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ENGINEERING, SCIENCE & TECHNOLOGY INTERNATIONAL CONFERENCE 2019 (ESTIC'19)

14 & 15 OCTOBER 2019

MAHSA University's Faculty of Engineering and Information Technology and MAHSA IET On Campus have successfully organised its second "Engineering, Science & Technology International Conference 2019 (ESTIC'19)" on the 14th and 15th October 2019.

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ENGINEERING, SCIENCE & TECHNOLOGY INTERNATIONAL CONFERENCE 2019 (ESTIC'19)

14 & 15 OCTOBER 2019

This conference is a platform to share innovative ideas, latest technological information, research findings and strategic solutions. The inaugural ceremony of this international conference was initiated with an opening speech by YB Tuan Haji Mohd Anuar Bin Mohd Tahir, Malaysia's Deputy Minister of Works.

Seven distinguished speakers from various renowned universities, professional bodies and relevant industries were invited for the keynote sessions. The eminent speakers were Dr. Audrey Yong (MAHSA University), IR Dr. Chuah Joon Huang (IET Malaysia Honorary Treasurer), Dr. Nagaraja Suryadera (MAHSA University), Prof Dr. Mohammad Iftikhar Hanif, Ir Dr Lee Yun Fook (Sepakat Setia Perunding Sdn Bhd), IR Ellias Saidin (Consultant Engineering Firm), Prof. Ir Dr Wong Hin Yong (Multimedia University).

Twenty international companies from the industrial sector and three professional bodies participated as exhibitors. They are Technological Association Malaysia (TAM), the Institution of Engineering and Technology (IET) Malaysia and the Institution of Engineers, Malaysia (IEM). The Technical Review Committee selected 40 out 80 papers from various countries, including Indonesia, India, Nigeria, Pakistan and Malaysia for presentation in the conference.

The conference was concluded successfully with the various award presentations in the closing ceremony. This two days event was presented the closing ceremony by Prof Dato Dr Zaininah Bt Mohd Zain, Deputy Vice Chancellor, MAHSA University. The best presenter awards and ESTIC-19 Icon Award were announced during the closing ceremony. ESTIC-19 Icon Award goes to Mr.Myco Lam Kon Fatt, BENTO Food Industries SDN BHD. The Best Presenter award goes to Ms.N.Suganthy from India, and her paper is One POT Fabrication of nano scale Hybrid Phytodrug encapsulated metal organic framework as smart drug delivery system for lung carcinoma held at Auditorium. The Best Presenter award also goes to Ms. Tahirrih Anak Sebastian Lebang and her paper is Bio-medical sleep inducer using geomagnetic field application which is held at different venue. This is one more milestone to Faculty of Engineering and Information Technology, MAHSA University under the leadership of Dean Prof. Dr.Ir.Leong Wai Yie, Prof.Khairul Saleh, Dr.Tan Koon Tatt and Ir.Mohamad bin Ayob. Dr.Shinto and Dr.Lee Sim Yee were the Conference Chairman and cochairman. All the staff members and student volunteers did their job in a pleasant manner. This conference has provided a platform for IET On Campus volunteers to serve and explore various opportunities. Last but not least, this conference would like to appreciate the valuable contribution and wholehearted support from the twenty international companies' industrial sector and three professional bodies participated as exhibitors. The organising committee is really appreciating Bento food industry, Easy study solutions, A -Z book store, TAM and IET for their support to the international conference ESTIC'19.









SIGNING CEREMONY: MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN MAHSA UNIVERSITY AND MALAYSIA INDUSTRY ROBOT ASSOCIATION, BENTO FOOD INDUSTRIES SDN BHD, BOLT INDUSTRIES SDN BHD AND NECTAR CONSORTIUM SDN BHD

4 JULY 2019

On the 4th of July 2019, the Faculty of Engineering and IT bringed itself with four establish companies, namely Malaysia Industry Robot Association, Bento Food Industries Sdn Bhd, Bolt Industries Sdn Bhd and Nectar Consortium Sdn Bhd for industry collaboration under MAHSA University. The ceremony was held at Auditorium Level 9, Empathy building and was witnessed by 4 of the representatives from each company as well as MAHSA's Vice-chancellor, Prof. Dato' Dr. Ishak bin Abdul Razak, Deputy Vice-chancellor, Deans and Lecturers.

