News

Memorandum of Understanding (MOU) signing ceremony with the Institution of Engineers Malaysia (IEM)

On the 24th August 2020, IMechE and IEM signed an MOU to formalise a collaborative partnership which will allow both societies to work together to promote, contribute and share activities on the engineering profession. One of key areas discussed was to have both societies to work on creating a better awareness and interest in STEM. IMechE Malaysia branch and the Mechanical Engineering Technical Division (METD) of IEM will be working closely to achieve the objectives of the MOU. This MOU is for a period of 3 years.

IMechE was represented by Prof. Dr. Ir. Vinesh (South East Asia Regional Chair), Ir. Eddie Lim (Malaysia branch Chair) and Mr. Zen Teng (South East Asia Business Development Manager).

In attendance from IEM are as follows:
- Council President: Ir. Ong Ching Loon
- Honorary Secretary: Ir. Dr. David Chuah Joon Huang
- Vice President: Ir Dr Wang Hong Kok
- Vice President: Ir. Mohd Khir Muhammad
- Vice President: First Admiral Dato Ir. Hj. Ahmad Murad bin Omar (Rtd)
- Council Member: Ir Gunasegaran Krishnan
- METD Chair: Ir. Syed Neguib b. Syed Mohamed
- METD Deputy Chair: Ir. Dr.Aidil Chee Tahir CEng MIMechE
- METD Secretary/Treasurer: Ir. Dr. Alvin Yap Chee Wei CEng MIMechE

The MOU was signed by Prof. Vinesh and Ir. Eddie for IMechE and Ir. Ong Ching Loon and Ir. Dr David Chuah for IEM.

Past Events

1.0 National Speak Out for Engineering Competition

Speak Out for Engineering (SOFE) Malaysia is an engineering public speaking competition organized annually by IMechE to encourage engineers and engineering students to showcase their talents in presenting mechanical engineering subjects to non-technical audience and the public. This competition has been conducted at a National Level in Malaysia for the past 13 years.

On 31st October 2020, the Young Members Section (YMS) of IMechE Malaysia has successfully organised the SOFE Malaysia 2020.

This year was the very first year the SOFE being conducted on a virtual platform, hence the actual presentations were recorded by the shortlisted participants and uploaded to the official Youtube channel of YMS IMechE Malaysia.

Dear Fellow Members,

This is the last issue of the IMechE Malaysia Branch Newsletter for 2020.

We have come to the end of 2020. This year has been a very challenging year to most of us due to COVID-19 pandemic. We wish that 2021 will be a far better year to all of our fellow members and the families.

Our plan for the Annual Dinner has to be called off. All the activities are still planned as online events. We wish that we would be able to meet up with you again soon. Stay safe and healthy!

Ir. C.C. Chow

MOU signing ceremony between IMechE and IEM
The virtual live Q&A session where judges could ask any question based on the videos presented by the shortlisted participants was held via MS Teams.

The shortlisted participants were:

- **Jasmine Demi Danny Jabing** from Universiti Teknologi MARA
- **Mohamad Fahrur Radzi** from Universiti Teknologi PETRONAS
- **Pham Chong Yao** from University of Southampton Malaysia
- **Dhipan Raj Sundram** from University of Nottingham Malaysia
- **Tanuja Kaur Bhajan Singh** from Asia Pacific University of Technology
- **Anas Ahmad Khan** from Heriot-Watt University Malaysia
- **Ammar Zoheir** from Universiti Tenaga Nasional

The judges of the competition comprised of:

- **Dr. Rahmat Iskandar Khairul Shazi**, Technical Director of ShazInnovation Solution and Chief Operating Officer of Silver WynTech Sdn. Bhd.
- **Dr. Diana Jayasauri**, a PROSCI certified change management practitioner.
- **Mr. Tan Soo Guan**, Distinguished Toastmaster of Toastmasters International.
- **Miss Michelle Tang**, a coach of Toastmasters Club.

**Dhipan Raj Sundram** emerged as the Champion for the topic "Edge Computing". He won the cash prize of £300 and a certificate.

The second prize was won by **Ammar Zoheir** for his presentation on "Origami Based Materials". Ammar received a certificate and a cash prize of £200.

Both Dhipan and Ammar also won the opportunities to represent Malaysia for the South East Asia Regional SOFE 2020 competition.
2.0 South East Asia Region (SEAR) Speak Out for Engineering (SOFE) Competition

The SEAR SOFE 2020 was held online via Microsoft Teams on 28th November 2020.

The two winners of National SOFE competitions from each Malaysia, Singapore and Brunei took part in this SEAR SOFE 2020.

The champion was declared as Gan Yi Zhe from Singapore with the topic of "Zero Energy Building".

The first runner up was Ammar Zoheir who presented "Origami Based Materials". Ammar is currently a student of UNITEN, Malaysia.

As the winner in this year’s SEAR SOFE event, Yi Zhe will be competing in the upcoming International SOFE competition, representing Southeast Asia Region in 2021.

3.0 Online Workshop - 3D Modelling in Industrialization 4.0

IMechE Universiti Tunku Abdul Rahman (UTAR) Sungai Long Campus Student Chapter conducted an online workshop on 5th September 2020 from 2pm to 5pm, on "3D Modelling in Industrialization 4.0" by using SOLIDWORKS.

This workshop provided an opportunity for the participants to get exposed to what engineering fields need. The modelling and design workshop covered motion simulation for gear movement, chain movement and reciprocating movement.

