UMS
UNIVERSITI MALAYSIA SABAH

FACULTY OF ENGINEERING NEWSLETTER

OCTOBER TO DECEMBER
2020 ISSUE
Q4 EDITION

Content Features 7 Key Categories

- Administration
- Academic
- HEPA
- CSR
- Presentation/Talk/ Conference
- General
- Research, Development & Innovation

2020 Newsletter Committee

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SCAN ME

Message From The Dean

Assalamualaikum and Salam Harmony FKJ, Faculty of Engineering, UMS to all respected readers. It is my pleasure to welcome you to our fourth quarter (October – December) year 2020 FKJ Newsletter.

First of all, on behalf of the FKJ Newsletter Committee, I would like to thank all the FKJ staff for contributing to the success of our newsletter. With the launch of the fourth edition, this marks the first anniversary of the launch of the FKJ Newsletter. The year 2020 marks the biggest hurdle faced by everyone where the world struggled to cope with the spread of the COVID-19 epidemic worldwide. As a result, academic institutions have to change from common face-to-face teaching and learning approaches to online approaches. The years ahead of us will be very tough and challenging but I believe if we learn to approach things with positive attitudes, we can overcome many hurdles. With that, I am very pleased to officially launch this fourth edition of FKJ Newsletter and I hope that you will find this newsletter informative.

The fourth issue of our newsletter begins with an article on the faculty human resource management updates, followed by the faculty 2019 appreciation awards, FKJ, UMS strategic plan workshop 2018-2022, and many more. There are seven key categories featured in this issue comprising of Administration, Academic, HEPA, CSR, Presentation/Talk/Conference, Research, Development & Innovation, and General. In the academic category, most of the articles featured revolved around the IAP & EE online visits for the Electronic Engineering (Computer), Electrical & Electronic Engineering and Civil Engineering programs. The categories can help the reader to choose which article to read from and we hope that you will find great value in its content. We will continue to provides updates on the many activities in which the faculty are involved through the upcoming newsletter issues. I would like to take this opportunity to sincerely thank all the members for their contribution in making the newsletter successful, despite the challenges faced. To the readers, we always welcome your feedback and suggestion to help us improve.

In the meantime, stay safe and healthy!

Together we are stronger.

With warmest regards,

Associate Professor Ts Dr. Ismail Saad
Dean of FKJ, Faculty of Engineering, UMS

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Administration

FKJ Human Resource Management Updates

Reported by En. Azmi Bin Jumat & Saverin @ Sayerine Binti Vun Sang.

A. NEW STAFF REPORTING DUTY

Congratulations and welcome to the newly appointed staff:

Name	Position	Program	Date
Ir. Vun Wey Tyng	Senior Felo	HK01	16/11/2020

B. SERVICE ENDED

Many thanks to the Faculty of Engineering members who have completed the service as follows:

Name	Position	Program	Date
Prof. Dr. Duduku Krishnaiah	Main Felo	HK03	29/11/2020
Prof. Dr. Awang Bono	Main Felo	HK03	15/12/2020
Assoc. Prof. Dr. Manas Kumar Haldar	Associate Professor	HK20	02/01/2021
Prof. Dr. Nader Nassif Barsoum	Professor	HK20	01/01/2021

C. FKJ NEW APPOINTMENTS

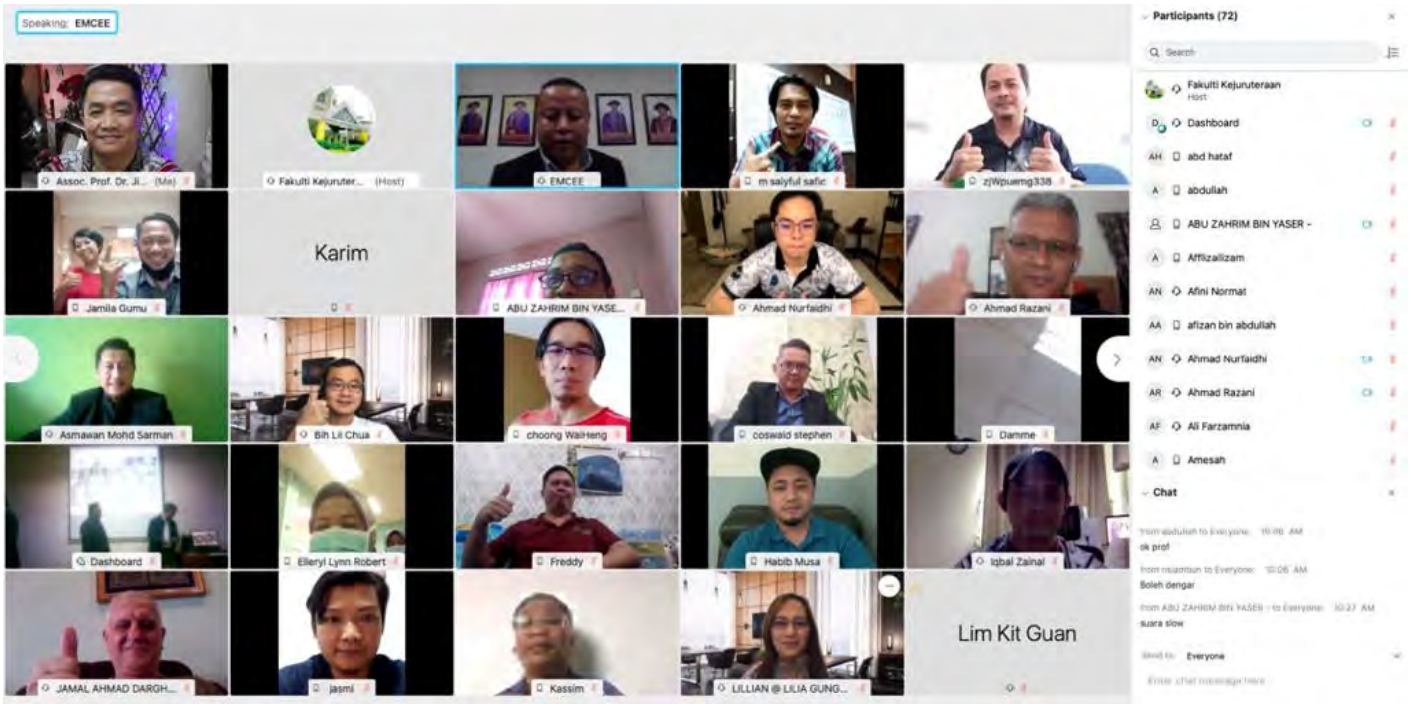
Name	Position	Duration
Dr. Mazlina Mamat	Coordinator, FKJ Postgraduate Programme	01/12/2020 – 30/11/2022
Dr. Mariani Rajin	Head of Programme, Chemical Engineering	16/10/2020 – 15/09/2022
Ts. Dr. Lillian Gungat@Lilia	Head of Programme, Civil Engineering	03/12/2020 – 02/12/2021

2019 FKJ Appreciation Awards

Reported by En. Azmi Bin Jumat & Azwan Gakau.

The Faculty of Engineering (FKJ) Appreciation Awards was held on 30 December 2020 giving appreciation to the staff who have shown excellent performance in various disciplines set by the Management of FKJ. This appreciation is recognition to the faculty staff who have provided excellent services throughout the year 2019. This event was held for the first time virtually via Webex platform. A total of 49 recipients were selected to receive awards in the form of plaques and certificates which are divided into 4 categories according to the following disciplines:

CATEGORY	NUMBER OF RECEIPIENTS
MANAGEMENT & ADMINISTRATION	12
STUDENT AFFAIRS & ALUMNI	14
RESEARCH & INNOVATION	19
ACADEMIC AFFAIRS & INTERNATIONAL	4
TOTAL	49



Dean of FKJ, Assoc. Prof. Ts. Dr. Ismail Saad emphasized the importance of harmony and understanding among faculty staff to remain closely intertwined. In an organization, good relationships between staff need to be maintained, while performing tasks sincerely and honestly. The task entrusted to the staff must be done diligently so that the sustenance increases with blessings.

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He also hopes that this appreciation can inject enthusiasm and competitiveness among the staff to achieve excellence. Together, we have to maintain what is achieved while competing healthily to continue progressing and improving. 'Let today be better than yesterday' he said. He ended his speech with Malay poesy:

Bertaut semalu sepoi cuaca
Terbang tinggi si burung tempua
Setahun berlalu tidak terasa
diriku berbakti kepada semua

Terang bulan cahaya berseri
dibalik awan hati teruja
segala kekurangan bersama baiki
moga kecemerlangan milik kita semua

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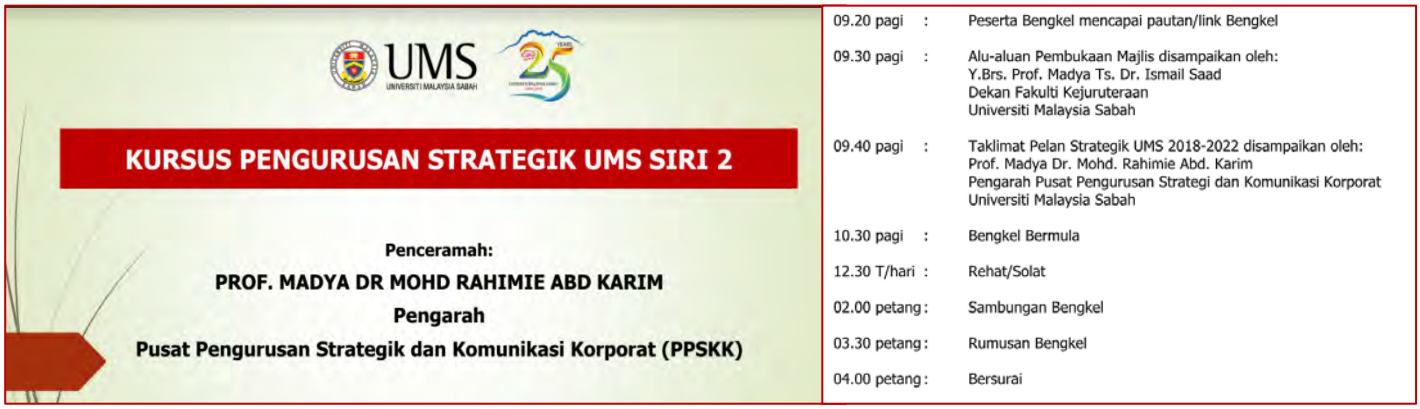
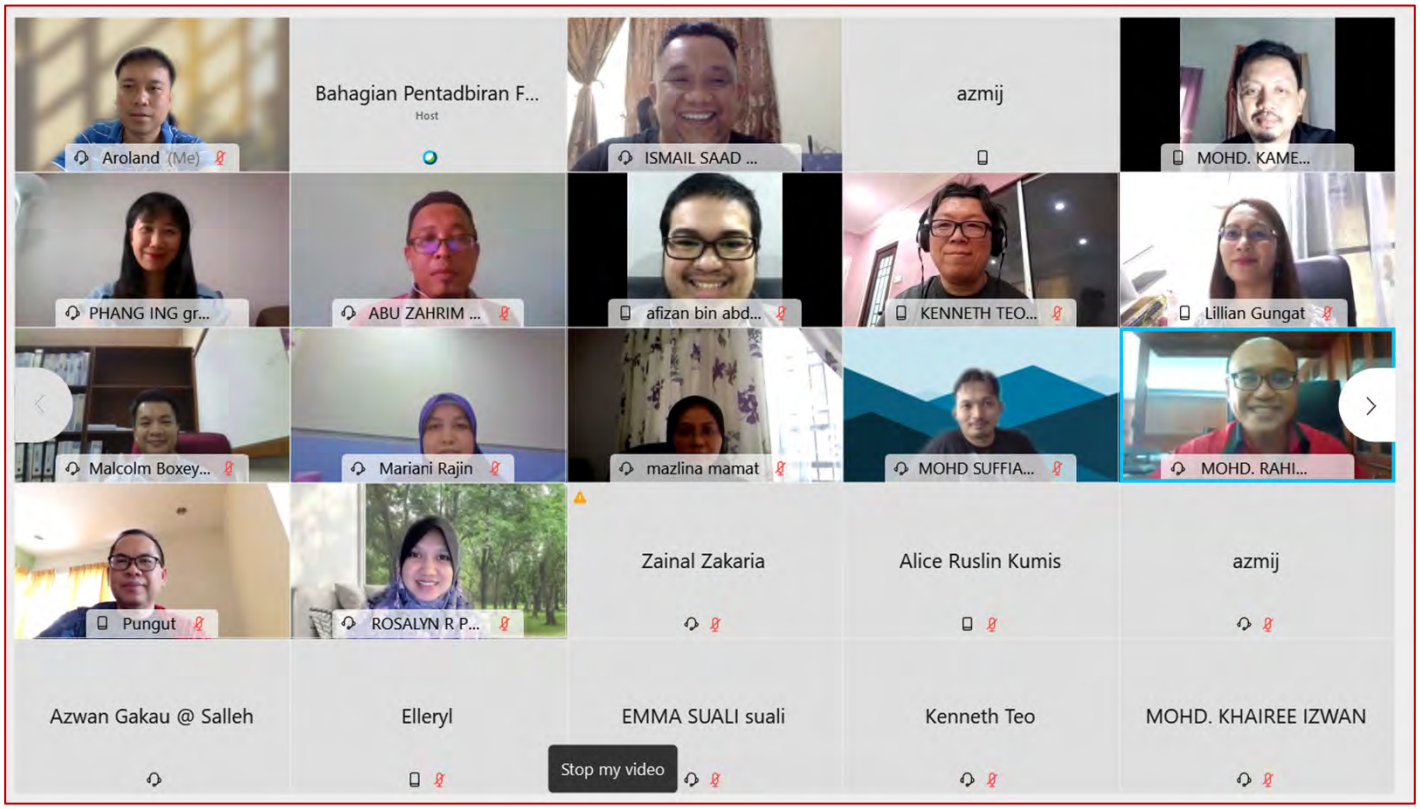
UMS Strategic Plan Workshop 2018-2022 Faculty of Engineering

Reported by Dr. Aroland Kiring.