In the MoU, MAHSA University and Malaysia Industry Robot Association, Bento Food Industries Sdn Bhd, Bolt Industries Sdn Bhd and Nectar Consortium Sdn Bhd have agreed to collaborate in a number of areas:

- 1. Meetings, trainings and seminars for research and education
- 2. Joint research and joint expeditions

3. Provide an exposure to engineering students relate to industrial revolution 4.0

4. Exchange of scientific materials, publications, and information

Collaboration with Malaysia Industry Robot Association is one of the preparations in facing industrial revolution 4.0 (IR 4.0). This is a good opportunity for MAHSA student to enhance the technology gathered from industrial partner in designing a project. In addition, products such as renewable energy that related to solar PV and internet of things (IoT) such as wireless light switch, RF remote control socket and wireless scene switch supplied by Bolt Industries Sdn Bhd gives benefit to MAHSA in mobile application studies.

Nectar Consortium Sdn Bhd with their tagline 'Innovating Automation for All Your Automation Needs' specialty in providing a training related to instrumentation, control system, PLC and SCADA, to MAHSA point of view will helps the student to improve their skills. The training proposed expose the students in real working life, and of course relates to system design. The atmosphere enlivened by a speech from managing director Bento Food Industries Sdn Bhd, with their tasty ready to eat meal. With the variety of meals provided with preparation time less than 10 minutes seem to be suited for students that busy with their assignment but still care about their health. The MoU ceremony is closed by exchanging the token of appreciation from each side.





PROUD BE PART OF MAHSA - BE MORE

At MAHSA university, it's not all studies. Students involve themselves in hands-on practice. The real works that they are going to do once go out after their graduations will be practised while their journey at MAHSA.

MAHSA has taught them to be independent and to look out for more opportunities on how to do the things better. Sure the students can develop with the knowledge and experience they've gained during their practice. MAHSA has proved that we are always be more and make it happen.

The evidence has been given by MAHSA FEIT by making the Drainage Grate Project success. A small project was given by Lecturers to the students during their Lab practices to help the organization to make their Drainage Gates to be covered the drainages in the whole University Campus as a safety aspect. Some students, who wanted to learn extra, make it a success. They had come out with their design and then fabricated it with low costing. They had made it with more quality compared to the outsider. Sure they will be always shining.

KNOWLEDGE EXCHANGE PROGRAM WITH JAPAN UNIVERSITY 10-14 JUNE 2019

Knowledge exchange program held at Shibaura Institution of Technology, Tokyo, Japan during 10th June to 14th June, 2019. Faculty of Engineering and IT (FEIT), MAHSA university student attended the Knowledge exchange program. During this program our student kindle her mind with wide range of opportunities of her development by doing projects.

Knowledge exchange program mainly to improve the expertise, knowledge, International leadership skills, build networks and generate innovation by breaking down the barriers between sectors. Also the program provides opportunities for the academic staff to engage with industry or professional practice and then to share the contemporary ideas with their students. Also the program provides opportunities to network with other professionals. The employee, the employer and organization all get benefit from student exchanges. The exchange programs will improve understanding between sectors leading to greater collaboration. First day of the program at Shibaura Institution of Technology (SIT) started with Internet of Things (IoT) program with some brief introduction and discussing ideas by splitting into groups.

The students were given a task to solve a common problems by applying IoT knowledge, and then develop a program using Arduino software in order to overcome the issues. Even though multiple races in a team the students break the communication barriers by the help of 'Google Translate' together with body language and solve the real problems by interacting and discussing with new ideas.

Our MAHSA university student's group decided to create an "Accident – Free Device" that can help in minimizing death and injuries from fire disaster and earthquake. The next day our student group continued the project by assigning the tasks among them. The main tasks are developing programs using Arduino, building circuit with sensors and components, as well as preparing slides for presentation purpose. In the evening, Yukata workshop was held, during which students were given a chance to enjoy and experience the Japanese cultures and traditional clothing. In one fine evening another activity which let the Japanese student to experience the Malaysian's traditional games like

teng-teng, gasing and zero point. The Japanese students and even lecturers can catch-up the games easily and did very enthusiastically with fun and enjoyed lot. While doing the coding the Japanese students willing to teach other students about the coding. It was so difficult for the Japanese students to explain the whole program in English for other expatriate students, but he put effort to ensure that other students understand how the whole program is developed and functioning.

Finally the students developed the entire project which can detect fire disaster as the temperature is high enough to trigger the heat and humidity sensor, as well as flame is detected with flame sensors, it will trigger the alarm (buzzer sensor) and send an email to the owner. The same things goes to earthquake detections, with acceleration sensor is used to detect vibration at certain value then will activate the alarm and send email to owner as well. Finally our student learned a lot of knowledge regarding IoT programs which will be the trend and significant in the future generation, and experienced a lot of novel ideas including their culture by exploring around Japan. For example, the Japanese are always on time and polite in manners. The students will not be late to school, and the trains will not delayed unless some emergency cases happened. With this type of programs students not only get knowledge but also exploring things, Time keeping, good manners and skills.









