



*Engineers
Insight*

*Volume 26
June 2021*

Engineers Insight Editorial Board



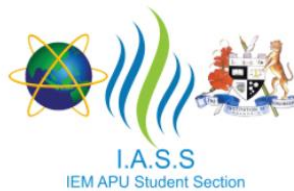
Ts. Harvin Kaur



Ir. Ts. Dr. Lau Chee Yong



Ts. Dr. Shankar Duraikannan Prof Ir. Ts. Dr. Vinesh Thiruchelvam



APU MALAYSIA
STUDENT CHAPTER



**Institution of
MECHANICAL
ENGINEERS**

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“Right now, companies are laying the hardware foundation and software foundations for the quantum computing revolution and emergence into our daily lives. It is such an exciting time for the industry”

Assoc. Prof. Dr. Lai Nai Shyan, Associate Professor, SoE

The three types of Quantum Computers

ASSOC. PROF. DR. LAI NAI SHYAN 1. Quantum Annealer
MAY 2021

Very often students asked what quantum computing is and how do quantum computers work, but what was not covered during our discussion is the types of quantum computers that exist today. This article focuses on 3 quantum computing designs which can be categorized by their computational power. We will start with the weakest form of quantum computer to the most powerful one.

The quantum annealer is the is the easiest to build, least powerful and most restrictive form of quantum computers. It can do only a few tasks such as factorizing very large numbers and solving optimization problems. Therefore, it has no known advantages over conventional computing. A classical computer can easily outperform this kind of quantum computer for everyday tasks such as email and gaming. D-Wave Systems was one of the first companies to announce a commercially available quantum computer and utilizes Quantum Annealing for its core processing. D-Wave is still very early with Annealing and perhaps in time they can harness this processing to provide more qubits and thus more performance. Figure 1 below shows how D-Wave systems looked like externally and internally.

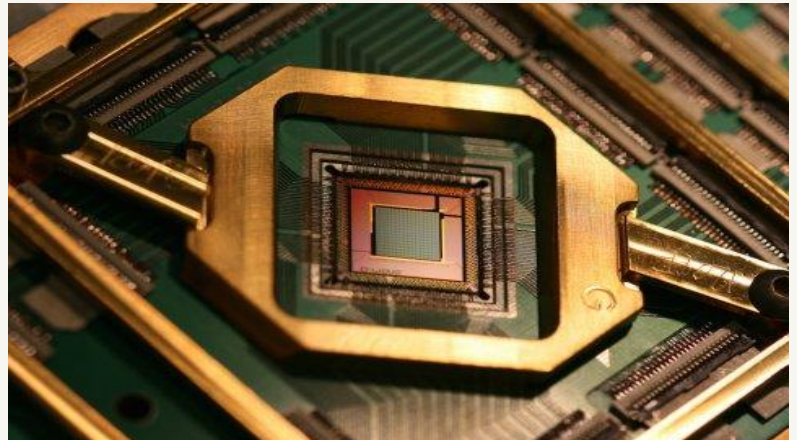


Figure 1: 10-foot-tall quantum computer (left) to cool the Vesuvius chip (right) to a temperature near absolute zero. (<https://www.dwavesys.com>)

2. Analog Quantum

The analog quantum computer is more popular among the researchers because it is much faster than classical computers and has incredible computational benefits, however, difficult to manufacture. Big companies such as Google, Microsoft and IBM Q use this technology paradigm to build quantum computers as this form of quantum computer holds great promise for solving massive problems in quantum chemistry, material science, quantum dynamics, sampling, and optimization problems. Moreover, it can also be used to break current encryption standard using encryption breaking algorithms, like SHOR's or Grover's. If such quantum computer is realized, it will emerge as the first form of computer that will exponentially outperform today's classical computers. Figure 2 shows the IBM Q quantum computer.

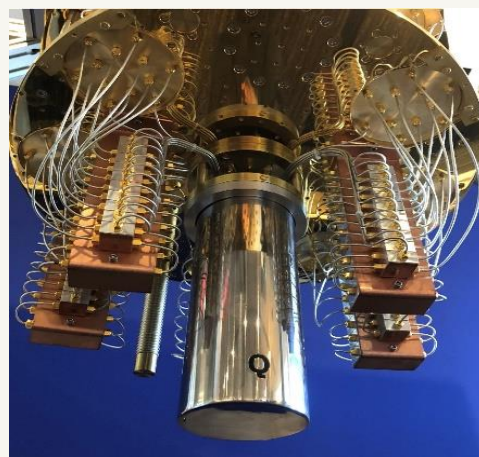
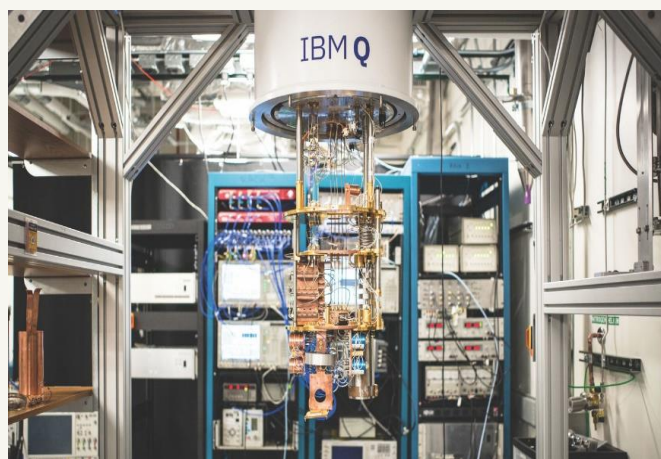


Figure 2: The IBM Quantum Network. (<https://www.ibm.com>)

3. Universal Quantum

The universal quantum computer is the most complex to build but is the most powerful. It will have more than 100,000 qubits and require massive amounts of energy to operate. More than the energy requirements, the Universal Quantum computer requires cryogenic cooling to maintain the absolute zero to 4 Kelvin to operate. In 2017, IBM was the first company to offer universal quantum computing systems via IBM Q Network. The network now includes more than 125 organizations, including Fortune 500s, start-ups, research labs and education institutions. They are all working towards quantum supremacy, a computer much larger than what you see in Figure 3. Universal Quantum Computers can be used for secure computing, machine learning, quantum dynamics, optimization problems, material science, quantum chemistry. It can break encryption even faster than any other form of quantum computer.



So, quantum computing is taking quantum leaps in terms of power, performance, and capability. The field is rapidly maturing, but there are many more developments to come. Right now, companies are laying the hardware foundation and software foundations for the quantum computing revolution and emergence into our daily lives. It is such an exciting time for the industry.

Figure 3: Quantum supremacy might be here



"It was tiring and stressful but was it worth it? Definitely! "

Ailie Sofyiana Serasa, Lecturer, SoE

Volunteering: Waste of Time or Best Experience?

AILIE SOFYIANA SERASA
MAY 2021

Volunteering is a basic building block of civil society. A lot of people ask WHY and WHEN do people contribute to the welfare of others, and why do so many people choose to help others and (to the most question) many others DO NOT? Volunteerism and community involvement have been demonstrated and proven to benefit both the volunteers and to the communities themselves. For some people, volunteering might not be attractive, and just a waste of precious time. But for some blessed individuals, volunteerism is the best and unforgettable experience. Volunteering is truly a selfless act; volunteers do it for many reasons, but the main reason is to live by the Humanitarian principles.