On 25 November 2020, Universiti Malaysia Sabah (UMS) strategic plan workshop 2018-2022 Faculty of Engineering (FKJ) was held virtually via Webex. The speakers for the workshop were Assoc. Prof. Dr. Mohd Rahimie Abd Karim and Dr. Phang Ing @ Grace from Center for Strategic Management and Corporate Communication (PPSKK), UMS. In UMS Strategic plan, there are 6 key result area (KRA) was identified; KRA 1 Quality Educational Experience for Students, KRA 2 High impact research and innovation, KRA 3 Global prominence, KRA 4 Empowerment of governance, human resources and delivery system, KRA 5 Financial sustainability, and KRA 6 Sustainable campus. The main objective of the workshop is to understand, discuss and identify what role and action needed to be taken by FKJ to help the University in achieving its 2018-2022 strategic plan.





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Electronic Engineering (Computer) Program IAP Online Visit 2020

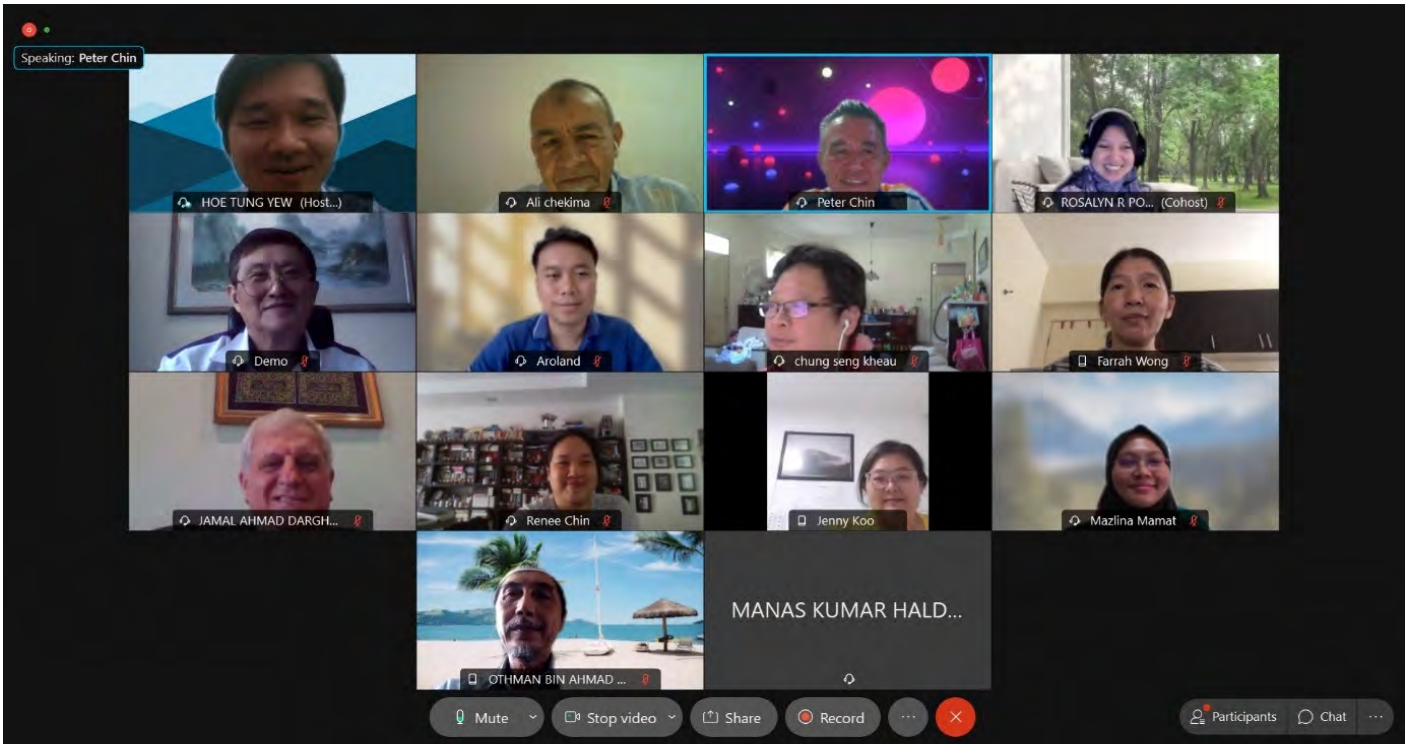
Reported by Dr. Yew Hoe Tung.

Electronic Engineering (Computer) program has held Industrial Advisory Panels (IAP) Meeting 2020 virtually on 19 November 2020. The meeting was chaired by the head of program, Dr. Rosalyn R. Porle. Three IAP members, Mr. Tony Tee, Ir. Peter Chin and Ir. Jenny Koo attended the meeting and made valuable suggestions on the new academic curriculum structure to meet industry needs.

Mr. Tony Tee Boon Chai
Chairman / Managing Director of Galaxy Group of Companies

Ir. Peter Chin Hon Ming
Managing Director of Inferno Network Company

Ir. Jenny Koo
Director of IP Consultants Sdn Bhd

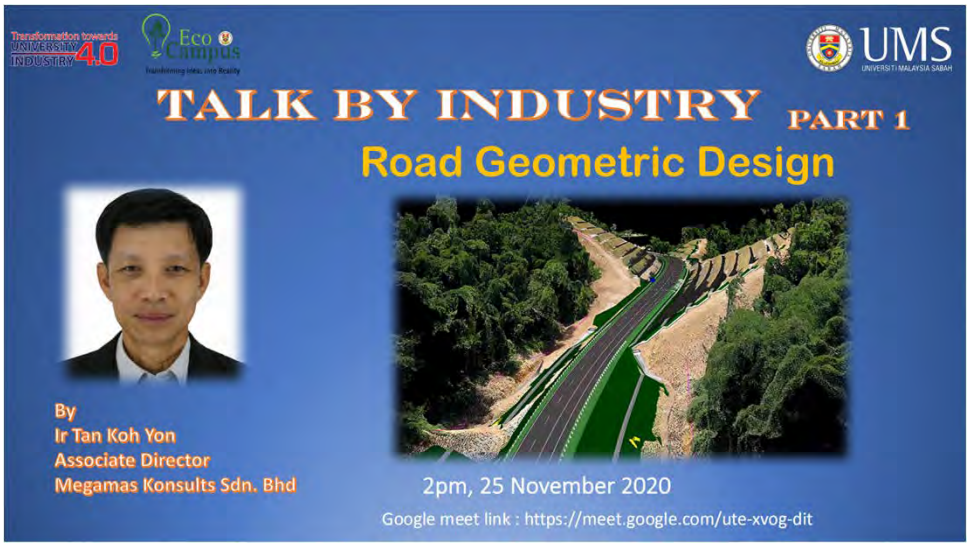


Industrial Talk (Road Geometric Design) Part 1/2

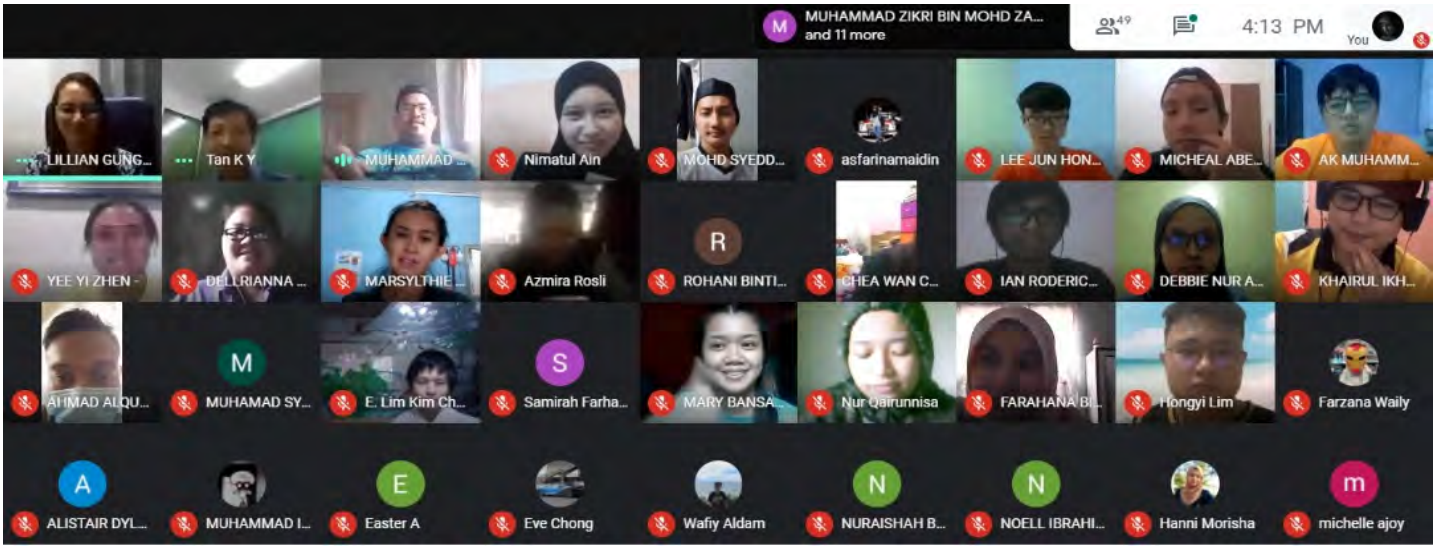
Reported by Marsylthie Timothy (Leader of CEC Publicity Unit) & Dr. Lillian Gungat.

An Industrial Talk (Road Geometric Design) Part 1 was delivered by Ir Tan Koh Yon, an Associate Director of Megamas Konsults Sdn. Bhd. with the 3rd Year (BK18) Civil Engineering (HK01) students on the 25th November 2020 at 2pm through google meeting. The talk was coordinated by Dr Lillian Gungat under the Highway Engineering (KA34503) course .

Highway engineering is an engineering discipline branching from civil engineering that involves the planning, design, construction, operation, and maintenance of roads, bridges, and tunnels to ensure safe and effective transportation of people and goods. Thus, by having an industrial talk between an expert and among students, it exposes students to the practical aspects and, to a certain extent the know-how.



Therefore, that they will be able to translate theories and concepts into practice which could enhance students learning process and understanding on highway engineering aspects.



Participations by 3rd year (BK18) students

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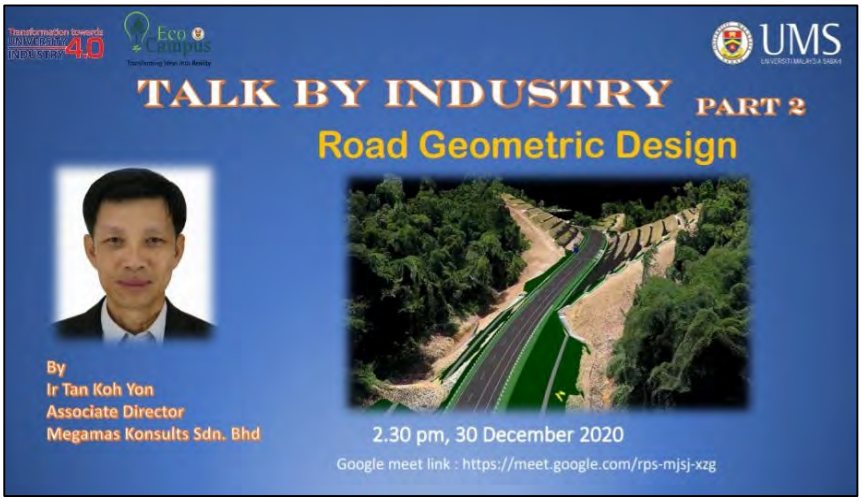
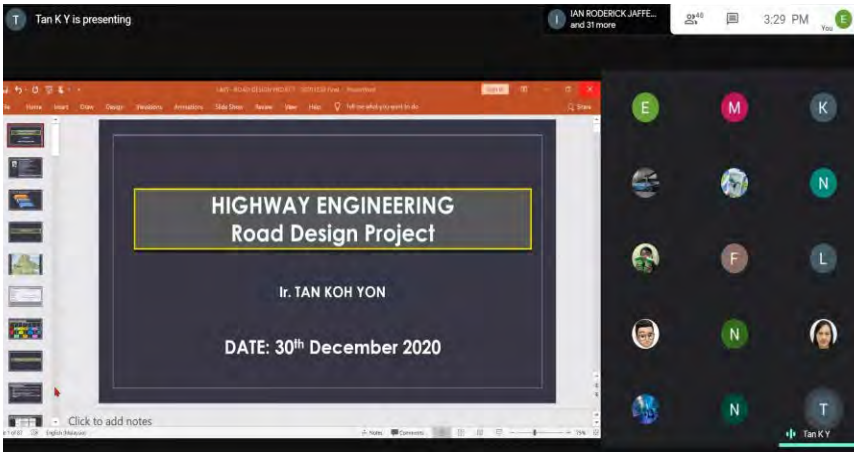
Industrial Talk (Road Geometric Design) Part 2/2

Reported by Salinah Dullah & Ally Easter Alan (Civil Engineering student).

Exposure to real engineering design is very important for students to relate their theoretical knowledge to real-life aspects of the study course. But with the current Covid-19 pandemic, it was difficult to conduct Industrial visits. Industrial talk through online platforms such as Google Meeting had therefore been the main approach to make exposure to real-life industries possible today.





An Industrial Talk was held via Google Meet on 30th December 2020, at 2.30 pm, coordinated by Dr. Lillian Gungat on the subject of KA34503 Highway Engineering. The Associate Director of Megamas Konsults Sdn Bhd, an experienced engineer, Ir Tan Koh Yon, was invited to give a talk on the real Road Design Project he was working on. The students involved were the 3rd year (BK18) Civil Engineering students who took the subject of KA34503.