STUDENT ACTIVITIES

TNB ILSAS-A TECHNICAL VISIT

23 APRIL 2019



VISIT TO KAJANG ROCKS

PONDOK PENYAYANG COMMUNITY SERVICE

13 JUNE 2019

10 JULY 2019



ZOO NEGARA COMMUNITY SERVICE

24 APRIL 2019



PROFESSIONAL TALK ON STANDARDS AND ELECTRICAL ENGINEERS WATER TREATMENT PLANT VISIT

30 MAY 2019



25 OCTOBER 2019











Visit to kajang rocks :On 24th April 2019, 25 Civil Engineering students and staff from the Faculty of Engineering and IT, MAHSA University conducted a site visit to Kajang Rocks Quarry at Semenyih, Selangor. Faculty of Engineering and Information Technology has signed memorandum of understanding (MoU) with Kajang Rocks Quarry for the benefit of both parties and for better connection between academic and industrial sectors. The purpose of this visit is to introduce an industrial exposure as well as real site conditions to diploma and undergraduate students that involved the knowledge of geology.

Upon arrival at Kajang Rock Quarry, the students and staff are welcome by the representatives of Kajang Rock Quarry staff. The programme of the day was started with some introduction of the company background from management team on the history of Kajang Rocks Quarry, their achievements, products, manufacturing process and followed by presenting the corporate video. Visitors (students and staff) also have given the briefing on the fundamental knowledge and safety issue relevant to the site. After the short briefing, all the visitors are required to wear safety helmet and vest provided by the company before site visit.

All visitors were brought to the main quarry site and explanation gave by the site engineer. Visitors had been told that the latest explosion of the quarry had been conducted few days ago. Therefore, the quarry was under rocks transportation progress on that day. Next, visitors were introduced to all manufacturing process. During the site visit, the instructors and site engineers were been alert with the safety issues as the construction were going on. Besides, students were bring to the laboratory. Visitors has been explored with various laboratory works done by the industry for quality control. The final product of the quarry also has been introduced by the site engineers.

After half day site visit, all visitors were return back to the meeting room and short question and answer section had been conducted. The event was closed by closing speech from the representative from Kajang Rocks Quarry and staff from MAHSA University had presented a token of appreciation to Kajang Rocks Quarry.









TNB ILSAS-A Technical Visit: As an initiative from Faculty of

Engineering and IT to expose the Electrical and Electronics engineering students in hands on training, a technical visit to TNB ILSAS, Universiti Tenaga Nasional was organized on 23 April, 2019. This benefit is shared with 20 students majoring in electrical power, in collaboration with IET members to expose them with the high voltage application. This technical visit started at 10.00 am, whereby a welcoming speech from Asrul Azizi Alias, Chief of learning officer related to the professional program offered by TNB ILSAS. After a short briefing by one of the instructors, students were divided into two groups and they were insisted compulsory to wear a safety helmet.

There are five locations, related to six training divisions that students need to visit. First is the transformer room, by means students had been exposed with different type of transformers namely power transformer and distributed transformer that operate more than 33kV, 30MVA. The second location is a substation that consists of a main unit that can be controlled manually or remotely. The instructor explained on how all the systems are interconnected to each other as well as the benefit of using a SCADA system to monitor and control all the components inside the switch gear. Besides, types of breaker which focused on vacuum circuit breaker based on its function, operation and maintenance are deeply explained.

The third and fourth checkpoints are related to the 33kV simulator (pencawang masuk utama, pencawang pembahagian utama and pencawang elektrik) and transmission tower. To make the students understand how the process of installation and maintenance of transmission tower is demonstrated, they have been given an opportunity to climb a tower follows the safety procedure started. A fourth location is the renewable energy which related to the generation of electricity using solar photovoltaic cells. In TNB ILSAS, they connected this 6.69kW solar system as a standalone, this system is used to support the demand at load side. Lastly, students has been exposed to the drone practitioner in monitoring the condition of transmission tower. At the end of this technical visit, there is a quiz covering all six checkpoints about the visit and one of the Mahsa students Akash Vijaya Kumar got the first prize.

<u>Faculty of Engineering and IT Facebook update</u>

https://www.facebook.com/FEIT.MAHSA/