We volunteer because it makes a difference. I joined voluntary NGO MERCY Malaysia as a non-medical volunteer with the motivation to help others. I was inspired by the selfless act of volunteers on missions who put other people's need before themselves. One of the highlights of my many mission is volunteering in this COVID-19 pandemic. While other people are doing their bit by staying home, volunteers have decided to do more by volunteering their time and energy to help their communities. MERCY Malaysia has mobilized all their Chapters around Malaysia and stepped up its response plan to assist the government by setting up COVID-19 screening stations to assist in swabbing activities, providing health and also mental assessment to COVID-19 patients, launched its COVID-19 Pandemic Fund to support medical services and the essential needs of marginalized groups within the country, providing supplies of healthcare equipment to healthcare facilities and recently, door-to-door vaccine outreach programme targeting homeless individuals, elderly and disabled people.

On weekends I will usually go on missions and stationed at mobile clinics at underserved areas to help connect patients to medical care, providing health awareness, and education campaigns. With the spike of the third wave in Malaysia, MERCY Malaysia mobilized volunteers to red zones around Selangor and Klang Valley. I have got the chance to be stationed at one of the COVID-19 Assessment Centers (CAC). The CAC identify patients who are not suitable to be monitored from home and requires referral to the COVID-19 Quarantine and Treatment Center or hospitals. The CAC also serves to coordinate referrals from health clinics to hospitals for individuals tested positive. My mission at CAC has given me the opportunity of wearing the full gear Personal Protective Equipment (PPE) and I was trained on the proper donning and doffing (DoD) of PPE. The work at CAC is very challenging. I had to work under the hot sun from 8am until around 4-5pm as a runner wearing full PPE. Some days, I am in-charge to register individuals for home quarantine / discharge of patients. When I get home, I go into self-isolation so as to not put people around me in danger.

I have learned several things by volunteering. Number one; time management was challenging. Daily number of patients coming for appointments at CAC can reach up to 200. The team leader must mobilize a lot of volunteers and break down larger task into smaller tasks to ensure that we are able to process all patients. Volunteers must be very quick to act and able to stand long hours of working time. Number two; I learned how to consult and comfort parents with small children who developed COVID-19. It is very heartbreaking to see parents bringing their children for assessment. There is no age group that is immune to the virus, and there is no way to ensure you have zero risk of getting the virus. Number three; I learned how to communicate with people of different age and culture. At the CAC, I learned how to build communication skills with people of different background, and it is a very different experience altogether comparing with communicating with colleagues and students. Number four; I learned to work as an effective team member. Out in the field especially in the red zone, you need to have effective communication to ensure no miscommunication when handling patients and cases, and number five; I learned to be more compassionate. I practice being other-focused rather than self-focused and this experience has opened my heart.

Volunteering brings satisfaction and a sense of purpose as well as personal growth to me. I have never encountered so many people helping one another, and I will not let the pandemic stop me from serving those in need.





“Working with diverse groups of individuals allows for students to gain more self-confidence, autonomy, and appreciation for others' differences and similarities.”

Ts. Harvin Kaur, Lecturer, SOE

Coaching and Developing Well-Rounded Petroleum Engineers

SOCIETY OF PETROLEUM
ENGINEERS
JUNE 2021

If oil and gas remain an important part of the energy mix, the world still needs petroleum engineers for exploration, extracting and processing crude oil and natural gas beyond the boundaries of countries. Besides strong technical skills from academic training, what are the qualities and traits that a full-fledged petroleum engineer ideally owned? Before we dive deep into that, let's look at how a petroleum engineer works. The source of oil and gas could be discovered anywhere in the world, so travel and relocation to other countries may be a part of the role of a petroleum engineer. It is also common for engineers on-site to work 84-hour rotations and shifts, but they do get long breaks away from work as well!

A typical day for a petroleum engineer, especially those who are not working in offices or laboratories, could be exciting and demanding. It includes working on the ground which needs much communication skills with colleagues from different backgrounds and culture: maintaining records of drilling and production operations; coordinating the installation, maintenance & operation of mining and oil field equipment; developing plans for oil and gas field drilling; executing product recovery and treatment.



Well-rounded petroleum engineers are with strong teamwork skills and passion to build a connection with people; open-minded and are resourceful with problem-solving skills and can work under immense pressure whilst keeping their drive and enthusiasm.

“Naturally and inevitably, they must have strong teamwork skills and be passionate to build a connection with people; open-minded and be resourceful with problem-solving skills and can work under immense pressure whilst keeping their drive and enthusiasm,” said Ts Harvin Kaur, a Chartered Mechanical Engineer and engineering lecturer who used to work onshore and offshore as a production engineer for a petroleum operating company based in Sabah. Lecturers like Ts Harvin Kaur bring industry experience and real-world knowledge into teaching and learning at APU, transforming students into industry professionals.

Abdallah El Badaoui, 21, a Year-3 petroleum engineering student who aimed to join the energy industry and have a real impact in the world, shared a similar view. “You got to be open-minded, always challenge your perspective and have a great attitude. Before stepping into the real world just like any other field, you need to be passionate about what you are doing, be eager to learn and unlearn, make connections, as the saying goes – your network is your net worth,” he stated. “Therefore, for a petroleum-engineer-in-training, joining a professional organization even while you still studying, is important to form up your professionalism”, added Abdallah, a Comorian by origin, who came to Malaysia pursuing a Bachelor of Petroleum Engineering with honors at APU. Abdallah now helms the Society of Petroleum Engineers (SPE) Student Chapter @ APU as the President. Recently, SPE APU was presented with an excellence award by SPE International, in recognition of its efforts in technical knowledge dissemination, uplifting society, and community outreach and innovation.

SPE Student Chapters around the world are providing extracurricular training for the petroleum-engineer-to-be at the university level. The primary goal of their activities is to complement the university’s petroleum engineering academic curriculum and to augment the students’ educational experience. SPE International is a non-profit professional association that has more than 140,600 members in 144 countries engaged in oil and gas exploration and production. SPE is a key resource for technical knowledge providing opportunities to exchange information at in-person and online events and training courses, publications, and other resources.

“I believe a students’ peer group is the most important source to influence their academic and personal development. The development of the well-rounded individual comprised of in-class and out-of-class activities. So, the out-of-class activities help students to understand the importance of critical thinking skills, time management, and academic and intellectual competence. Furthermore, working with diverse groups of individuals allows for students to gain more self-confidence, autonomy, and appreciation for others' differences and similarities,” elaborated Ts Harvin, who is also the advisor of the SPE Student Chapter.

Petroleum engineering students need to develop skills specific to their career path, this is imperative for their future job success. By participating in SPE and organizing activities, students could develop soft skills, leadership skills and learn to work in a team apart from getting networking opportunity. All these highly sought-after attributes by employers in the energy and oil & gas sector. While the aspiration for newly grads equipped with a soft skillset besides academic achievement always exists, leadership roles in SPE’s activities will be positively linked to the attainment of one's first job or even a managerial role in it.



Formally established in February 2020, SPE Student Chapter at APU has accomplished many milestones during the first year. This is APU’s SPE Student Chapter Team of 2019-2020.

Outstanding SPE Student Chapter Award

Established in February 2020, SPE Student Chapter at APU has accomplished many milestones during the first year, despite the disruption of the global pandemic. “We have proved to be amongst the most active student chapters in Malaysia. Our very first activity was a trip to Indonesia for a smart competition early last year, followed by a geological field trip, and a collaboration with fellow Malaysian student chapters for a major event - SPE Malaysia Student Chapter Oil and Gas Convention,” said Abdallah.