Ir Tan recently appointed as Industry Advisor Panel (IAP) for the Civil Engineering Program and was working on a road design project located at Kuala Penyu, Sabah. The talk focused on the actual process of road design, where many aspects need to be taken into account. Ir Tan stated, "The engineering process for road design is not easy because it has to be the most practical and economical." Moreover, students also get the opportunity to see the actual design layout of road drainage and pavement design. At the end of the Industrial Talk, students were given the chance to have a short question and answer session with the speaker.

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Civil Engineering Program IAP Online Visit 2020

Reported by Ir. Ts. Dr. Habib Musa bin Mohamad & Ts. Dr. Lillian Gungat.

Civil Engineering (HK01) program has held Industrial Advisory Panels (IAP) Meeting 2020 virtually on 9 December 2020. The meeting was chaired by Ts. Dr. Lillian Gungat, the Head of program. The IAP 2020 meeting met the quorum as it was attended by 4 newly appointed industry panels which are Ir. Dr. Tom Ngui, Ir. Mohammad Safri bin Abdul Habi, En. Mohd Izwan @ Eboy Bin Jumat and Ir. Tan Koh Yon @ Tang Kok Yon and lecturers from Civil Engineering programme. The particular direction of Civil Engineering programme and current general measures was discussed in the meeting. By the same token, the industry panels have made valuable suggestions and advises on the relevance of the curriculum ranges from the technical, safety and work readiness skills to ensure that the content of program is responsive to current industry needs.

Ir. Dr. Tom Ngui
Principal Consultant
Managing Director
Eramaju Synergy Sdn Bhd

Ir. Mohammad Safri bin Abdul Habi
Ketua Penolong Pengarah
Cawangan Lebuhraya
Jabatan Kerja Raya Sabah

En. Mohd Izwan @ Eboy Bin Jumat
Jurutera Daerah
Jabatan Pengairan
Dan Saliran Kudat, Sabah
Alumni UMS

Ir Tan Koh Yon @ Tang Kok Yon
Associate Director
Megamas Konsult Sdn. Bhd
President Sabah Engineers Association

Electrical & Electronic Engineering Program IAP Online Visit 2020

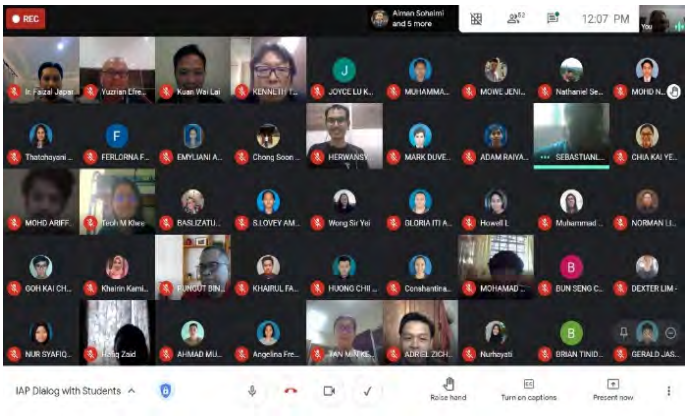
Reported by Baslizatun Asania binti Alli, Joyce Lu Kuan Yee (*Executive Publicity, IEEE Student Branch*).

Thursday, December 10th: **2020 HK02 IAP Meeting** was held for deeper interactions and discussions between Electrical & Electronic Engineering (EE) Programme and the industrial panels. The IAP Meeting started at 9:00 am via Google Meet with four invited panels:

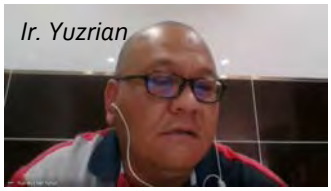
1. Ir. Yuzrian Efren Yunus (Principal)
   Prestigious Konsult
2. Ir. Malek Tan Hak Vui (Chief Engineer)
   Advanced Power Solutions (Borneo) Sdn. Bhd.
3. Ir. Faizal Japar (Chief Engineer)
   Sabah Electricity Sdn. Bhd.
4. Mr. Lai Kuan Wai (General Manager)
   Ascertain Tech Automation & Solution Sdn. Bhd.

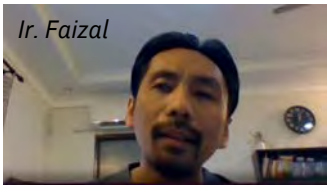
A few concerns had been addressed in this meeting, with the following details delivered by the EE Programme:

1. Academic curriculum and PEO
2. Laboratory concern (compliance and safety)
3. Potential projects link to the industry (design project, final year project, industrial training)
4. UMS Channel for industry collaboration



IAP Meeting encourages deeper connections between the academic and the industry.





Sharing form the invited industrial panels.

The student dialogue session was carried on from 11:00 a.m. to 12:00 p.m., attended by total 46 students comprising 3rd year, 4th year undergraduate and postgraduate students. The event was moderated by Mr. Ahmad Razani Haron and Ir. Pungut Ibrahim. Ir. Yuzrian began the forum by emphasizing on the right attitude and discipline which are essential throughout the career of an engineer. He also shared his companionship with Ir. Faizal as he elaborated the importance of having the right attitude to have good communication and practice with other engineers.

In the second sharing, Mr. Lai Kuan Wai shared his experience as he worked on projects in a startup with no staff handbooks and no guiding senior engineers. Mr. Lai pressed on having the right mindset to encourage students not to complete the studies for certification, but to learn the true knowledge.

The third panel sharing from Ir. Faizal Japar as a chief engineer of major projects in transmission level, SESB (major in power and high voltage), has advised the students to be aggressive in obtaining knowledge as they are encouraged to ask and consult senior engineers. He pressed on right attitude to ask sensible questions.

Electrical & Electronic Engineering Program EE Online Visit 2020

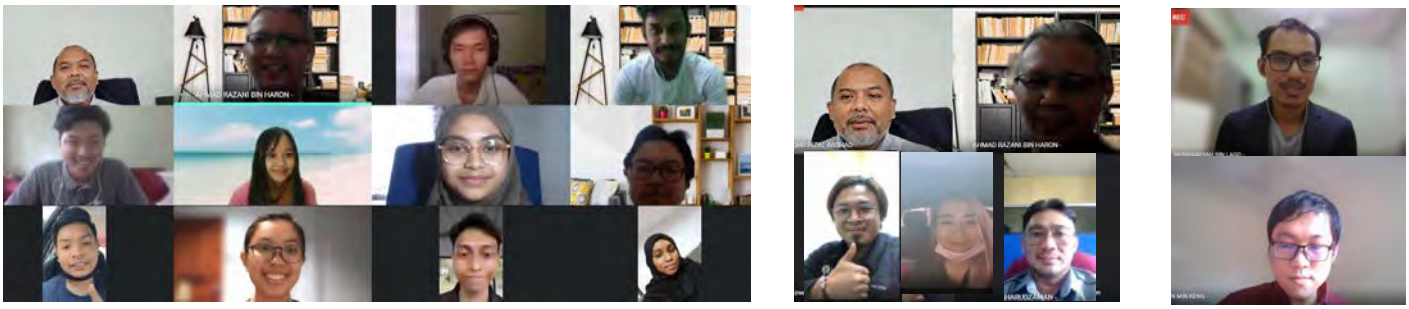
Reported by Herwansyah Bin Lago and Tan Min Keng.

Mon, 14 December: External Examiner – Prof. Ir. Ts. Dr. Mohd Rizal Bin Arshad, the Deputy Vice Chancellor (Academic & International) of Universiti Malaysia Perlis (UniMAP) had been invited to conduct a programme assessment of Electrical & Electronic Engineering programme (HK02 / UH6523001), Faculty of Engineering, Universiti Malaysia Sabah (UMS) on 13-14 December 2020.

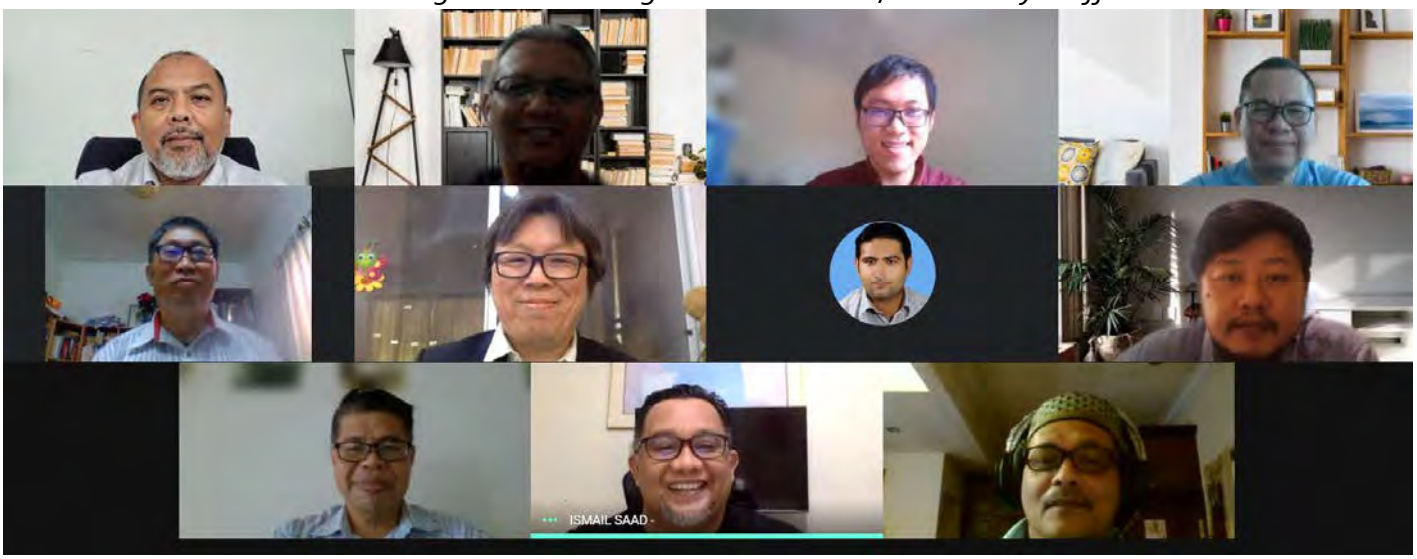
During the 2-day event, Prof. Rizal has performed assessment including documentation reviews and online interviews to examine the programme. We appreciated valuable contributions and constructive comments delivered to the programme.

Faculty Dean, Assoc. Prof. Ts. Dr. Ismail Saad expressed the appreciation to the feedback from Prof. Rizal during the exit meeting. Both universities urge to work closely in the area of academics, research and development.

Online Interaction (12:00 p.m. – 02:00 p.m., 14 Dec) (A) *Interviews with HK02 Staffs and Students*	
UG & PG Students	12:00 p.m. – 12:30 p.m.
Laboratory Staffs	12:30 p.m. – 12:50 p.m.
Programme Lecturers	12:50 p.m. – 01:10 p.m.
(B) *Exit Meeting with Faculty of Engineering Members*	
Faculty Members	01:10 p.m. – 02:00 p.m.



Online Interviews: Undergraduate & Postgraduate Students, Laboratory Staffs and Lecturers.



Exit Meeting: External Examiner with Dean, Deputy Dean and HK02 Lecturers.

Faculty of Engineering Continues to Excellence In Innovation Teaching & Learning

Reported by Associate Prof. Ir. Dr. Nurmin Bolong.

17 December 2020 - For the first time, UMS held a Ceremony to present excellence and innovation in teaching and learning (AKIPP2020) under the Center for Teaching Excellence and Academic Quality. The organization of this ceremony was held during the period of the Targeted Movement Control Order. Thus, UMS is no exception in compliance with the Standard Operating Procedures for managing the event prescribed by the authority. Selection and finalist candidates involving participation from various faculties and centers presented their respective projects during the pitching sessions on 30 November and 1 December 2020, respectively. Finalists from different categories presented their projects with question-and-answer sessions from the judges using Google Meet online platform.

Award presentation ceremony on 17 December 2020 by UMS Vice Chancellor, Prof. Dr. Taufiq Yap Yun Khin and witnessed by Prof. Dr. Rasid Mail (TNCAA) and Dr. Junainah Jaidi (Director PKPKA)

The Faculty of Engineering participated in two projects, both lead by A.P Ir Dr. Nurmin Bolong. She submitted the transformative teaching and the immersive learning experience categories. Under the category of transformative teaching, their project entitled 'Empowerment of Open-Ended Learning for Environmental and Traffic Laboratory" with team members Dr. Lillian Gungat, Dr. Azizul Ladin, Ms. Dayang Masliah Marasuka, and Ms. Nurafini Septiana Normat; have won runners-up.

The project titled 'Enrichment of Environmental Sustainability Involving Community by Civil Engineering Programme' has won the championship for the category of the immersive learning experience (face to face). This T&L project involving the Project-based-Learning approach was conducted with team members, namely A.P. Ts. Dr. Ismail Saad, Sr. Dr. Asmawan Sarman, Dr. Nazaruddin Taha, and Ir. Dr. Habib Musa Mohamad.

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According to A.P. Ir. Dr. Nurmin, she is grateful for the appreciation and thankful for various resources and individual/ institution help in executing this effort. Furthermore, it is the responsibility and passion in educating the young future leaders. Hopefully, this program will give an injection of encouragement to more academic partners in developing more creative and dynamic teaching and learning methods in line with the dynamic changing demand and current challenges in educating the learners, she added.

Finalist Pitching session via GoogleMeet on 30 November and 1 December 2020

Electronic Engineering (Computer) Program EE Online Visit 2020

Reported by Dr. Aroland Kiring.