The workshop was conducted by Ts. Dr. Bernard Saw Lip Huat who is the current chairperson of the Centre for Vehicular Technology at UTAR. Dr. Saw is also an expert in computer-aided design, computer-aided manufacturing and computer-aided engineering.
4.0 Internship 101 Sharing Session

IMEchE Universiti Teknologi PETRONAS (UTP) Student Chapter held an sharing session, namely “INTERNSHIP 101” on 5th September 2020. The event was conducted online from 3pm to 5pm, where a few of the final year students from UTP shared their internship experience.

Zaim completed his internship at PROTON R&D where he used CFD application to find out the aero-acoustic effects of the side mirror on a vehicle. He was assigned to the CFD division under CAE department.

Adam was attached to PETRONAS for his internship, where he provided support piping projects and ensured compliance to all piping specifications. He was assigned to the Mechanical Piping Discipline of PETRONAS Group Technical Solutions.

Ferliena completed her internship at Malaysia Airports Holdings Berhad (MAHB) where she rotated among twelve MASepang Engineering Units at Kuala Lumpur International Airport (KLIA) and KLIA2, gaining deeper technical knowledge on Airport Operation Engineering and managed data for System Reliability for her Student Industrial Training (SIT) period.
5.0 Online “Arduino Workshop”
IMechE INTI International University Student Chapter has organized an online workshop on “Arduino” on 12th September 2020, with Mr. Muhammad Hishamuddin as the guest speaker.

The workshop gave an introduction to the Arduino uno board, mit inventor software and firebase. It showcased the usage of the Internet of Things (IoT) system.

6.0 Online SOLIDWORKS Workshop
An online SOLIDWORKS workshop was held from 10am to 12pm on 19th September 2020 by IMechE Asia Pacific University of Technology (APU) Student Chapter. The trainer was Dr. Arun Seeralan Balakrishnan who is a member of IMechE.

7.0 Developing Engineer Program Presentation
The IMechE South East Asia Business Development Manager, Mr. Zen Teng delivered a presentation for IMechE Associate members on using the Developing Engineers Program on 24th September 2020 from 10am to 11am.

This webinar was ideal for young professionals who would like to get a head start in mapping out their competencies for professional registration.

Zen covered the following points in his presentation:
- The online tools available under the Developing Engineer Program.
- Benefits of Associate membership.
- Importance of Professional Registration.
- Mentoring.

8.0 Webinar “Machine Vision – Eyes of Machine”
IMechE UTAR Student Chapter invited Mr. Tong-Yuen Chai to present an online talk on “Machine Vision – Eyes of Machine” on 5th December 2020 from 10am to 12pm. Mr. Chai is currently a senior lecturer in the department of Mechatronics and Biomedical Engineering in UTAR. He has developed machine vision solutions for multinational corporations (MNCs), and small and medium enterprises (SMEs) in the past 10 years.

The speaker shared his experience in Machine Vision, covering below topics
- Introduction of Machine Vision
- The importance of image processing
- Pattern recognition
- Industrial experience: real-time iris localization, face recognition, medical image segmentation
- Machine vision solutions for manufacturing industry

**Ongoing Events**

**1.0 YMS Malaysia Design Competition**

A DESIGN COMPETITION in addressing the United Nation (UN) Sustainability Development Goals (SDGs) is being organized by the IMechE Malaysia Branch YMS.

As covered in the previous September 2020 Newsletter, this DESIGN COMPETITION aims to harness the potentials of IMechE Malaysia Branch.
Improving the world through engineering

Young Members in addressing the challenges posed by global energy issues. The battle against decarbonisation of the global, even at regional energy landscape is not a singular path, instead it is diverse and decarbonisation can be achieved by improving various aspects of the energy we produce and use.

STAGE 1 was concluded where great ideas and design proposals as the ‘answer’ to this year’s design question have been received.

The selected Top 5 Finalists will be moving on to the next challenge which is to refine and materialise their design into a functional prototype. Each finalist will receive an INDUSTRIAL MENTOR and £200 PROTOTYPE GRANT to assist them in achieving the next challenge and sharpen their competitive edge.

The Top 5 Finalists are:

- **WT-HOT, Solar Peltier Cooling System** by Universiti Malaya (UM)
- **Solar Powered Portable Car Cooling System** by Universiti Tenaga Nasional (UNITEN)
- **Smart Active Cool Roof System** by Universiti Tenaga Nasional (UNITEN)
- **Liquid Desiccant Coolers: A Cooler Alternative?** by University of Nottingham Malaysia
- **Fentastik Pho** by University of Southampton Malaysia

These Top 5 Finalists will compete in STAGE 2: FINAL DESIGN PITCHING SESSION which is scheduled in January 2021.

CONGRATULATIONS to all Top 5 Finalists!

**Coming Events**

1.0 **Webinar “Automotive Engineering Design Process”**
   - **Date:** 6th January 2021
   - **Time:** 8.30am to 11.00am
   - **Speaker:** Ir. Dr. Balamurugan A. Gurunathan

BEM Approved CPD / PDP hours: pending
2.0 Webinar “Making The Best Out of Your Internship and Industrial Engagement”

Date: 9th January 2021
Time: 10.00am to 12.00pm
Speaker: Ir. Dr. Lim Jen Nee Jones

BEM Approved CPD / PDP hours: pending

Registration link: https://docs.google.com/forms/d/1hk-wB9kDK9a_bDBgTQ6r0qkXt1MgoSKjCZjTR8BqAN4/edit

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ANNOUNCEMENT

IMechE Malaysia Young Member Award and Best Academic Liaison Officer (ALO) Award

Nominations are now open!
Closing date: 24th December 2020

Nominations can be sent through to the YMS Hon Secretary at imeche.yms.malaysia@gmail.com

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