SPE Student Chapter from the Asia Pacific University of Technology & Innovation (APU), took part in the Integrated Petroleum Festival 2020, Bandung, Indonesia.

Moreover, the society had marked their first year of operation with an iconic event – Saturday is for SPE, a five Saturday's virtual event series that saw the first international collaboration with SPE Imperial college, SPE IFP School and SPE University of Houston. The event attracted participants from 33 countries, 60 universities and 40 SPE Student Chapters with 11 speakers and more than 200 attendees, which accumulated more than 3000 views and 4000 interactions on the internet. With its active involvement over a year, members of the society were thrilled to be awarded the Student Chapter Excellence Award 2021, as this prestigious recognition is the second-highest honor a student chapter may receive and only awarded to 20% of student chapters around the world. Every student chapter around the world needs to submit an annual report for yearly performance review. SPE International would then evaluate if each chapter exhibits the criteria and perform exceptionally

“This is a recognition of our team’s effort, it is not about the product, but the process. All the work we had done rewarding by itself, the connections we made, the new skills learned and the exposure we had will impact our future path. As it reminds us all to work hard for something, this award also motivates our student community to keep working hard and striving for excellence,” opined Abdallah.

APU MALAYSIA
STUDENT CHAPTER

Institution of
**MECHANICAL
ENGINEERS**

Institution of Mechanical Engineers (IMechE)

ROUTE TO PROFESSIONAL QUALIFICATIONS

Organized by IMechE Malaysian Branch

DR. ARUN SEERALAN
MARCH 2021

Route to Professional Qualifications was an event (Tech Talk) held to highlight an individual's plan as a professional engineer after graduation. The event provided information about vocational training courses, certifications, requirements and how to achieve success as a professional engineer. The event also highlighted various professional bodies providing professional engineer certifications and various routes on how to become part of a professional body. A questions and answers session were also held near the end of the event to answer any further questions the participants might have. Certificates were provided to all participants of the event. Emcee of the event was Zayan Rameez.

Organizers

The event was a collaborated event held between I.A.S.S and IMechE APU Student Chapter.

Date and Venue

The event was held on March 19th, 2021, on Friday. The event was streamed live on Facebook and YouTube from 1:45 PM to 3:15 PM.

TASKS DONE PRIOR TO THE EVENT:

- Preparation of posters
- Marketing of the event using posters/ Upload posters on APU marketing platforms
- Filling APU request form
- Creating presentation slides
- Creating MS Teams for the competition
- Creating templates for certificates
- Creating Google drive for uploads
- Creating the following Google forms :
 1. Registration form
 2. Feedback form

TASKS DONE AFTER THE EVENT:

Judging and announcement of the results.

ROUTE TO PROFESSIONAL QUALIFICATIONS

what's next after you graduate?

Zayan

APU
ASIA PACIFIC UNIVERSITY
OF TECHNOLOGY & INNOVATION

Institution of MECHANICAL ENGINEERS

IMECHE PRESENTATION INSTITUTE OF MATERIALS MALAYSIA WEEK

Thank you for inviting me to speak !

Improving the world through engineering

Prof. Vinesh

Prof. Dr. Ir. V. V. Thiruchelvam

ent box

Have a question? Do post your question in th

Recognized Technology Fields

- Nano Technology (NT)
- Nuclear and Radiological Technology (NR)
- Art Design and Creative Multimedia (AM)

Dr. Shankar Duraikannan CEng

ROUTE TO PROFESSIONAL QUALIFICATIONS

WHAT'S NEXT AFTER YOU GRADUATE?

A talk by:

- Prof. Ir. Ts. Dr. Vinesh Thiruchelvam on Chartered Engineer
- Ts. Dr. Shankar Duraikannan on Professional Technologist
- Ir. Ts. Dr. Lohgheswary on Professional Engineer

ON 19.03.2021 AT 01:45 pm to 03:15.
Certificates will be provided.

Scan to register

APU MALAYSIA STUDENT CHAPTER
Institution of MECHANICAL ENGINEERS
I.A.S.S.

Have a question? Do post your question in the comment box

APU MALAYSIA
STUDENT CHAPTER

Institution of
**MECHANICAL
ENGINEERS**

Institution of Mechanical Engineers (IMechE)

HOW TO IMPROVE YOUR MAINTENANCE STRATEGY?

DR. ARUN SEERALAN
MAY 2021



Organized by IMechE Malaysian Branch

Southeast Asia Region IMechE organized an informative webinar hosted by the Asia Pacific University of Technology and Innovation, Malaysia on the 19th May 2021 from 5 pm onwards. The webinar was based on the topic "How to improve your maintenance," with Mr. Matthew Laskaj CEng FIMechE as the guest speaker.


Mr. Matthew is the current chair of the IMechE Scottish Region and the current director of a very successful engineering consultancy and training business. He started his career in Australia and worked throughout the world in manufacturing plants, refineries and offshore oil rigs.

The speaker elaborates on the adaptation to the rise of industry 4.0. To improve asset management plans through preventive, predictive, proactive and reliability centered and risk-based methods. And to develop our own maintenance plan that can deliver a world class level of maintenance at our organization.

Hosted by Asia Pacific University of Technology & Innovation and IMechE SEAR





SEA Region IMechE Webinar :
How to improve your maintenance strategy




Key topics:

- Traditional techniques of reactive, preventive, predictive maintenance
- Reliability centered and risk based maintenance
- Steps required to optimising your own plan

 19 May 2021 (Wed)


 5:00 pm (MYT)
10:00 am (BST)

Matthew Laskaj
CEng FIMechE, IMechE Trainer and
Scottish Region Committee Chair



Asia Pacific University of
Technology & Innovation

Scan to join online



A CASE STUDY – UNITED AIRLINES.

Let's go back to the 1960's



Photo by [Tim Gouw](#) from [Pexels](#)

Matthew Laskaj

How to improve your maintenance strategy

SEAR IM

Webinar pictures

Geoscience 101: From the Oil & Gas Industry Perspective

Asia Pacific University of Technology and Innovation
5th May 2021, 11am to 12noon