On 22nd December 2020, Electronic Engineering (Computer) program conducted a virtual meeting with the External Examiner (EE), Prof. Dr. Wong Hin Yong, from the Multimedia University. The meeting was running for 2 days with the first day was started with a presentation by the head of the program, Dr. Rosalyn R. Porle. Various issues ranging from OBE implementation to quality management system have been presented and discussed. On the second day, Prof. Dr. Wong interviewed the selected staffs and students to get some inputs of related matters. Then, towards the end of the virtual visit, an exit meeting was conducted with all the academic staffs. The Dean of the Faculty of Engineering (FKJ), Associate Prof. Ts. Dr. Ismail Saad has also joined the exit meeting. During the exit meeting, Prof. Dr. Wong congratulated the program for getting 6 years of accredited in the previous 2018 EAC visit. Then, he summarized his findings and gives valuable feedback for improvements.

Tuesday, 22nd December 2020

Meeting Link https://meet.google.com/evs-vwqq-dre

Time	Item
0900	Opening Session by the Dean (All staff)
0930	*Presentation by the Programme Head on:* • OBE implementation • Programme curriculum • Staff • Students • Facilities • Quality management system
1100	• Discussions (All staff)
1230	Break
1400	• Document checking
1500	• Actions taken on report from last External examiner & EAC Visit • Any other programme updates • Online Teaching, Learning & Assessments by the programme
1600	• Document checking

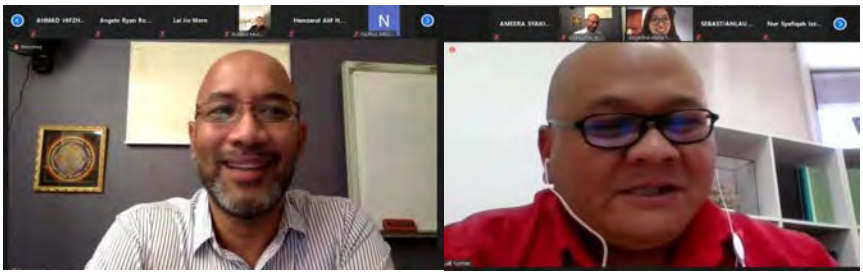
Wednesday, 23rd December 2020

Time	Item
0900	• Interview with staff (4 separate sessions) – Selected Staff Meeting Link: https://meet.google.com/dio-qjbq-awy
1000	• Interview with students (Year 1 & Year 2) Meeting Link: https://meet.google.com/goj-ancx-eem
1030	• Interview with students (Year 3 & Year 4) Meeting Link: https://meet.google.com/goj-ancx-eem
1100	• Discussion Meeting Link: https://meet.google.com/dio-qjbq-awy
1200	• Draft Report preparation
1230	• Exit meeting (All staff) Meeting Link: https://meet.google.com/dio-qjbq-awy

IEEE · HK02 Career Insights 2020

Reported by Ameera Syakira binti Shuhaimi & Joyce Lu Kuan Yee (*Executive Publicity, IEEE Student Branch UMS)*.

IEEE Student Branch (UMS) organised Career Insight 2020 on 6th October 2020 to enhance students' skill in securing a job. There are 63 students attended the event, where most of them are graduating soon and heading towards their new career paths. Ir. Yuzrian Efren Yunus (Principal, *Prestigious Konsult*) and Dr. Sivakumar Kumaresan (Associate Professor, *Faculty of Engineering, Universiti Malaysia Sabah*) were invited to give a speech on job hunting skill. Both speakers also discussed on the current job opportunities and challenges, especially during the Covid-19 pandemic.



Dr. Sivakumar (left) and Ir. Yuzrian (right) meeting in the air to share their experiences, knowledge and insightful advices.

Dr. Sivakumar shared the tips to prepare CV and cover letter writing before job interview. He also highlighted few attention to be paid during the interview section. Dr. Sivakumar emphasised self-confident level is one of the key factors that employers are looking for. He encouraged students to engage with him during his talk in order to increase their self-confidence while communicating with others. Dr. Sivakumar also shared that job seekers should think differently from the norm by emphasizing on the strengths of the individual regardless of how trivial it is.

"Think Out of the Box"

Ir. Yuzrian shared the process of interview including the costs for the employer and weight of actions taken by interviewees, besides his expectations during the interview with his potential employees. Ir. Yuzrian highlighted that the appearance of interviewee is very important during the interview section. He reminded students to do research on the company's background prior to the interview and match their skills to the company's needs.

UMS-IEM Joint Effort in a PPE Donation to Queen Elizabeth II Hospital

Reported by Mr. Anand Ryan Thurairajah (UMS-IEM Student Chapter).

On 20th October 2020, a donation in the form of medical-grade face mask and gloves were sent to the Queen Elizabeth II Hospital as a contribution by the UMS-IEM Student Chapter and IEM-YES Sabah Branch to protect the frontliners amid the rising cases of COVID-19 in Kota Kinabalu, Sabah. Donated items were received by Ms. Stephanie Lai, person-in-charge of the logistics and equipment of personal protective equipment (PPE) from their pharmacy department. The donation was handed by Mr. Jackson Wong Siaw Jye (Chairperson of IEM-YES Sabah Branch) and assisted by Mr. Lee Tze Yei (Secretary of IEM-YES Sabah Branch) and Mr. Anand Ryan Thurairajah (Club President of UMS-IEM Student Chapter 2019/2020).

From right to left: Ms Stephanie Lai, Mr. Jackson Wong Siaw Jye, Mr. Lee Tze Yei and Mr. Anand Ryan Thurairajah.

Arrived at Queen Elizabeth II Hospital to unload PPEs.

FKJ Student Engineering Society (Essoc) Implementing e-Voting for Annual General Meeting

Reported by Dr. Mohd. Kamel bin Wan Ibrahim.

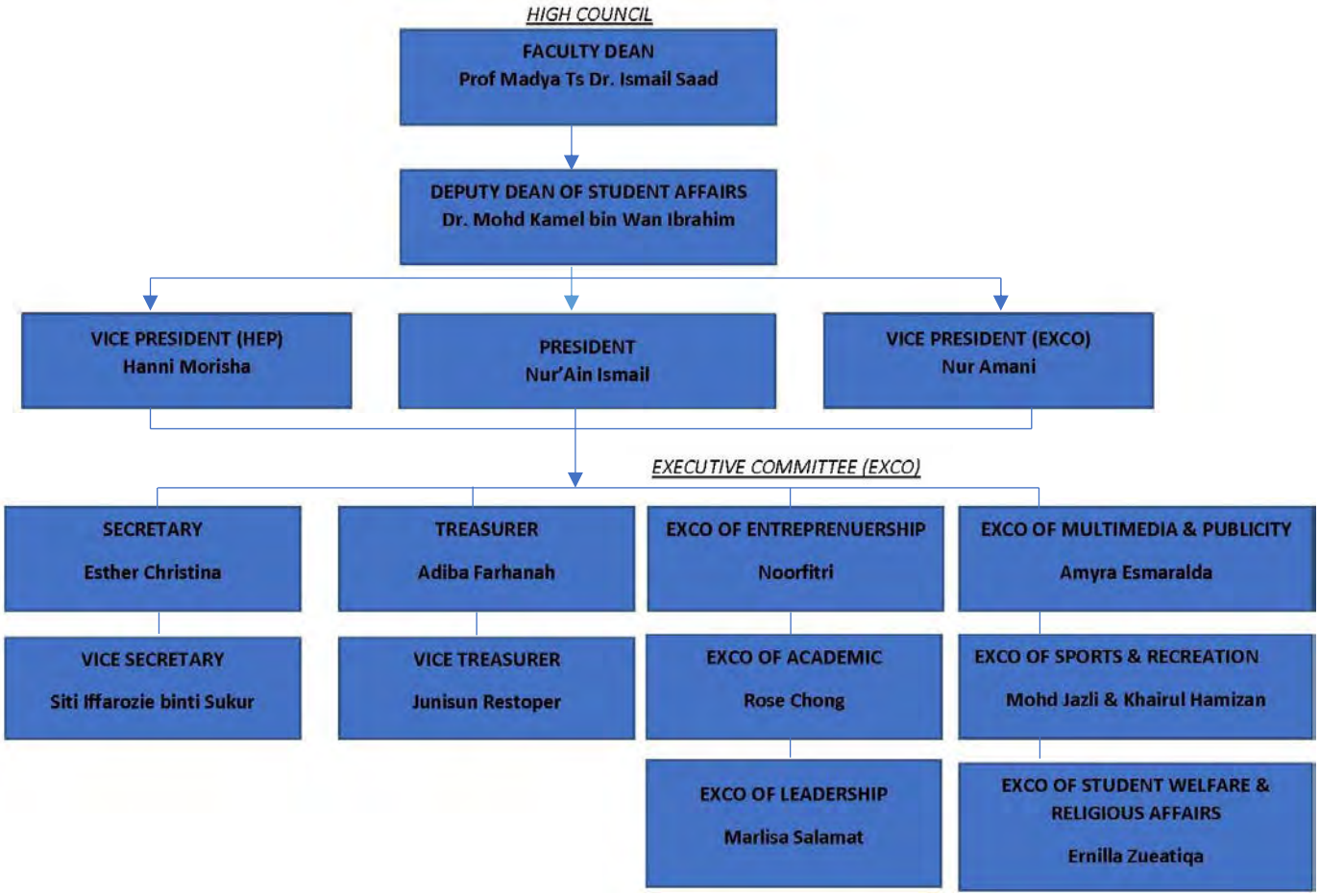
Prior to the Annual Grand Meeting (AGM) of the Engineering Students Society (Essoc) of Faculty of Engineering, University Malaysia Sabah, an election of the future leaders was conducted virtually on the 17th to the 19th of November 2020. Due to the pandemic occurring worldwide, some movements and activities were restricted and is limited to online activities. Therefore, the election was done in accordance with the new-norm introduced. A total of 21 nominations comprised of the first, second and third-year engineering students were received via Google Form that was prepared by an election committee of 5 engineering students. The first-ever event lasted for a whole week, with the nomination period taking 2 days and the voting period which started in the afternoon of 19th of November 2020. Posters of the candidates were also shared across all platforms for campaigning purposes.

According to the former president, Freddle Freddie, currently, in his 3rd year as a Mechanical Engineering student, it was the first time an election was held virtually. The idea was birthed during a meeting with the faculty's deputy dean, Dr Mohd. Kamel bin Wan Ibrahim, and was conducted by a small team that consisted of 3rd year engineering students from different courses. He said, "the pandemic has changed our lifestyle, especially among us students because we are so used to socialising and networking with people in real-time. However, this situation should not affect the voices of the students especially in these trying times.". He added, "the best way for a successful and fair transition of power should still be conducted through an election regardless of the current situation". Therefore, he decided that the obvious solution was to conduct online polling.

Releasing his position to the new line-ups, he has high hopes for the new team as these assortments of talented students have great potential to improve the faculty's environment, especially when it comes to student welfare. Besides, it was the first time an open nomination was performed and it took a lot of time to brainstorm ways in making sure the polling runs smoothly. Regardless of the results, he would still be glad to offer a helping hand and guidance for the new committee. Under this new-norm, most of the activities that were supposed to be conducted after the University reopens were put on hold as the number of cases continues to rise, especially that spike of cases after the Sabah State Elections held recently.

Some activities, however, were able to be conducted online using available and quite reliable platform such as Google Meet, Webex, Zoom meetings or even Instagram for competition purposes. The Annual Grand Meeting conducted together with the management of clubs in the faculty were conducted in the form of virtual meeting. To keep the clubs active, more electronically-based activities were conducted, if compared to last semester, where most of the activities were conducted face-to-face. The e-elections was one of the programmes that was done virtually and successfully.

ESSOC ORGANIZATIONAL CHART 2020_21



The-election results were announced on the 22nd of November 2020 via Google Meet participated by approximately 30 students. The elected president was Nur'Ain Ismail along with her two other vices, Hanni Morisha and Nur Amani Balqis binti Adnan. The other committees were elected automatically for the positions they've applied since there were no other nominees for the position."Always reach for the moon, because if you miss you will land among the stars" the new president, Nur'Ain Ismail quoted during the interview. Feeling thrilled for the election, she felt a bit scared as it was a whole new experience for her, being the president of the main club of the faculty. However, she believes that being eager for new things will lead her to have an exciting and adventurous journey in life. She believes that the students' voices should have listened for a better environment, & she hopes to uphold the quality of courses and clubs, along with aiming to be the best faculty in UMS. "I'm looking forward to building bonds and work together as one team to push and pioneer through a new version of ESSoc", she added. The e-election was a successful event and it is hope that the new committee chosen by the students could improvement the faculty's environment and becomes voices of the students.

Journey of ROBOCON Malaysia 2020

Reported by Assoc. Prof. Ir. Dr. Muralindran Mariappan (Advisor) & Stanley Ka Gong Sheng (UMS Robotics Club President)

ROBOCON is one of the largest engineering competitions among Malaysia universities where undergraduates need to fabricate their own robots to complete specific tasks in every year's competition. The theme for this year competition is 'ROBO Rugby 7s' where two robots need to pass, place, and kick rugby ball in order to score points. ROBOCON Malaysia 2020 recorded participation of 32 universities, polytechnics, and technical colleges to aim to become the Malaysia representative for ABU ROBOCON 2020. As the 2nd-runner up of ROBOCON Malaysia 2019, UMS ROBOCON Team under UMS Robotics Club was determined to win ROBOCON Malaysia 2020. Unfortunately, ROBOCON Malaysia 2020 was cancelled due to the severe COVID-19 pandemic in Malaysia. Nonetheless, this article would share the preparation process and lesson learnt along the year to all readers.

BRAINSTORMING SESSION

The figure shows preliminary mechanism design of the robot. Designed by Stanley.

After rulebook and competition video were published, we quickly organised a brainstorming session and discussed about the functionality of robot. Preliminary CAD drawing of robot was constructed virtually in SolidWorks helped us to check whether the mechanism mounting, material acquisition, and motion planning were suitable.

The rugby ball used in the competition is a standard size 5 rugby ball. The throwing mechanism uses two pneumatic cylinders as catapult to throw the rugby ball to another robot and score point.

