM technology and NVM Express (NVMe). He approaches engineering issues in holistic manner with innovation solutions.

Biodata of Mr. Ooi Eng Hun

Ooi Eng Hun is Principal Engineer with Intel Corporation. He received his Bachelor of Science (Summa Cum Laude) in Electrical Engineering from Texas A&M University in 1995. He received an Intel Achievement Award (0.2% of all Intel employees worldwide recognized annually) on behalf of the first generation PC chipset Serial Advanced Technology Attachment (SATA) host controller design team and holds 13 patents related to high speed IO, chipset and system aspects.

Program

| 1.45 pm - 2:00pm | Arrival at KDU Penang University College and Opening Address |
|------------------|--|
| 2.00 pm - 3:00pm | Talk by Mr. Ng Sang Beng |
| 3:00pm - 4.00 pm | Talk by Prof. Dr. Raymond Ooi Chong Heng |
| 4.00 pm - 5:00pm | Talk by Mr. Ooi Eng Hun |
| 5:00pm - 5:15pm | Souvenir presentation and group photo |
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REGISTRATION FORM

InspireMe Talk - Engineering Career Development as Techno-Entrepreneur, Academic and Individual Contributor

Date : 08th December 2016 (Thursday)

Time : 1.45 pm - 5.15 pm

Venue : KDU Penang University College

32, Jalan Anson, 10400 Georgetown, Penang

Moderators : Mr. Lau Heng Kar and Ir. Lee Choo Yong

Registration: on a 'first-come-first-served' basis.

Closing Date: 5th December 2016 (Mon)

| REGISTRATION FEES | | | | | | |
|-------------------|----------|------------|----------------|-------------------|--|--|
| Student | Graduate | IEM Member | Non-IEM Member | Senior IEM Member | | |
| FOC | RM20 | RM30 | RM60 | RM20 | | |

Payment Mode (please tick where applicable)

- 1. Online bank-in to: AMBANK Acct#: 002-201-101022-6 (please e-mail/fax receipt to us with attendee (s) name on it
- 2. Crossed cheque in favour of: The Institution of Engineers, Malaysia
- 3. Cash to: The IEM Penang Secretariat

Closing Date: payment should reach us latest by 5th December 2016 (Mon)

We wish to register the following person(s) for this Technical Visit.

I/We understand that the fee is not refundable.

If I/we withdraw after my/our registration is accepted, substitution of participants will be allowed. If I/we fail to attend the event, the fee paid will not be refunded.

| # | FULL NAME (s) in CAPITALS | NEW IC# | MOBILE# | IEM# | PE# | FEES (RM) |
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| Name of Organization: | | | | | | |
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| Tel: (o) | Fax: | Email: | | | | |
| Contact Person: | | Designation: | | | | |
| Signature: | | Date: | | | | |

Note: IEM reserves the right to cancel the talk with full refund