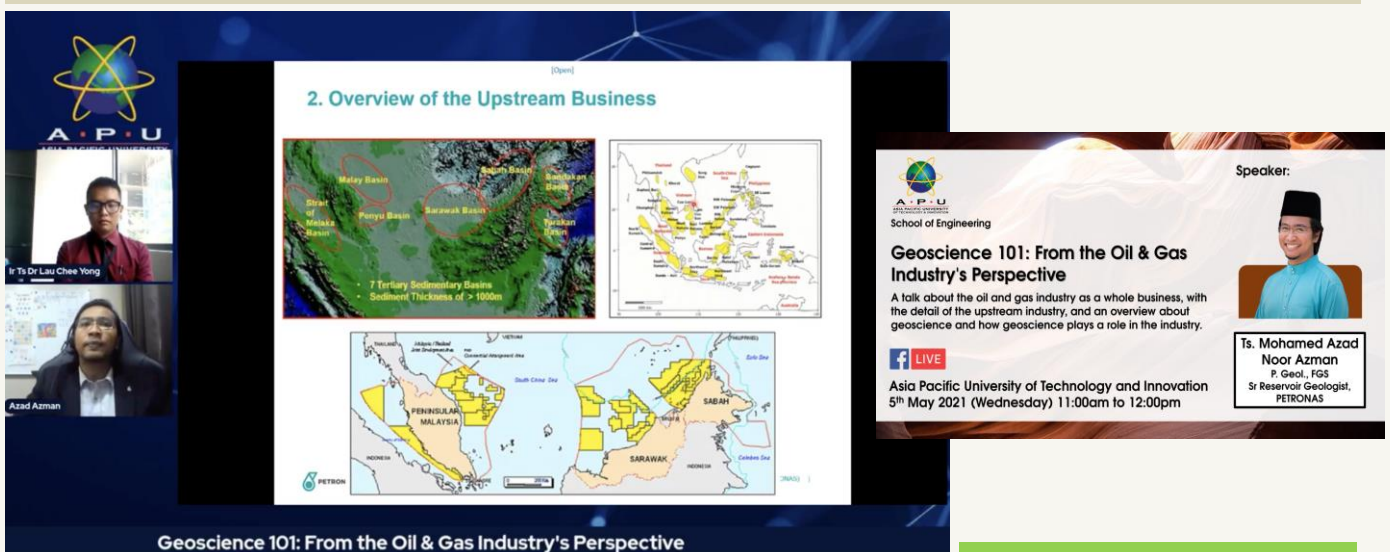
IR. TS. DR. LAU CHEE YONG
MAY 2021

On 5th May 2021 (Wednesday), School of Engineering is delighted to invite Ts Mohamed Azad Noor Azman to give his sharing about “Geoscience 101: From the Oil & Gas Industry Perspective”.

Ts Azad is a Senior Reservoir Geologist / Geomodeller at PETRONAS. He has 10 years of oil & gas industry experience, mainly in exploration, appraisal and development. Various technical and lead roles in PETRONAS Upstream, which include leading a successful exploration drilling campaign that results for hydrocarbon discovery. 2-year stint as Digital Accelerator in PETRONAS, leading digital transformation enterprise-wide. Currently providing geological consultancy and subsurface technical assessment as well as developing robust & integrated 3D static model of deepwater reservoirs (offshore Malaysia) development project collaboratively with a multidisciplinary FDP team.

He is also a key member in several transformation initiatives in PETRONAS, at Upstream and Corporate level, including the formulation of the PETRONAS Cultural Beliefs. Active involvement in volunteer activities within and beyond oil & gas industry network. Passionate about learning, connecting and making an impact.

The oil and gas industry has an enormous impact on all aspects of our daily life. Ts Azad has shared a lot about the oil and gas industry as a whole business and investigate the details of the upstream industry. The session also provided an overview about geoscience and how geoscience plays a role in the industry.



Geoscience 101: From the Oil & Gas Industry's Perspective

Webinar pictures

Industrial Perspective: Electrical Engineer

Asia Pacific University of Technology and Innovation
9th June 2021, 11am to 12noon

IR. TS. DR. LAU CHEE YONG
MAY 2021

On 9th June 2021, School of Engineering was delighted to invite a Professional Engineer, Ir Tanesh Ravichandran, an Electrical Engineer from Perunding Shanu Sdn Bhd to give a sharing about the life being an electrical engineer. Ir Tanesh has more than 10 years experience in the field. His expertise covers:

1. Design electrical power distribution system
2. Space and route planning for the electrical installation utilizing Autodesk Revit software
3. Conduct power system study, protection coordination and arc flash analysis
4. Prepare budget for the proposed electrical installations
5. Prepare tender package inclusive of drawings, BOQ, equipment specifications, etc.
6. Evaluation of bidding submissions
7. Monitor site installations and attend to queries from contractors related to site issues
8. Review of shop drawing submission
9. Attend to FAT, SAT and commissioning

This talk is aimed at giving electrical engineering students an insight into the practical electrical engineering world. The speaker would share with the students his experiences in the electrical engineering field. The students are expected to participate and be benefitted from this talk in preparing themselves to step into the industry. The key topics are as follows:

1. Introduction to electrical engineering.
2. Introduction of the speaker's experiences, his roles as an electrical engineer, and workflow.
3. Traits of becoming a successful engineer.

This event has given some insight about a life being an electrical engineer to students. Ir Tanesh also provided some advices and resources at the end of the event.



A.P.U.
ASIA PACIFIC UNIVERSITY
OF TECHNOLOGY & INNOVATION

School of Engineering

Speaker:



Ir Tanesh Ravichandran
Electrical Engineer
Perunding Shanu Sdn Bhd

Industrial Perspective: Electrical Engineering

This talk is aimed at giving the electrical engineering students an insight of the practical electrical engineering world. The students are expected to participate and be benefitted from this talk in preparing themselves to step into the industry. The key topics to be covered are as follows:

1. Introduction to electrical engineering.
2. Introduction of the speaker's experiences, his roles as an electrical engineer, and workflow.
3. Traits of becoming a successful engineer.



Asia Pacific University of Technology and Innovation
9th June 2021 (Wednesday) 11:00am to 12:00pm

Webinar pictures

APU MALAYSIA
STUDENT CHAPTER

Institution of
**MECHANICAL
ENGINEERS**

Institution of Mechanical Engineers (IMechE)

BUILDING INFORMATION MODELLING

Organized by IMechE Malaysian Branch

DR. ARUN SEERALAN
FEBRUARY 2021

Building Information Model (BIM) is a theoretical method of approach for project design and construction that involves three-dimensional (3D) modelling and parameters of computer intelligible interchange of information between parties involved in construction project management. The Building Information Modelling (BIM) was a collaborated event with IASS club of APU. The talk was held on a Saturday the 20th of February 2021, online on Teams and Facebook live from 2 pm to 4 pm Malaysian time.

SCHEDULE OF THE EVENT

- MC Intro (2:00pm – 2:10pm)
- Webinar (2:10pm – 3:30pm)
- Q&A session (3:30pm – 3:50pm)
- Vote of thanks (3:50pm – 3:55pm)
- Group photo (3:55pm – 4:00pm)

TASKS DONE PRIOR TO THE EVENT:

- Preparation of posters
- Marketing of the event using posters/ Upload posters on APU marketing platforms
- Filling APU request form
- Creating presentation slides
- Creating MS Teams for the webinar.
- Creating templates for certificates
- Creating the following Google forms :
 1. Registration form
 2. Feedback form

TASKS DONE AFTER THE EVENT:

- Emailing the certificates to the attendees.

BUILDING INFORMATION MODELLING (BIM)
ARE YOU KEEPING UP WITH THE TREND?