Fabricated by Rahmat and Jesse.

MECHANISM TESTING AND ROBOT CONSTRUCTION

Since the throwing distance is approximately 2 meters, we spent quite a long time in fine tuning the throwing angle and air pressure needed. We found out that the optimal air pressure needed is around 5 bar. Another important task in this year competition is to kick the rugby ball over the rugby stand. We discussed several possible mechanism designs and decided to use motor to resist the spring attached to the kicking shaft. This helps to generate a huge momentum when releasing to kick the ball. This mechanism was tested in open area and was found to be working as per the design.

Modular Omniwheel Base.
Designed and Developed by Stanley.

ROBOTS

Pass Robot

Try Robot

These two robots were fabricated completely in August 2020 with basic programmed motion and command. However, due to the COVID-19 outbreak at Sabah in September and reinforcement of CMCO in Sabah and Selangor, fine tuning of robot motion was halted and ROBOCON Malaysia 2020 was unfortunately canceled.

Nonetheless, throughout this year preparation, new members gained their respective technical knowledge while senior members also learned to manage the team in this unprecedented time.

We hereby profusely thank to Faculty of Engineering UMS and especially the Student Affair Department (HEPA), UMS for the financial support throughout the robot preparation. We would also like to thank our Club Advisor, Team Manager and Trainer, Assoc Prof. Ir. Dr. Muralindran Mariappan and Dr. Khong Wei Leong for the accommodation and transport arrangement.

We also thank everyone who has lent their helping hands to us directly or indirectly throughout this venture. Although we could not showcase our robots in competition, we promise we will come back stronger next year in ROBOCON Malaysia 2021!

Field Work & Community Visit at Kg Binaung Baru for the 'Clean Water for Everyone using Biochar' Project

Reported by Salinah Dullah & Ms. Dayang Nur Hidayati Binti Yunus (Secretary Project).

Clean Water for Everyone (Biochar Filter) Project sponsored by KHIND Starfish Foundation "Projects For Happiness 2020" consists of eleven final year (BK17) Civil Engineering (HK01) students supervised by Associate Professor Ir. Dr. Nurmin Bolong under the subject of KA40503-Environmental Engineering will implement their water filter project in Kampung Binaung Baru, Menggatal, Sabah.

On 13th December 2020, we had collaborated with BK19 HK01 "GLEE- Good Life Essential for Everyone Water Filter Project" students to organize Dialog of Water Filter Projects for an online sharing session. Both projects' supervisors were also in attendance to give their feedbacks and suggestions.

On 19th December 2020, our team had officially visited Kampung Binaung Baru Menggatal, Sabah to survey the location and communicate with the villagers. We had also started preparing the items needed to carry out this project. Team members who are currently in Kota Kinabalu, had begun producing biochar from woods at the lab. This can ease our water filter implementation project in the village. The project is expected to conduct on 4th January 2021.

Poster for Dialog of Water Filter Projects, an online sharing session for both projects of Civil Engineering (BK17 & BK 19) students sponsored under KHIND Starfish Foundation.

From left to right: Mr. Goh Wang Siang, Mr. Suleiman Hj. Nassor, Mr. Joedansen Anak Delon, Mr. Maxmalcolm Symond, Mrs. Esther Lukas & vilagers'.

Community Outreach by Civil Engineering Programme for Enhancing STEM Education and Environment Sustainability Awareness through The Green Ribbon Box Project

Reported by Assoc. Prof. Ir. Dr. Nurmin Bolong & Mr. Muhammad Safwan Bin Ahmad.

Recent 20th December 2020, Civil engineering students of Faculty Engineering of UMS engaged with Etania Beaufort, also known as Matakana Learning Centre (MLC), a school for marginalized children whose parents are mostly immigrants working in Malaysia. This project's objectives were to approach the underprivileged communities despite of the nation-wide school shutdown due to pandemic covid. The project has delivered reading materials associated with the Science, Technology, Engineering, and Mathematics (STEM) concepts and carrying out online activities such as drawing competitions for students virtually. Their theme for the day of the event was 3R, Reduce, Reuse Recycle. The Standard-operating-procedure (SOP) during Movement-Control-Order (MCO) was followed. During on-site community engagement, six students with the lecturer, Associate Professor Ir. Dr. Nurmin Bolong from UMS present at the school that day. The event involves two activities, which are split into three groups. The first one is kindergarten level, which consists of a drawing and coloring competition named 'Bumi Yang Indah.' The next is for the older kids who split into two groups; they had box decorating activities that emphasize the importance of waste reuse and reduce.

Certificate of appreciation giveaway by Associate Professor Ts. Dr. Ismail Saad (Dean of Faculty of Engineering) to the Etania school headmistress, Dr Katryn Rivai

Associate Professor Ts. Dr. Ismail Saad (Dean of Faculty of Engineering) also present on the day has motivated the kids in the school to foster self-esteem by improving education whoever they are during his opening speech. The event went smoothly, and through the project book donation drive since September also has donated over 300 books to the school for student references. The program's success may be impossible without the project's financial assistance by the KHIND Starfish Foundation "Projects for Happiness 2020" and aid by the volunteers and donators.

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The founder of the school, Dr. Kathryn Rivai holding the Headmistress of Etania School, Sabah, expressed her gratitude to UMS and was honored to be part of the faculty sustainability project involving communities despite the school background. She hopes that the STEM outreach programs will be continued as it implicitly shared positive influence significantly to the kids in the school.

Group photo of the Etania kids and UMS students

The project organised by Final Year Civil Engineering students and a volunteer; Danelle Leezong Jinivon, Mohd Nazreen Shah Bin Baharun Alam, Jeremy Jacob, Nurulaini Nasha Binti Nazeri, Muhammad Safwan Bin Ahmad, Syashella Eliana Binti Abdon, Matthew Jonathon Bin Donny, Muhammad Haziq Bin Harris, Jane Ann Jumi, Hazwani Binti Halid, Dayang Russalnie Binti Deh and Fredon Adear with supervision of A.P Ir. Dr Nurmin Bolong.

Faculty of Engineering UMS Attended Engineering Ethics Forum Hosted by Universiti Teknologi Malaysia

Reported by Sr Ts. Dr. Asmawan Mohd Sarman & Ms. Danelle Leezong Jinivon.

Kota Kinabalu, 4 November 2020 - Universiti Teknologi Malaysia (UTM) hosted a Forum entitled "Engineering Ethics: Into The Future" through a live stream on YouTube. This forum was attended by lecturers and final year students of Civil Engineering batch BK17 and this semester they took the course KA44703 Ethics and Law for Engineer. The forum discussed the importance and speculation surrounding ethics in engineering:- Why is it so important? How long will it play an integral part in engineering? The first panel is the honourable Ir. Professor Dr. Rajkumar Durairaj, Dean (Academic Quality Assurance), Division of Quality Assurance, he is the Associate Director (Materials and Manufacturing) with the Engineering Accreditation Department, Board of Engineers Malaysia (BEM). The second panel, Ir. Francis Ngiam is a licensed civil engineer in Arkansas, California & Malaysia, he started practicing engineering in 1997. He is involved in Green Infrastructure & Green Building Design & Construction and is the co-founder of GPROTD Resources, a training and consulting company. The third panel was Amru Daud. Involved in the SHE Managerial role in CCM Chemicals. Amru started his career in 2000 as a process engineer. His expertise is in process engineering, process & occupational safety. The moderator for this forum was Ir. Ts. Dr. Zaki Yamani bin Zakaria. Previously a chemical engineer for an oil & gas services company and process engineer for an oil & fat company. He is a fellow in the Centre for Engineering Education, a senior lecturer in the School of Chemical & Energy Engineering, UTM, and the author of "Ramblings of A Chemical Engineer" book.

The main highlights of the forum were question and answers. One of the questions directed to Mr Amru Daud was why are ethics taught to students, to which he replied by stating that ethics is a culture because it is practiced both individually and also collectively. This applies to engineers as their field of work involves working with others. To support his point, Mr Daud mentioned that ethics should be taught and embedded within students at an early age to encourage or nurture ethical qualities such as originality, punctuality and teamwork. Mr Daud also stated that unethical students who copy the work of others will not get any hands-on experience.

Ir. Ts. Dr. Zaki Yamani (Top left), Ir. Francis Ngiam (Top right), Ir. Professor Dr. Rajkumar Durairaj (Bottom left), Mr Amru Daud (Bottom right) attending the forum

Ir. Prof. Dr. Rajkumar Durairaj was asked about what happens to students who only follow ethics half-heartedly or without any enthusiasm. Ir. Rajkumar answered the question by stating that ethics are split into 3 categories which are moral principles, consequentialism, and deontological ethics. In order to be an ethical person, one must obey each and every one of those categories in order to be ethical. Ir. Rajkumar then proceeded to give an analogy to justify his point that people cannot be partially ethical. They are either ethical, or they are not.

Ir. Francis Ngiam was asked by Dr. Zaki, to give an illustration or reason to the importance of engineering ethics, to which he replied by saying that engineering ethics help engineers live a more successful life on a personal and also professional level. Ir. Francis claims that one must "Do the right things right" to be successful in life and he claimed that engineering ethics help engineers achieve that by teaching certain rules and guidelines that help engineers make the right decisions. The video is can still available on YouTube through the link http://bit.ly/cee-utm

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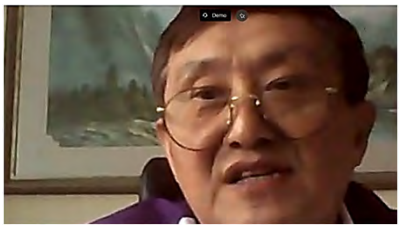
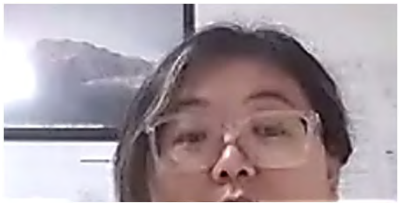
Presentation/Talk/ Conference

The New Normal – How Technology can Mitigate the Negative Effects of COVID-19

Reported by Dr. Yew Hoe Tung.

Electronic Engineering (Computer) program and IEEE Sabah Subsection have organized an online industrial forum entitle "The New Normal - How Technology Can Mitigate The Negative Effects Of COVID-19" on 19 November 2020. A total of 120 students and 11 lecturers joined the forum. The forum was moderated by Associate Professor Dr. Jamal A. Dargham with invited industrial speakers Mr. Tony Tee, Ir. Suadi Bin Wahab, Ir. Jenny Koo and Ir. Peter Chin.

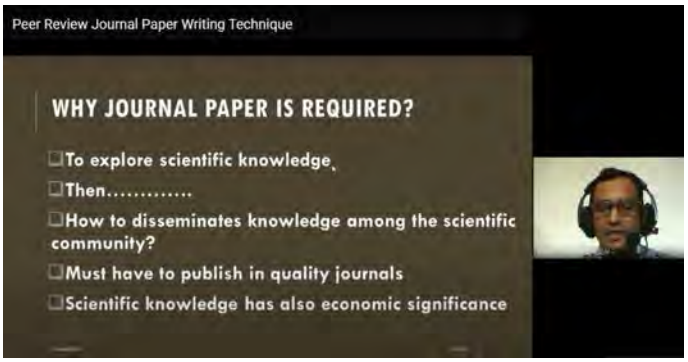


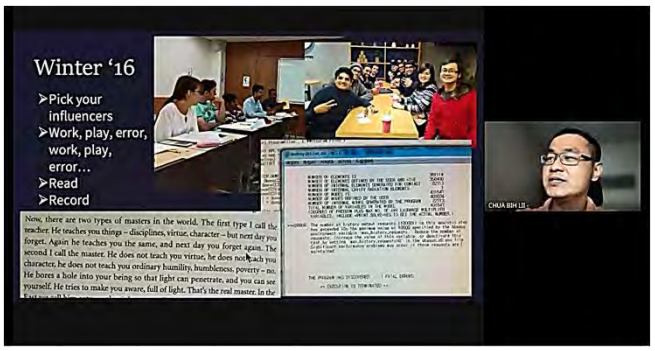


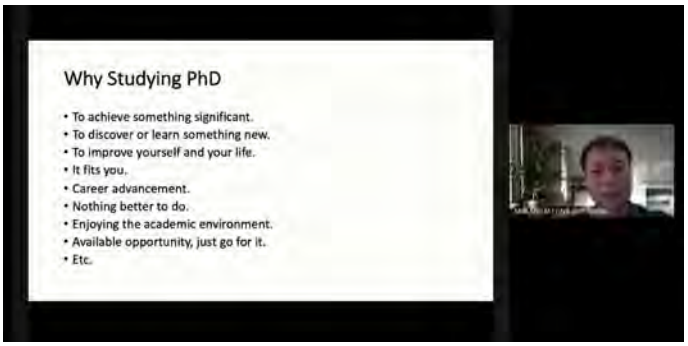
FKJ Postgraduate Research Methodology Seminar

Reported by Dr. Mazlina Mamat.

A Research Methodology Seminar dedicated for new FKJ postgraduate students was held on 16-17 December 2020. The seminar was conducted online and attended by 70 enthusiastic FKJ students. The first day began with a brief welcoming speech from Dr. Mazlina Mamat, FKJ postgraduate coordinator, followed by a talk on "Postgraduate Supervision: Student - Supervisor Role & Relationship" by Assoc. Prof. Dr. Jidon Janaun, the Deputy Director (Research), Pusat Penyelidikan & Inovasi, UMS. The seminar then moved to the key topic which is the "Research Methodology: Literature Review & Research Design" by Assoc. Prof. Dr. Abu Zahrim Yaser, the Deputy Dean Research & Innovation, FKJ. In the afternoon, a talk entitled "Technical Writing: Peer Review Journal Paper Writing Technique" was given by Dr. Bablu. On the second day, three speakers: Dr. Mohamad Azwa Mohamed, Dr. Aroland Kiring and Dr. Chua Bih Li shared their insightful writing strategy and research journey with the students, respectively. The seminar ended successfully with positive comments from the students. The seminar organizer would like to express gratitude to all moderators: Dr. Yew Hoe Tung, Dr. Farm Yan Yan for giving excellent commitments and Mr. Azwan for helping with the seminar arrangement.