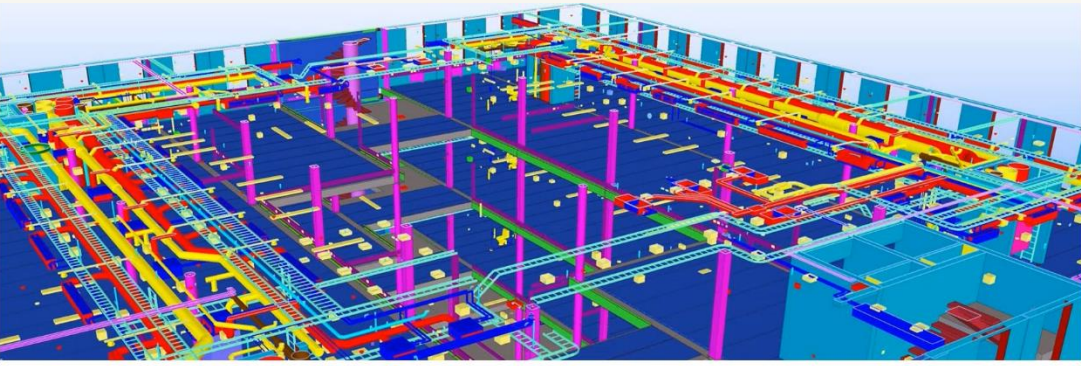
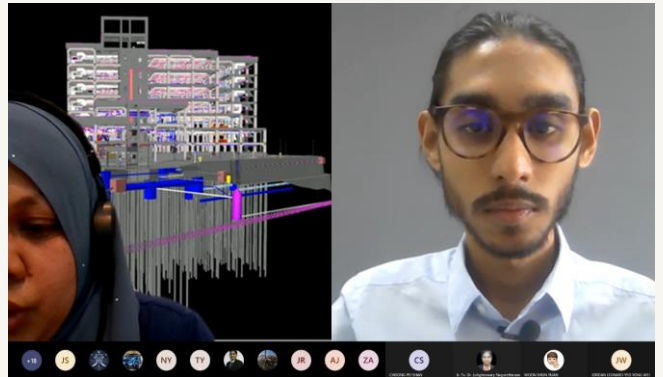


20th Feb 2021
2.00 pm - 4.00 pm
Speaker: Ir. Dr. Salmaliza Salleh


Register here:
<https://forms.gle/5QCu51shmuVuHkBY9>



APU MALAYSIA STUDENT CHAPTER
Institution of MECHANICAL ENGINEERS
I.A.S.S.
A.P.U.



BUILDING INFORMATION MODELLING (BIM)
Are you keeping up with the trend?



Event pictures

APU MALAYSIA
STUDENT CHAPTER

Institution of
**MECHANICAL
ENGINEERS**

Institution of Mechanical Engineers (IMechE)

ICE BREAKER

Organized by IMechE Malaysian Branch

DR. ARUN SEERALAN
FEBRUARY 2021

An icebreaker is an event or game meant to welcome people to a meeting, training class, team building or other activity and to heat up the talk amongst participants. In the gathering, in which people interact comfortably. Ice breakers may be a good approach to start a workout or team build-up. Before the major events, engaging and often enjoyable workshops enable people to know one other and buy for the purposes of the event. If such a session is properly structured and simple, it can truly assist to make a good start. By becoming familiar with each other, learning about the organizers and the goals of the event, individuals may participate more effectively in the process and so contribute more effectively to success.

SCHEDULE OF THE EVENT

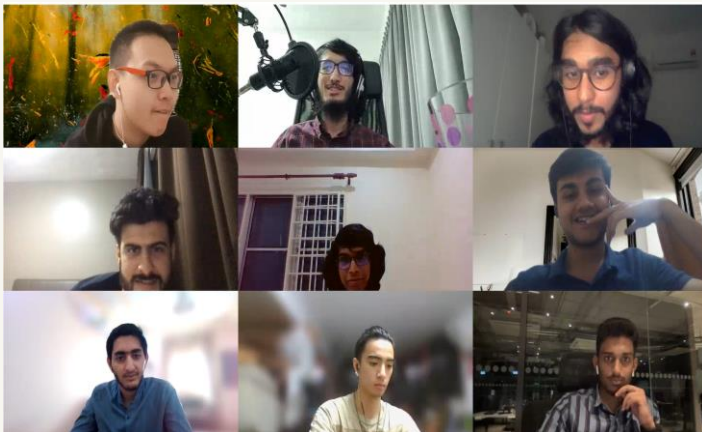
- Briefing for participants
- Presentation by Zayan Rameez
- Introduction of everyone
- Activity with Polly (2 truths and 1 lie)
- Pictionary
- Kahoot
- End of Ice Breaker

TASKS DONE PRIOR TO THE EVENT:

- Preparation of posters
- Marketing of the event using posters/ Upload posters on APU marketing platforms
- Filling APU request form
- Creating presentation slides
- Creating MS Teams for the competition
- Creating Polly for an activity
- Creating words for Pictionary
- Creating questions for Kahoot
- Creating the following Google forms :
 1. Registration form
 2. Feedback form

TASKS DONE AFTER THE EVENT:

Judging and announcement of the results.



Polly 11/03 8:00 pm Updated

Closed |
 14 completions |
 Non-Anonymous |
 Closed
 3/18/2021 7:58 PM

2 Truths and 1 Lie

[View all results](#)

Polly 11/03 8:00 pm Updated

| | |
|---|---------|
| I am from China | 64% (9) |
| ADAM EBIHARA SIDDIQUI, TAN KYE JYEN, MOHAMMED JUBAIDUR RASHID + 6 more | |
| I love volleyball. | 14% (2) |
| NABIHA TASFIA ZAMAN, ZIFAAN ABDULLAH | |
| I can speak up to 5 languages. | 21% (3) |
| ADEEL MOHAMMED KHAN, MUHAMMAD ABDOOL HAKIM LALLMAMODE, LAURENT EDDIE SYLVESTER PREA | |
| Total Votes: 14 | |
| View all results | |

← Reply

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Institution of Mechanical Engineers (IMechE)

STATISTICAL PROCESS CONTROL

Organized by IMechE Malaysian Branch

DR. ARUN SEERALAN
MARCH 2021

The Statistical Process Control: An Overview in Improving Quality event was a virtual technical talk held on the 5th of May 2021. The primary objective of this technical talk was to emphasize the technique to improvise quality. Through the Statistical Process Control (SPC) technique, the process of monitoring, controlling, and improving numerous processes in production can be performed with the tool available in SPC. This technique can provide a competitive edge over the competitions as solutions to improve productivity can be identified through the designated tools.

SCHEDULE OF THE EVENT

- MC Intro (3:00pm – 3:05pm)
- Webinar (3:05pm – 4:05pm)
- Q&N session (4:05pm – 4:20pm)
- Vote of thanks and Group photo (4:20pm – 4:30pm)

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TASKS DONE AFTER THE EVENT:

- Emailing the certificates to the attendees.

STATISTICAL PROCESS CONTROL (SPC)

AN OVERVIEW IN IMPROVISING QUALITY

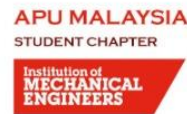


5th Mar 2021



3.00pm - 4.30pm

Speaker :
Ir. Dr. Shamini Janasekaran
Lecturer, SEGi University, and
Chartered Engineer.



Event pictures

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Institution of
**MECHANICAL
ENGINEERS**

Institution of Mechanical Engineers (IMechE)

IMECHE MEMBERSHIP RECRUITMENT

Organized by IMechE Malaysian Branch

DR. ARUN SEERALAN
MAY 2021

“IMechE membership recruitment 2021” is an event planned and organized by the IMechE APU Student chapter. The aim of this event is to encourage students to become an affiliate member of IMechE and to raise awareness about the advantages of becoming a member meanwhile collecting the information of registered members. Thus, this event will help answer any questions students have regarding becoming a member and become more aware of opportunities available for them while giving the participants step by step instruction on how to register for membership.

Day 1 of event (webinar):

- Introduction to IMechE
- Brief overview of student chapter 2021
- Overview of types of memberships available
- Step by step guide on registration process
- Benefits and opportunities available
- Sharing experience of chartered engineer by Dr. Arun and Ts. Alex
- QnA session

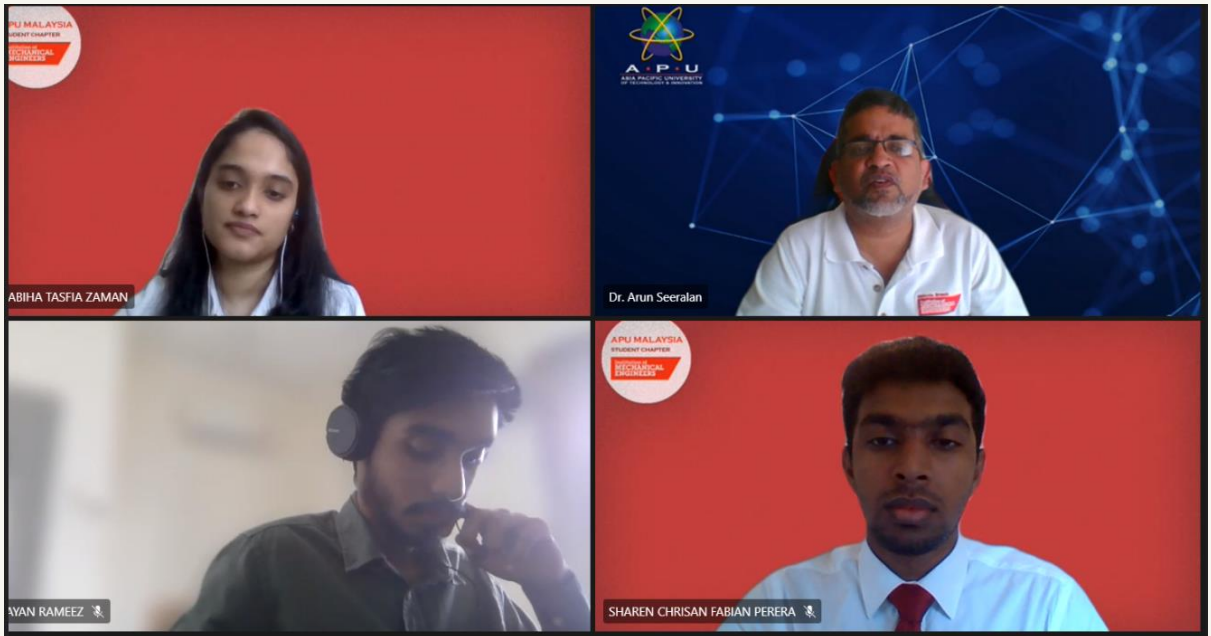
Day 2 and 3 of event:

- Poster (Advantages with QR code to registration form) circulation in groups
- Registration link circulation
- Request lectures to pass around the registration link.

Tasks done prior to event:

- Poster's preparation and approval (completed by 7th March)
 1. Invitation to webinar
 2. Advantages of becoming a member.
 3. Poster with QR code to join meeting.
 4. Info graph of step-by-step guide to become member.
- Filling APU request form (completed by 7th March)
- Lecture/guest invitations (25th April)
- Update slides and approve (completed by 7th March)
- Email interview questions to lecturers (completed by 7th March)
- Upload posters on IMechE social media and circulate WhatsApp message with poster (15th March)
- Upload posters on APU marketing platforms (17th March)
- Google forms
 1. Registration form with link to IMechE registration website and link step by step instruction guide.
 2. Feedback form

The poster features the APU Malaysia Student Chapter and IMechE logos at the top. The main title is 'IMechE Affiliate Membership Drive'. Below it, a central text reads 'We are looking for Creative Engineers who love to solve complex problems'. To the left, a diagram shows 'you' with arrows pointing to 'attend trainings, webinars, lectures and conferences', 'access to our world-class library', 'stay updated on latest technology', and 'awards and scholarships'. On the right, a yellow sticky note contains the event details: 'Come join us on 22nd May 2020 2.30pm (GMT +8) Microsoft teams (CODE- 0q8cdsr)'.



Event picture

APU MALAYSIA
STUDENT CHAPTER

Institution of
**MECHANICAL
ENGINEERS**

Institution of Mechanical Engineers (IMechE)

IMechE Handover Ceremony June 2021

Organized by IMechE Malaysian Branch

DR. ARUN SEERALAN
JUNE 2021

“IMechE APU SC Committee handover ceremony” was an event planned for the incoming committee to take over the responsibilities and tasks of the outgoing committee. The aim was to introduce the new committee and its hierarchy and give out the e-certificates to the previous committee. Other details that were given out were the events that were held in the past which include Design and print 3D face masks, Design skill competition, SOfE, workshops, ROBOCON 2021 etc., and those which will be held in the future which are PLC design competition, design skill competition, Hackathon, workshops etc.

Day of the event:

- MC intro
- Welcoming speech - Rabah
- Overview of last year's activities - Sharen
- Current and future events - Sharen
- Introduction of committee members and hierarchy
- Speech by Prof. Ir. Ts. Dr. Vinesh Thiruchelvam
- Speech by Prof. Dr. Thang Ka Fie
- Speech by Dr. Arun Seeralan Balakrishnan
- Handing of certificates to the previous committee
- Close out - Zayan

TASKS DONE PRIOR TO THE EVENT:

- Making the invitation poster.
- Getting the list of lectures and previous committee members.
- Making a Microsoft teams meeting and sending the invite.
- Assigning MC tasks and making a script and the agenda for the event.
- Making certificates.
- Making PowerPoint for presentations.
- Making an invite poster with the teams meeting QR code and posting it on socials (to invite other students).
- Trial run of ceremony

TASKS DONE AFTER THE EVENT:

Making a poster for committee hierarchy and posting it on social media platforms.





Event pictures

APU MALAYSIA
STUDENT CHAPTER

Institution of
**MECHANICAL
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Institution of Mechanical Engineers (IMechE)

PLC DESIGN COMPETITION 2021

Organized by IMechE Malaysian Branch

DR. ARUN SEERALAN
JUNE 2021

PLC Design competition aims to cultivate teamwork, use their imagination and analytical skills to invent, design and turn ideas into products among young Engineers. The PLC Design competition will be hosted online using MS-Teams and (Automation Studio/CX-Programmer & CX-Designer) software. The winning team of the competition qualifies to compete in the international PLC competition.