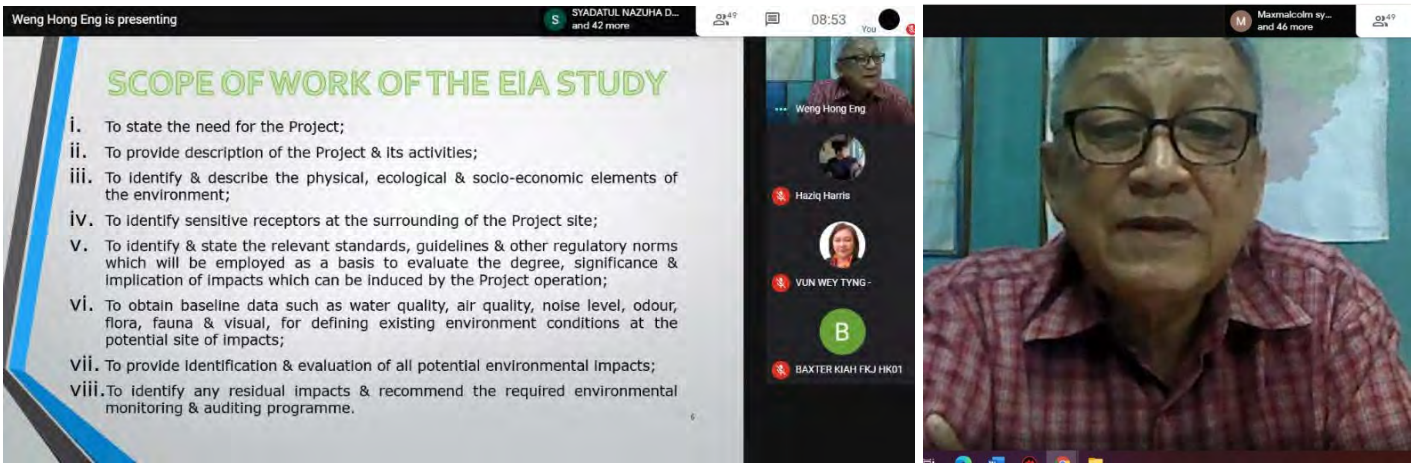






Environmental Impact Assessment (EIA) Consultant Webinar With Mr. Eng Weng Hong

Reported by Associate Prof. Ir. Dr. Nurmin Bolong & Anand Ryan Thurairajah.



Snapshot of the session via GoogleMeet and the photo of the invited industrial speaker, Mr Eng Weng Hong from North Borneo Environmental Services Sdn. Bhd.

23rd December 2020, The Civil Engineering programme in the Faculty of Engineering has organized an industrial webinar with a special invited industry speaker, Mr. Eng Weng Hong, a man with many experience and skills. The event was held for the 4th year subject Environmental Engineering KA40503, taught by Assoc. Prof. Ir. Dr. Nurmin Bolong and Ir. Vun Wey Tyng. The speaker is well known for his work and contributions as the founder and advisor of ENSEARCH Sabah.

Besides that, he also co-founded Kiwiheng Environmental Consultants and its subsidiaries. Mr. Eng Weng Hong talked about his experiences and journey to be where he is now. Being an environmental consultant, he has inspired the students to become an environmental consultant and its relevance with the civil engineer's career. His sharing on the Environmental Impact Assessment (EIA) explicitly highlighted the scope of work, format, and relevant government agencies that require EIA reports.

Mr. Eng also explain one of the EIA case study examples on "Earthwork Activities And Construction For The Proposed Development, Subdivision & Amalgamation For General Industrial Development On Lot 3 Of CL.015608741. Lot 1. Lot 2 And Lot 4 Of CL.015608750 At Kota Kinabalu Industrial Park (KKIP), Kota Kinabalu. Sabah." that provides a better understanding of the importance of EIA in the development and engineering works. The webinar officially starts at 8.30 am and wraps up after one and a half hours, with 50 active participation from lectures and undergraduate students.

The webinar ended with a short Q&A session and this valuable session has certainly vital for students to pick up further knowledge and understand the EIA more from the industrial perspective and benefits.

Oil & Gas Students Attended An Industrial Talk Webinar Held By SPE

Reported by Ts. Dr. Norzilawati Mohamad.

An Industrial Talk with title "drilling technologies used to drill conventionally undrillable wells" was held by UMS Society of Petroleum Engineers (SPE) on 28th December 2020 from 4 to 5 pm thru Microsoft Team platform. Mr. Nelson Tan Kiang Meng who is Senior Drilling Supervisor was invited as panel. Students from Oil and Gas (HK88 and H2451) were among the participants who joined the talk.

Drilling is a complex operation to construct wells of circular section applying excavation techniques. There are several actions to take into consideration on the well drilling process. In this talk, panel has been described about drilling technologies to drill convectionally undrillable well and some process of well construction that require for drilling operation, casing and cementing operation create conducter for the process of gathering geological data, program well testing and also to keep hydrocarbon.

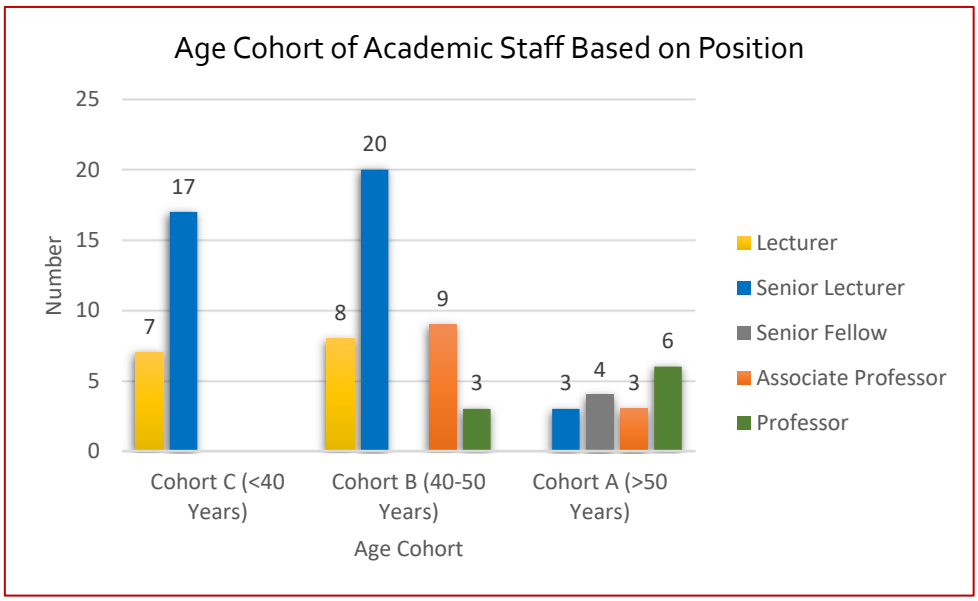
Mr. Nelson also explained some basic definition about drilling rig, geological prognosis, well design, drill string design, fluid design, people and procedures. The information including mud hydrostatic pressure (HP) and Dynamic Pressure (DP) formula, and some factor for Equivalent Circulating Density (ECD) were brief to the students for their exposure to the real industry process. This kind of talk not only will expose students to the real industry process, yet , also can increase students interest towards this course.

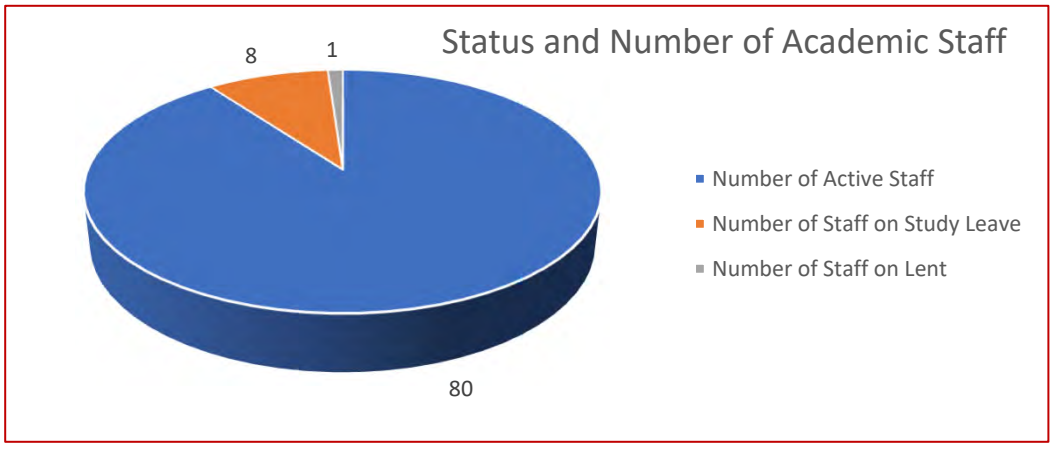
FKJ Research & Innovation Report Updates

Reported by Assoc. Prof. Dr. Abu Zahrim Yaser, Dr. Aroland Kiring & Malcolm Boxey Jilimin.

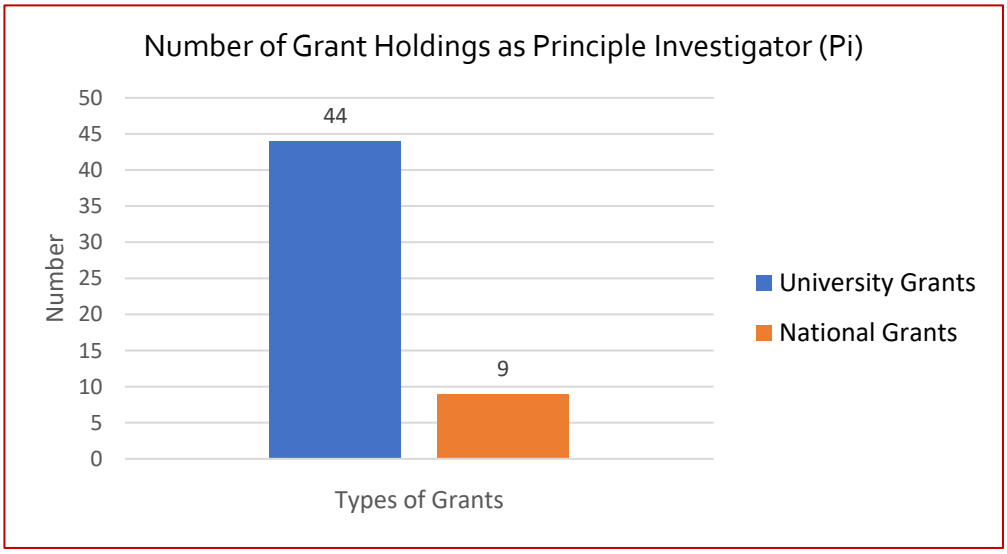
The report is presented based on five sections: FKJ Academic Staff Information, Quantity & Quality of Researchers, Quantity & Quality of Researchers of Postgraduates, Professional Services and Gifts, and Networking & Linkages. Up until September 2020, FKJ has 80 active academic staffs and 9 non-active academic staffs, bringing a total of 89. FKJ also managed to obtain various research grants at the national and international levels. The faculty obtained a total of RM5,731,340.32 in the research grant after receiving an additional RM882,260.00 this year. On the publication side, FKJ successfully published 60 indexed articles, 45 indexed proceedings, 8 MyCite articles, 5 indexed book chapters, 5 non-indexed books and 22 other publications. The FKJ research and innovation updates on various sections are given as follows:

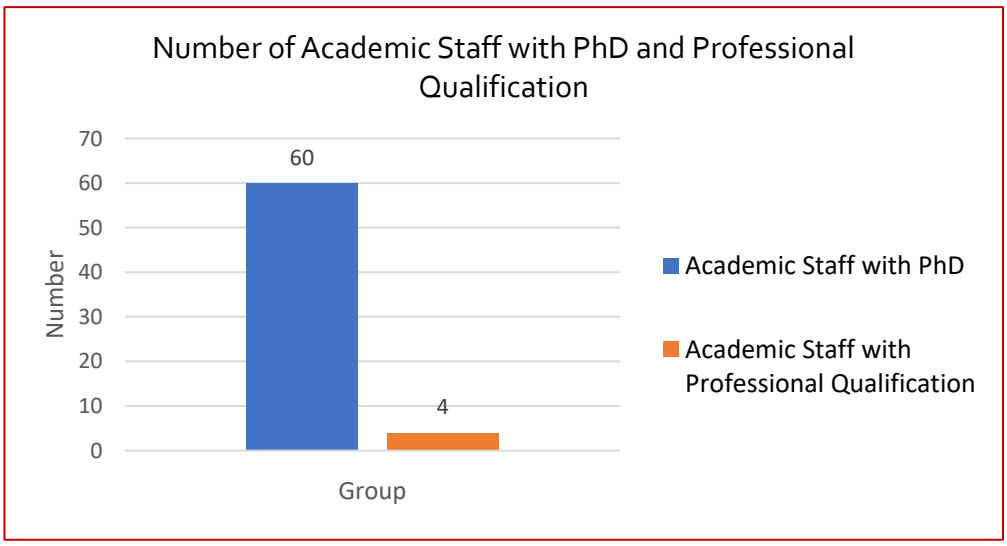
FKJ ACADEMIC STAFF INFORMATION

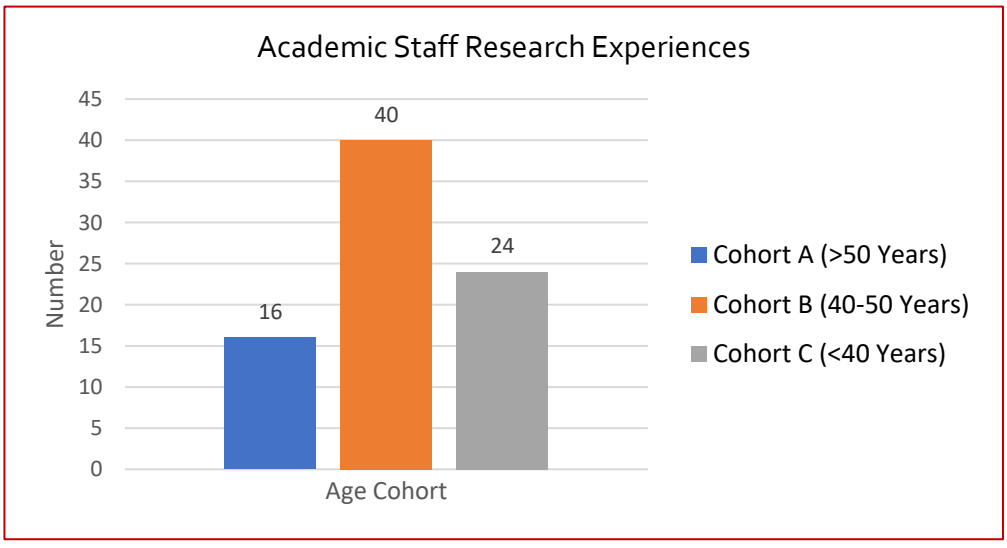




QUANTITY & QUALITY OF RESEARCHERS







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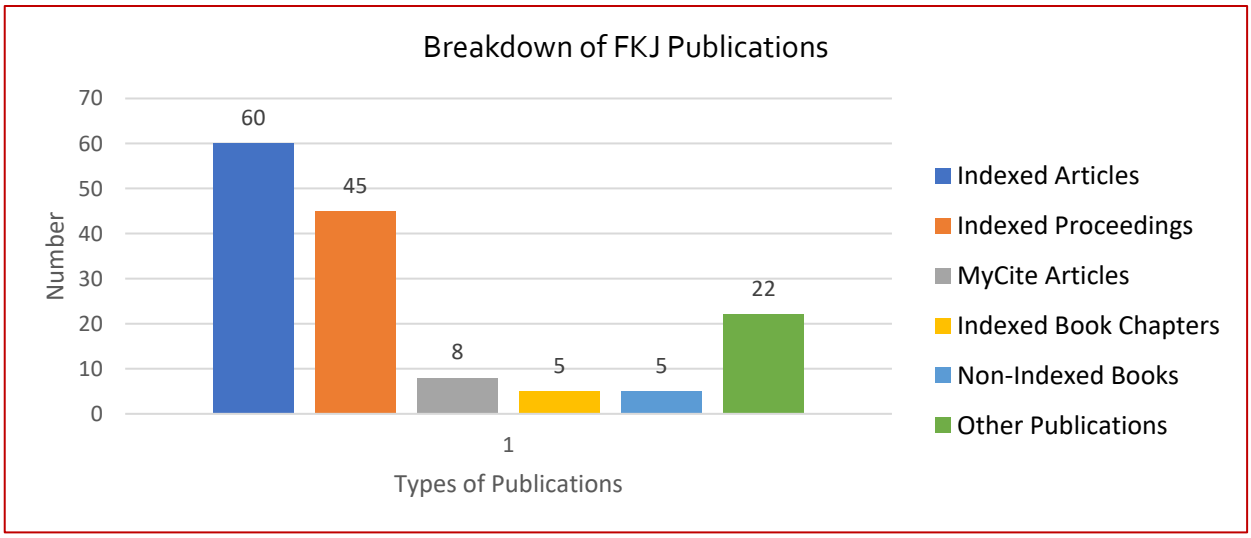
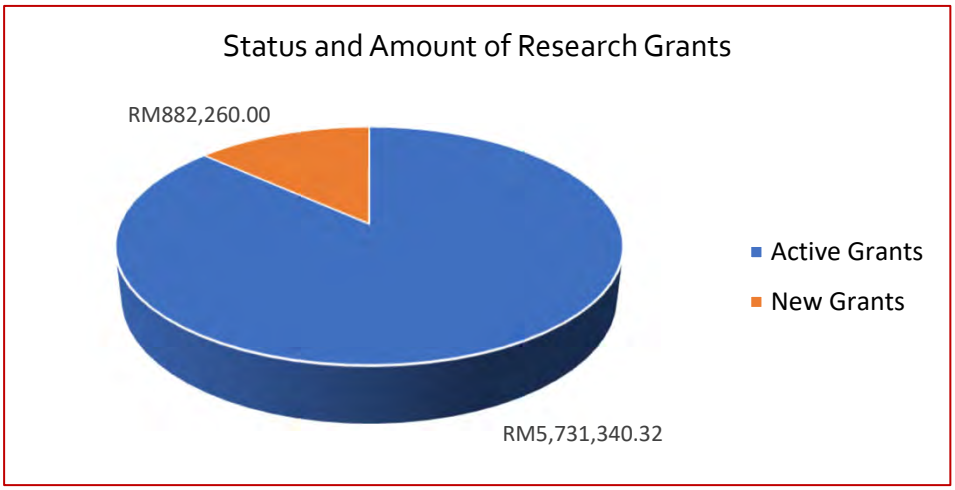
Research, Development & Innovation

QUANTITY & QUALITY OF RESEARCHERS





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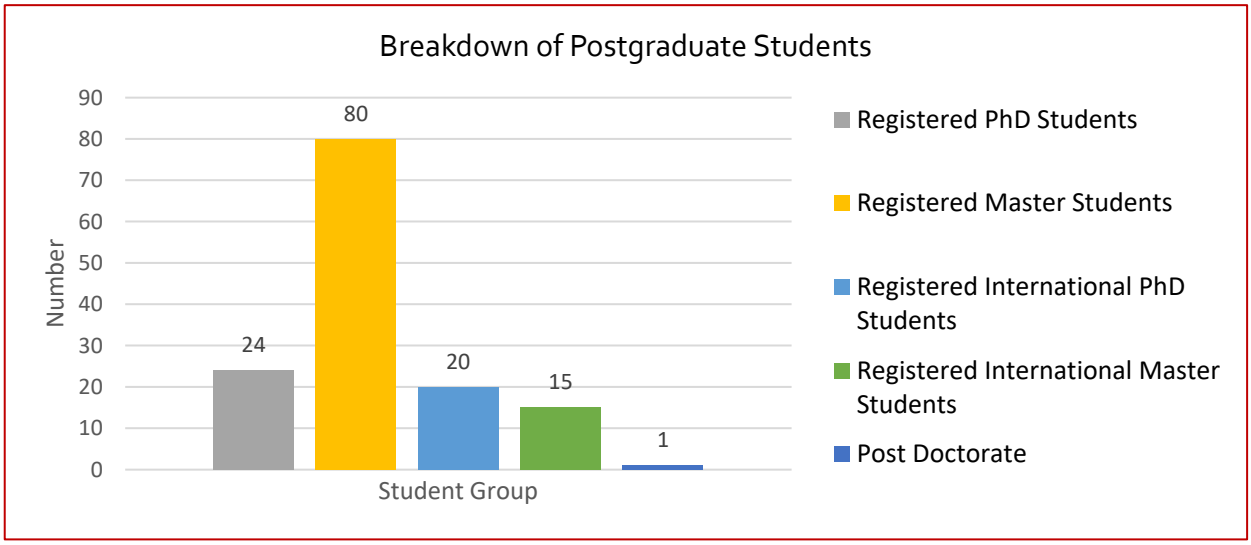
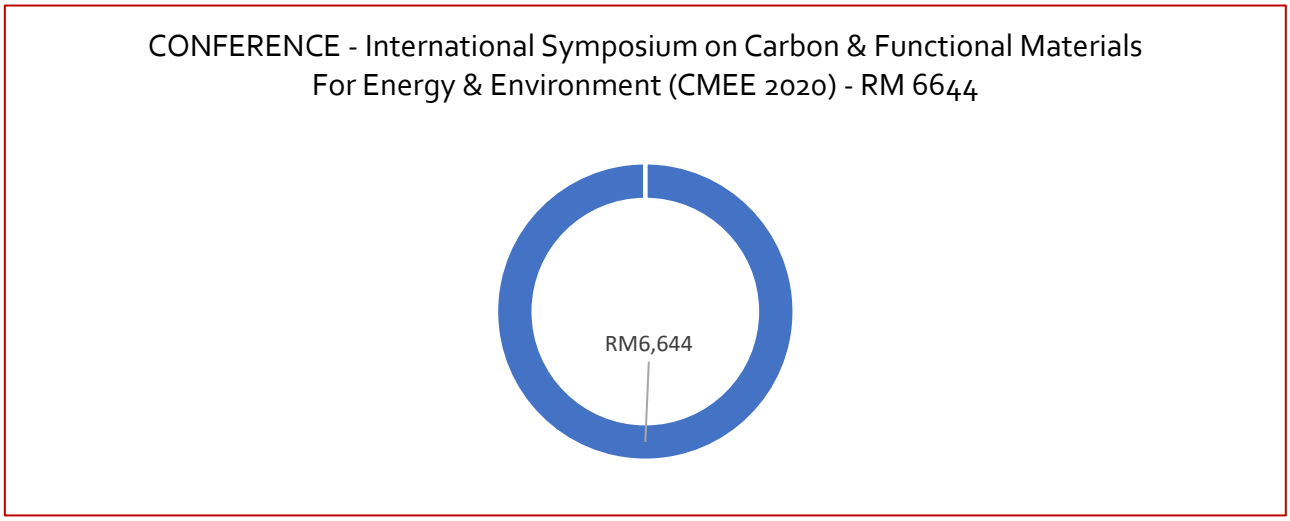
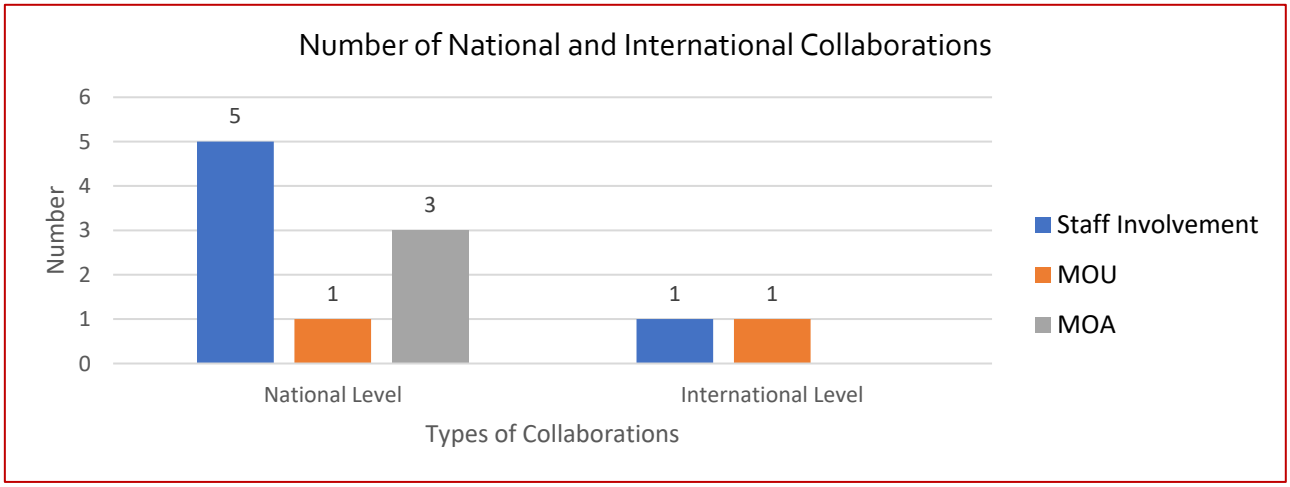


PROFESSIONAL SERVICES & GIFTS



NETWORKING & LINKAGES



Seismic Hazard and Seismic Design Requirement for Sabah

Reported by Dr. Noor Sheena Herayani Harith.

Sabah is considered to be located at a stable continental shield region at the triple junction zone of convergence between the Philippine, Indian-Australian and Eurasian Plates, hence with moderate seismicity. According to the historical records; there has been quite a number of moderate earthquake activity across the region with some of the cases has caused casualties, damage to properties and created narrow fissures in the ground. In recent years, Sabah has witnessed an increase in low to moderate seismic activities due to a few active fault lines since it was first monitored years ago by Leyu et al. (1985). About 40% of the land area is liable to seismic hazard damage as shown in Figure 1 with high and very high risk zone that are tend to shaking within an area.