SCHEDULE OF THE EVENT

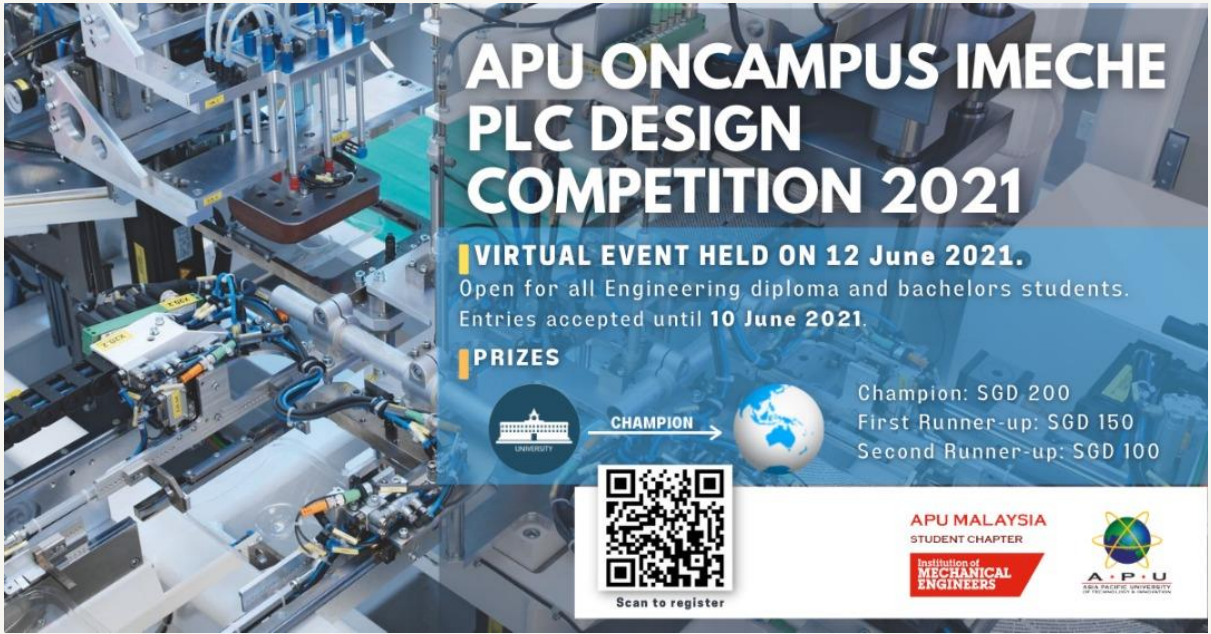
- Technical briefing for participants (9:00am – 9:30am)
- Online settings, checking the connectivity and stability of the software (9:30am – 10:00am)
- Time allocated for designing (10:00am – 12:30pm)
- Submission of the design files and the presentation video (12:30pm – 1:30pm)

TASKS DONE PRIOR TO THE EVENT:

- Preparation of posters
- Marketing of the event using posters/ Upload posters on APU marketing platforms
- Filling APU request form
- Creating presentation slides
- Creating MS Teams for the competition
- Creating templates for certificates
- Creating Google drive for uploads
- Creating the following Google forms :
 1. Registration form
 2. Feedback form

TASKS DONE AFTER THE EVENT:


Judging and announcement of the results.




**APU ONCAMPUS IMECHE
PLC DESIGN
COMPETITION 2021**

VIRTUAL EVENT HELD ON 12 June 2021.
Open for all Engineering diploma and bachelors students.
Entries accepted until **10 June 2021.**

PRIZES

CHAMPION → 

Champion: SGD 200
First Runner-up: SGD 150
Second Runner-up: SGD 100


Scan to register

**APU MALAYSIA
STUDENT CHAPTER**
**Institution of
MECHANICAL
ENGINEERS**

A.P.U.
ANGLO-PACIFIC UNIVERSITY



Event pictures

TOP GLOBAL IT COMPETITION AWARD FOR APU STUDENTS' RFID & IoT PROJECT

**200 teams from 43 countries in global IT challenge. 1 ultimate
champion from APU**

**IR. TS. DR. LAU CHEE YONG
MAY 2021**

The Internet of Things (IoT) has greatly changed how the construction industry operates and experts predict that the IoT market share in construction will reach USD 16.8 billion by 2024 . As IoT could simply mean embedding any objects with sensors, software, and other technology that are connected and interact with each other over the internet, you can imagine how construction companies can adopt IoT technology – by connecting materials with smart devices, to perform distance monitoring, tracking, controlling and analyzing to achieve construction safety, efficiency and sustainability.

Given this, industry players are eagerly building the talent pipeline to cope with the advancement of this technology. Hilti, a Germany based multinational company that supplies the construction industries with technological systems, organizes an annual global IT competition to identify industry-ready talents.

At this year's Hilti Global IT Competition (ITC) 2021, Team Techgasus comprising four Bachelor of Engineering in Mechatronics Engineering (Honors) degree students, Tan Jia-Hao, Lim Joon Yi, Lim Cher Khai and Chan Jing Hung from the Asia Pacific University of Technology & Innovation (APU), overcame more than 200 teams from 43 different countries to emerge as champions!. The team was more than adequately mentored by Ir Ts Dr Lau Chee Yong, Senior Lecturer of the School of Engineering.

The quartet felt humbled by this accomplishment. “This competition was indeed a huge win for us, however, it is only the steppingstone to our future careers,” said Tan Jia-Hao, the team leader. As a reward, Team Techgasus members have been offered an industry internship opportunity at Hilti – ahead of their peers in securing such an opportunity.

The competition required integration of IT and engineering know-how to develop a prototype which the winning team members were well equipped with having been trained in mechatronics and robotic technology. Despite the challenges posed by the COVID-19 pandemic, the team met regularly online to brainstorm their ideas and develop the prototype - a system that provides an alternative way to keep track of the construction industry's day-to-day operation like inventory and site workers count. Key features of the prototype include using RFID and IoT as well as remote monitoring technology.

Event poster

What indeed awed the judges was that *Team Techgasus* was the only team that was able to conceptualize what they advocated, and further proved it with a workable prototype - practical and hands-on abilities that are truly sought after by industry. “Becoming the champions of the Hilti Global IT Competition (ITC) 2021 is an endorsement of the professional qualities & attributes of our students - communication, problem-solving, critical thinking and innovation, as demonstrated before the panel of judges made up of industry professionals”, said mentor Ir Ts Dr Lau.

APU's Engineering programmes are market-driven, practical, reflect current technologies which prepare and nurture students as employable graduates. Apart from technical knowledge, the programme modules enable students to build leadership skills, communication skills and these skills prepare them for the workplace as professional and confident engineers, with skillsets across the board.



Event picture

Sustainable Innovation in Engineering and Technology

Asia Pacific University of Technology and Innovation
18th May 2021, 10am to 12noon

DR. FREDDY TAN KHENG
SUAN
MAY 2021

The 3rd International Conference on Sustainable Innovation in Engineering and Technology 2021 (SIET 2021) organized by School of Engineering APU on 18th May was a great success. The Conference was an overwhelming success, attracting more than 60 participants from all over the world, including speakers and researchers from different parts of the country. All the presentations were recorded and uploaded on SIET 2021 official website. All accepted papers were published in Scopus-Indexed journal.

The SIET 2021 was inaugurated by Prof. Ir. Ts. Dr. Vinesh Thiruchelvam, Deputy Vice Chancellor and Chief Innovation Officer of APU. The keynote speech was delivered by Prof. Dr. Kyo-Beum Lee, Head of Power Electronics Lab, Ajou University, South Korea on “Reliability on Power Electronics”, followed by Mr. Woon Wei Kian on “Innovation in the Electric Supply Industry”. Both the inauguration and keynote speech were delivered online.

Special appreciation and thanks to all the organizing committees – Dr. Freddy Tan Kheng Suan (Conference Chair), Dr. Shankar Duraikannan (Publication Chair), Dr Lau Chee Yong (Publicity Chair), Dr. Chandrasekharan Nataraj (Logistic Chair) and Krishna Ravinchandra (Technical Committee).

Keynote Speech

Sustainable Innovation in Engineering and Technology

Date: 18th May 2021 (Tuesday)
Time: 10:00am to 12:00pm

Opening Speech
Prof Ir Ts Dr Vinesh Thiruchelvam
 Deputy Vice Chancellor
 Asia Pacific University of Technology and Innovation

Keynote Speech 1
Prof Dr Kyo-Beum Lee
 Head of Power Electronics Lab
 Ajou University, South Korea

Keynote Speech 2
Mr Woon Wei Kian
 Lead (Strategy Intelligence & Formulation)
 Tenaga Nasional Berhad

Asia Pacific University of Technology and Innovation

Society of Petroleum Engineers (SPE 2020)



Asia Pacific University
SPE Student Chapter

WOMEN IN ENERGY

SPE
MAY 2021

Gender equality has gotten better over the years; women are currently more represented and included in various work fields. One of those fields is the energy field considered a male dominated field; nevertheless, discrimination against women is lesser now; women are directly involved in the area, although a few.

Events such as Women in Energy aim to acknowledge how far women have come and empower the young uprising female engineers in the energy field. They also aim to encourage them of its significant impact in the area. Thus, SPE APU student chapter is organized the Women in Energy Virtual Conference to address women's issues in the energy field and empower the upcoming female engineers. This event will also serve as a platform to clarify any doubts female engineering students might have, by hearing from the speakers' personal experiences — their journey in the field, the setbacks they might have faced, and how they overcame them.

Watch live at
SPE Asia Pacific University
Student Chapter Facebook page

SPE APU SC presents

Women in Energy Virtual Conference

Topics:

- THRIVE!
- Leadership in heels
- Where we are needed

May 8, 2021
5-7.30pm (GMT+8)
Online conference @ Microsoft Teams

5 SPE tokens will be given to SPE APU members

Scan to register

SPEAKER GUESTS

Mervin Azeta Sarah Hanes Ir. Jacqueline Lukose

GUEST SPEAKER OF WIE



MERVIN AZETA

- Award-winning Nigerian energy professional, intersectional advocate, multi-talented engineer, and presidential scholar.
- Product & Service Delivery Manager for two business lines at Schlumberger.
- Influencer and trailblazer, keenly passionate about sustainable development, gender equality, youth engagement as well as cultivating the next generation of female scientists, technologists, engineers, mathematicians and transformative leaders.
- Serves on multiple boards inspiring a shared commitment to deliver a cleaner, healthier, secure and sustainable energy future for all.
- Holds a BEng, with First Class Honors, in Chemical Engineering from the University of Benin, and MSc, with Distinction, in Sustainable Energy Futures, from the Imperial College London.

GUEST SPEAKER OF WIE



SARAH HANES

- Production Engineer at Schlumberger since December 2017.
- Holds a bachelor's degree in Chemical Engineering from USA, Colorado School of Mines.
- Involved in the technical development work to identify potential well candidates that integrates Machine Learning and Artificial Intelligence.
- Received technical trainings and certificates in Reservoir Production and Production Workflow in France.
- Serves as the SPE-KL Communications Chairperson and is part of the Young Professionals committee.
- Program management advisory for the Young Professionals Society of Petroleum Engineer Kuala Lumpur.

GUEST SPEAKER OF WIE



IR. JACQUILINE LUKOSE

- Holds B. Eng. in Electrical Engineering from the University of Roorkee in 1996, India and M. Eng. in Electrical Energy and Power Systems from the University of Malaya in 2010.
- She has vast experience in the construction sector of electrical engineering, ranging from low voltage applications up to 275kV transmission.
- She is currently pursuing her PhD in Eng. from the University of Malaya.
- Her area of interest is application of machine learning techniques in solving power system related problems.
- She is a professional engineer registered with the BEM, a corporate member of IEM and a student member of the IEEE.

Society of Petroleum Engineers (SPE 2020)



RARE DISEASES DAY

SPE MAY 2021

The first rare Disease Day was celebrated in 2008 on 29 February, a 'rare' date that happens only once every four years, due to that annually rare disease day takes place on the last day of February. A day that the rare disease community and its supporters come together with one voice to bring awareness and improve the knowledge on some diseases that are not in the spotlight, diseases that are not known and are suffered by a huge amount of people. As a result of these diseases not being known, they do not get the much-deserved attention they require. Mostly such diseases go undiagnosed.

To encourage researchers and decision maker to address and create a medical solution for those living with rare diseases, an entire day is dedicated to sensitizing the world about such diseases. These rare diseases include ectodermal dysplasia, leiomyosarcoma (rare cancer) Netherton syndrome is a rare hereditary disorder and SMA (Spinal muscular atrophy) to name a few.

During this day, several organizations around the world organize events to raise awareness on behalf of the rare disease community to reach hundreds of thousands of people which will result to a lot of media coverage. In this regard, the Society of petroleum Asia pacific university student chapter under SPE Care (which is a global volunteering initiative of the society of petroleum engineers which aims to shed a positive light on the oil and gas industry and make a difference in our community outside our careers) thought it fit to raise awareness within its university and therefore organized an event.

Three speakers were invited to tell the message that Rare is many, Rare is strong, and Rare is proud.

- **Dr Neelam Ismail**

A family medicine resident at the Aga Khan University Dar Es Salaam campus, - Defined rare diseases as a condition that affects less than 200,000 people and that due to the rarity of each individual disease and the scattered population and brain the expertise and information is scarce. Furthermore, Dr Neelam Ismail mention that rare diseases mostly affect body part that are associated with the never, muscles whilst listing a few rare diseases such as Progeria Syndrome, treacher collins syndrome and Dermatographia to name a few and listen some symptoms of several rare diseases.

- **Dr Hannah Moore**

A family medicine resident also at the Aga Khan University Dar Es Salaam campus who happens to be a parent of a son named Joshua that suffers from Duchenne muscular dystrophy. She spoke about her journey with her son from a baby till now that he is ten years old, the challenges she faced as a parent and as a doctor (including doctors' evaluation, discrimination, late speech and delayed walk and how expensive genetic testing is very expensive and not offered locally. More especially Joshua faced several problems on his own for E.g., when he was 6, he fell in school which caused him to be home schooled by his parent.

- **Allida Muhamad Said**

Spoke about the rare disease's society in Malaysia and their impact in the quest of raising awareness about rare diseases The session was very interactive with a turnout of more than 30 attendees. The event was indeed a success and the message about rare disease and how several of these diseases have no cure and the causes of most the above listed diseases was passed on.

Society of Petroleum Engineers (SPE 2020)

SPE MALAYSIA STUDENT CHAPTERS OIL AND GAS CONVENTION (SMOGC 2021)



**SPE
MAY 2021**

SPE Asia Pacific University Student Chapter is a Vice Director of the SPE Malaysia Student Chapters Oil and Gas Convention (SMOGC) and the International Student Chapters Conference (ISCC) organizer. ISCC was previously known as APSC or Asia Pacific Student Chapters Conference which occurs during the annual SMOGC.

Being the Vice Director of SMOGC, SPE APU SC will manage the leadership role by supervising the entire event. The role includes checking and recording each department's progress to ensure a smooth workflow and the event's success.

Besides, SPE APU SC will organize the International Student Chapters Conference (ISCC) which will be a two-day collaborative event by several Student Chapters from Asia, Africa, America, Europe, and the Middle East. It will take place physically and virtually through a hybrid video conferencing set-up. This event aims to expand and improve SPE Student Chapters' relations worldwide and provide them with a platform to share their experiences to learn from each other and progress.

Moreover, SPE APU SC is also responsible for catering for the SPE Malaysia Student Chapters Oil and Gas Convention (SMOGC). The Student Chapter will select the menu and draft a budget for the food and beverages for three days and for around 325 attendees.

The team working tirelessly to ensure the event's success and the accomplishment of all the roles entrusted to SPE APU SC include Majduline Jubarah, Mariam Sendali, Liz Wong Ming, Ibrahim Alshibani and Alex Gray.