Zone	Intensity
Zone IV	Very High Risk Zone (Area liable to shaking with intensity VII)
Zone III	High Risk Zone (Intensity VI)
Zone II	Moderate Risk Zone (Intensity V)
Zone I	Light Damage (IV and lower)

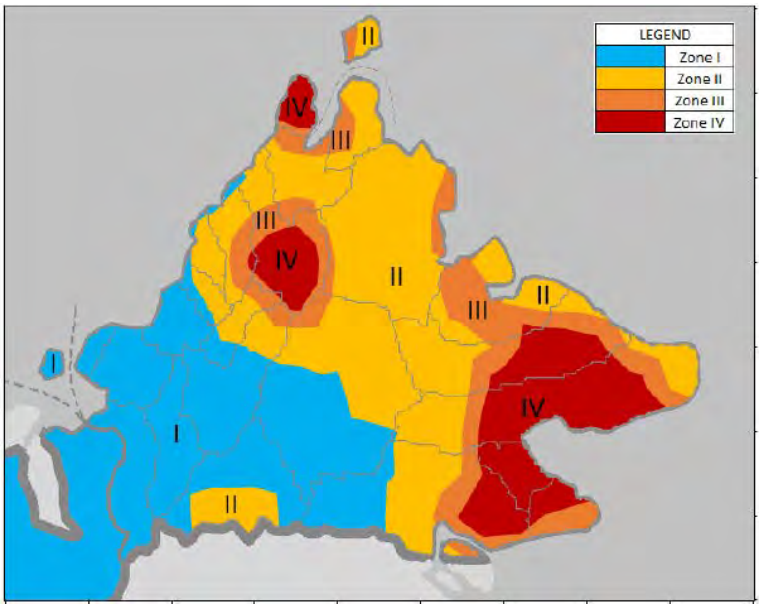


Figure 1. Seismic Zone Map of Sabah for 2020

According to a Malaysian National Annex (2017), it is necessary to give priority to public safety by designing buildings or structures that are earthquake proof. In understanding earthquake behavior, characteristics and distribution, coupled with appropriate mitigation measures, it is possible to reduce their adverse impact and degree of damages. The occurrence of ground shaking in the past, mainly due to active fault zones able to cause casualties and damage to properties and unfortunately the majority of existing buildings were built consequently without seismic consideration. A number of local earthquakes of low-to-moderate magnitude (between magnitude 2.0 to 6.5) have occurred in the past. As a result of increasing seismic activities around the region, Sabah is experiencing more tremors and there is a need to design for seismic loadings. Even though the seismicity of this area is much lower than other moderate seismicity regions, the seismic risk cannot be regarded as negligible.

Research talk on Sabah earthquake (in Stuttgart, Germany in 2019)

Research activities among undergraduates of Civil Engineering Program comprises of teamwork and regular discussion.

Although numerous conducted studies have explained the effect of seismic loading on buildings in Malaysia, it has not always been adequately considered in the Malaysian construction. Even though historical reports and paleoseismic studies have provided evidence of the occurrence of ground shaking in the past, mainly due to active fault zones, which is able to cause casualties and damage to properties, the majority of existing buildings were built consequently without seismic consideration. The seismic requirements have only existed recently, with the cost of implementing seismic design into current buildings possibly increasing by 3.4%. Regardless of the approach utilized, it is probable that most structures are at risk. Research on seismic vulnerability assessment stated that numbers of building needed to be further analyzed show that the buildings in high seismic risk areas are tend to damages and collapse when subjected to earthquake excitation.

Energy Perception and Development: Hidden Concept and Reality

Reported by Dr. Bablu K Ghosh.

Huge energy used for supporting development has lot of impact in environment temperature and stability. To limit environmental temperature rise innovation of diverse in energy and green technologies are substantial. For industrial revaluation transformation of electrical energy into mechanical processing is the key. Electrical and magnetic (mechanical) or electro-mechanical energy is nothing but electro-magnetic energy utilization in the industries. So, how we can conserve the earth temperature under massive industrial development scenario?

To know that it is requisite to identify the role of electro-mechanical system. If we look at the law of gravity and Coulomb's force in the same way, then the attraction of the mass in mechanics is similar as the Coulomb's force on a smallest electrical charge. In the interpretation of their thermodynamics behaviour the massive body lower energy density in respect to electrical system is due to wide variation of their velocity and mass or momentum.

In case of electrical system the storage energy in term of potential energy (position opposite to velocity!); on the contrary the mechanical energy execution process thermal energy (dynamic opposite to position!) is the net that has environmental effect. Is the temperature gradient and potential gradient equivalent in a system. So, anyway if the potential gradient can be controlled in any process, will it indirectly control the temperature gradient or entropic effect?

In nature the transformation of matter from energy is the concept of hiding energy that is occurred in quantum level whereas transformation of energy from matter is a part of classical mechanical energy. Human development process the mechanical energy transformation from matter would generate huge heat energy or entropy. It is so destructive for lives and environment. However, the quantum level transformation of mater from energy is considered just opposite of classical system thermal energy outcome. Could it be able to make a balance of the transformations effect?

In fact improving the quality of lives, uses of enormous energy at present time and a huge portion of it as heat generation is nothing but silent destruction of bio-diversity. To harmonize this development green technologies innovations are essential. In addition both surface water and plantation management are central in the entire human settlement. These are also depending on environment temperature stability. Besides natural process of balance (energy to mass as black energy is cooling in quantum level while mass to energy is heating in classical stage), the huge heating impact or global temperature rise effect curbing purpose green technology and green development is the key. Therefore, research diversity in these directions and associated pathways is very impactful.

We Can Become Innovators – Dr. Jidon featured by the Dailyexpress Newspaper

Reported by Dr. Aroland Kiring.

On October, 27 2020, Dr. Jidon Adrian Janaun, an associate professor from Chemical Engineering program, Faculty of Engineering (FKJ), Universiti Malaysia Sabah (UMS) was featured on the Dailyexpress newspaper. His works and achievements in developing innovative products such as LAMB Dryer, UMS Eco-Solar Dryer, UMS Eco-Solar House, UMS River Cleaning Machine, and Residual Oil Extractor has gained an attention by the Dailyexpress to feature him in their section of "your local voice". According to Dr. Jidon, Sabahan should stop being a consumer and start being a producer to contribute to the state's economy. FKJ is proud in his staff achievements and would like to encouraged more of his staffs to excel and strive in their research and innovation projects.

dailyexpress

YOUR LOCAL VOICE | TUESDAY, OCTOBER 27, 2020

Time Sabahans started being producers, not consumers

Salla Saidie

KOTA KINABALU: The outbreak of Covid-19 has posed great challenges to the economy and profoundly influenced the lives of most people.

However, the crisis is also a strong driver of innovation and many companies are stepping up to the challenge and using this time as a period of innovation.

An award-winning innovator, Associate Professor Dr Jidon Adrian Janaun, said innovation starts with a problem or opportunity that nobody has noticed before and there are many steps in the innovation process.

"It's all started with solving a problem which is then turned into an idea. It does not suddenly appear in people's minds for no apparent reason. It is the result of trying to solve a specific problem or to achieve a particular goal," he said during an interview with *Daily Express*.

Dr Jidon, who is also a lecturer at Universiti Malaysia Sabah, bagged Special Award and Gold Medal at iENA 2018 in Germany for his inventions as well as Gold Medal at Pecipta 2019, MTE 2018 and Pereka UMS in Malaysia.

He is recognised internationally and locally for his innovation. He also managed to commercialise five of his products and those are LAMB Dryer, UMS Eco-Solar Dryer, UMS Eco-Solar House, UMS River Cleaning Machine, and Residual Oil Extractor.

According to Dr Jidon, Sabahans should stop being a consumer and start being a producer to contribute to the State's economy. The Sabahans need to create products that are sellable in a global market.

"Take China as an example, China has become the world's top producer and almost everyone wants to buy the products from China due to their low price," he said.

He said Malaysia is one of the largest producers of palm oil in the world and the people should take it as an opportunity to create more products related to the palm oil.

"I invented two machines, namely Residual Oil Extractor and Oil Trap for the palm oil industry. Residual Oil Extractor is capable of recovering 40 per cent of residual oil in the palm oil mill effluent (Pome), this machine is currently available in the market commercially. Whereas, Oil Trap functions as a testing system for oil adsorbing materials," he said.

Dr Jidon with one of his inventions, Residual Oil Extractor.

He also invited the public to attend his talk, titled "How to be Innovative and Ways to Commercialise Innovation" on Oct 28 (Wednesday) from 10am to 12pm. The talk is organised by Univerisiti Malaysia Sabah (UMS) and Sabah Creative Economy and Innovation Centre (Sceic). Sceic is a government agency operating under the purview of Sabah Trade and Industry Ministry and tasked to produce successful innovators as well as entrepreneurs in Sabah.

"This is the first collaboration between SCEIC and UMS. The talk's supposed to be held at UMS but we decided to organise it online due to the pandemic. Rambutan Code Academy will also be helping us in conducting the talk virtually via Zoom," he said.

"I have 20 years of experience in innovation and I can't wait to share it with everyone," he said, adding that the talk is free, but registration is required.

Those interested in attending the talk may register at https://forms.gle/HMaTwBF41MCMbB146.

The figure shows a snapshot of written article taken from the dailyexpress newspaper.

7 FKJ Staffs Successfully Secured FRGS 2020

Reported by Dr. Aroland Kiring.

The Faculty of Engineering (FKJ) is delighted to announce that seven of our staffs have successfully secured the fundamental research grant scheme (FRGS) of the Ministry of Education Malaysia. The recipients are Prof. Dr. Willey Liew Yun Hsien (Mechanical Eng.), Assoc. Prof. Ir. Dr. Nurmin Bolong (Civil Eng.), Dr. Yew Hoe Tung (Electronic Eng. (Computer)), Dr. Nancy Julius Siambun (Mechanical Eng.), Dr. Tham Heng Jin (Chemical Eng.), Dr. Noor Sheena Herayani Binti Hariath (Civil Eng.) and Dr. Mohd Azlan Bin Ismail (Mechanical Eng.). FKJ is proud in his staff achievements and would like to encouraged more of his staffs to secure various national and international research grants.

Prof. Ir. Dr. Rosalam Hj. Sarbatly is one of the Three UMS Lecturer ranked in the Top Research Scientist Malaysia 2020

Reported by Dr. Aroland Kiring.

The Academy of Science Malaysia (ASM) recently recognized 30 outstanding scientists as the 2020 Top Research Scientists Malaysia (TRSM). The Faculty of Engineering (FKJ) is proudly to announce that 3 of the scientists are from Universiti Malaysia Sabah (UMS) with one of them is from FKJ that is Prof. Ir. Dr. Rosalam Hj. Sarbatly (Chemical Engineering Program). The recognition is given to active Malaysian research scientists with outstanding achievements in Science, Technology and Innovation and have been nationally and internationally recognized. FKJ is proud in his staff achievements and would like to encouraged more of his staffs to make significant impact to contribute to the nation progress.

Greetings & Birthday Wishes From FKJ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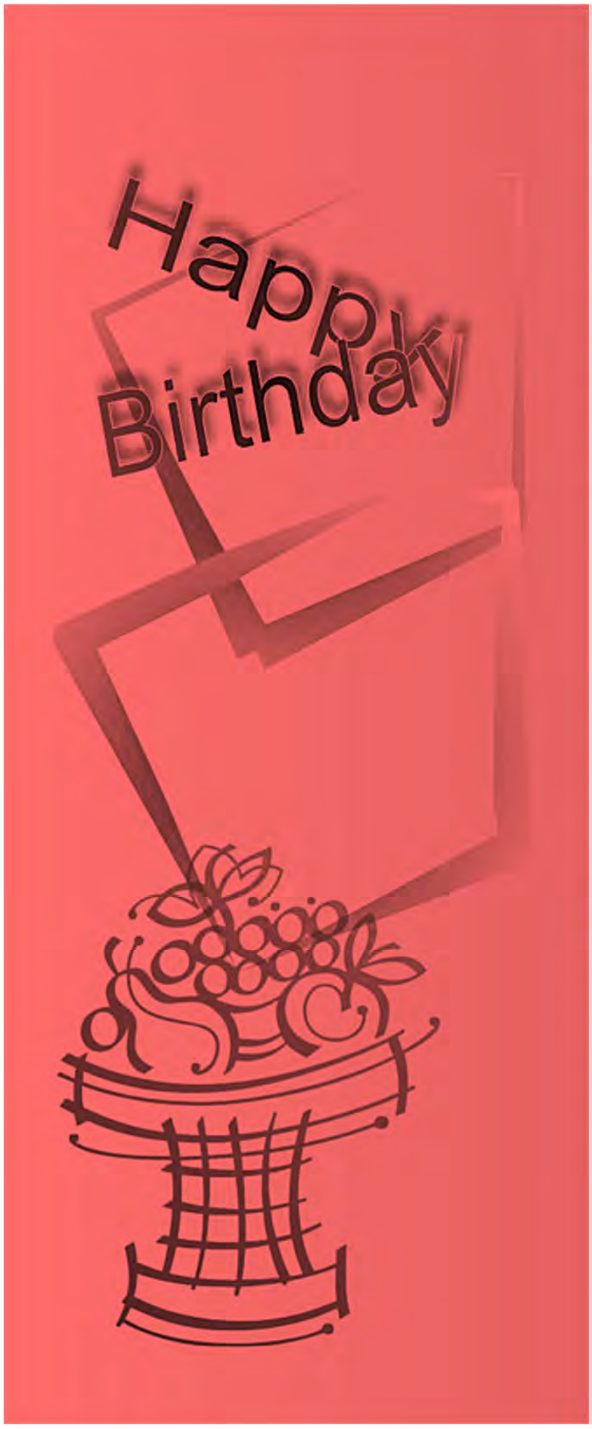
For all those born from October to December, we wish you a Happy Birthday and many happy returns.



OCTOBER
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IRWAN BAHARUDZAMAN
MOHD AZLAN BIN ISMAIL
NATASHA HANEEM BINTI YUSOFF IZZUDIN
OTHMAN BIN AHMAD
RAZAK MOHD. ALI LEE
SARIAH BINTI SAALAH
SUDIN BIN YUSOP
RENEE CHIN KA YIN
ZYKAMILIA BINTI KAMIN
MELVIN GAN JET HONG
VUN WEY TYNG

NOVEMBER
CHU CHI MING
DAMME BIN DAIM
ERNYVITA BINTI HALAI
LIAWAS BARUKANG
MOHD KAMAL MOHD SHAH
MOHD SAIFFULL AZWAR BIN AMAT JUTRAH
MOHD. YUZWAN ABDULLAH @ PIUS PETER MASAMIL
NOOR AJIAN MOHD LAIR
NURHANI BINTI SUGIANTO
SIVAKUMAR KUMARESAN
NAZARUDDIN BIN ABDUL TAHA
ZAINAL BIN ZAKARIA

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DECEMBER
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HIDAYATI BTE ASRAH
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MALCOLM BOXEY JILIMIN
NORFARARIYANTI BINTI PARIMON
NURUL AIN NAYAN
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