Seize and Innovate Research Technology Beyond Future

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Penaung: Prof. Madya Dr. Ishak Baba
Penasihat: Prof. Madya Hj Amran Mohd Zaid
Ketua Editor: Dr. Azrin Hani Abdul Rashid
Editor: Dr. Hanis Hayati, Dr. Aimi Syamimi, Dr. Peniel
Pembantu Editor: Students Chapter Committee (SCC)
Deen, Jojo, Mira, Amnani, Tie, Fina, Ashu, Awi, Marina,
Nadiah, Davies, Khairani, Wanis, Najwa, Faiz, Anis
Pereka Grafik: SCC - Fina, Ashu, Awi
Our Appreciation

Expressing our sincere thanks and appreciation towards our former Head of ATC, Prof. Madya Dr. Rafidah Hamdan for all the knowledge, skills, commitment and contribution.

Sejambak Kasih Sekalung Budi

Diucapkan kepada
Prof. Madya Dr. Rafidah Hamdan

Setinggi-tinggi penghargaan dan terima kasih di atas jasa-jasa yang ditaburkan sepanjang berkhidmat sebagai Ketua Pusat di “Advanced Technology Centre”, FTK 2015 - 2017

"Volunteers like you bring a little hope and leave a little sunshine everywhere they go."

Kompang bergema pusaka bangsa
Dipalu oleh si anak muda
Hadir Dr memeriah suasana
Kami menyambut penuh gembira

Rancik-rancik si kayu sugi,
Sunnah nabi jaga kebersihan,
Dr. Azrin sebagai pengganti,
Berkongsi ilmu madah pengetahuan.

Kapal berlabuh di Kuala Rengit,
Semat jerami di Sungai Muar,
Dr umpama bulan di langit;
Dapat kami menumpang sinar

We would also like to congratulate the appointment of Dr. Azrin Hani Abdul Rashid as our new Head of ATC.
May your experience and skills improve our ATC target and achieve better.

Sekalung Tahniah

Diucapkan kepada
Dr. Azrin Hani Abdul Rashid

Di atas perliatkan sebagai Ketua Pusat Advanced Technology Centre

"May today’s success be the beginning of tomorrow’s achievements."
Advanced Technology Centre (ATC) Organization Structure

**Prof. Madya Dr. Ishak bin Baba**
Dean Faculty of Engineering Technology

**Prof. Madya Hj. Amran bin Mohd Zaid**
Deputy Dean (RESEARCH, DEVELOPMENT & PUBLICATION)
Faculty of Engineering Technology

**Dr. Azrin Hani binti Abdul Rashid**
Head of CoR
Advanced Technology Centre (ATC), FTK

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**Power Energy Focus Group (PEFG)**
(PR: Dr Sim Sy Yi)

Niche area: Renewable Energy, Power System and Power Electronic, Drive and Control Technology

**Biotechnology-Sustainable Material (B-SMAT)**
(PR: Dr Mazatuszila Ahmad)

Niche area: Biotechnology, Advanced Polymer, Nanotechnology

**Sustainable Environmental Technology (SET)**
(PR: Dr Mimi Suliza Muhamad)

Niche area: Water & Wastewater, Green Materials, Sludge & Soils, Solid Waste Management, Air Quality

**Cybernetics Research Group (CRG)**
(PR: Dr Il Najaa Aimi Mohd Nordin)


**Automotive and Combustion Synergies Technology Group (ACST)**
(PR: Prof. Madya Dr Amir Khalid)


**Occupational Safety & Health and Work Environment (OSHWE)**
(PR: Prof. Madya Dr Abdul Mutalib Leman)


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**FTK FOCUS GROUP**

**Deputy Dean (RESEARCH, DEVELOPMENT & PUBLICATION)**
Faculty of Engineering Technology

**Head of CoR**
Advanced Technology Centre (ATC), FTK

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**Sustainable Transport and Safety Studies (STSS)**
(PR: Dr Joewono Prasetyo)

Niche area: Transportatin Systems Planning, Traffic Engineering Studies and Transport Safety Measures

**Plant Reliability and Process Technology (PROTECH)**
(PR: Dr Abdul Latif Mohd Tobi)

Congratulation!
For the Student Chapters Committee Appointment.
In hope to transform and instill courage on the importance of research in the hearts of the faculty members and among the future postgraduates.
2017 ACHIEVEMENTS

Active academic staff
- 2 Professor
- 12 Associate Professor
- 59 Senior Lecturer / Lecturer

Postgraduate Enrolments
- **PhD**
  - Active: 33
  - Completed: 1
- **Master**
  - Active: 28
  - Completed: 6

2017 PUBLICATIONS

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2017 KEY PERFORMANCE INDICATOR (KPI)

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2017 Scopus output
- Proceedings: 48%
- Journals: 52%
2017 ACHIEVEMENTS

SCOPUS INDEX ARTICLE PUBLICATIONS

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Top 6 Scopus articles contributor 2017

- Prof. Madya Dr. Amir bin Khalid ———— 32
- Dr. Huda bin A Majid ———— 21
- Prof. Madya Dr. Chan Chee Ming ———— 17
- Dr. Mohd Faisal bin Hashim ———— 13
- Dr. Joewono Prasetijo ———— 9
- Prof. Madya Dr. Rafidah binti Hamdan —— 8

H-INDEX RANKING 2017

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**2017 TOTAL GRANT FUNDING**

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**2017 TOTAL CITATIONS**

- **1003 citations**
- **FTK CUMULATIVE CITATION : 1003**
- **AVERAGE CITATION PER STAFF : 13.7**

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<td>Dr. Nur Hanis Hayati binti Hairom</td>
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<td>Dr. Noraini binti Marsi</td>
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2017 ACHIEVEMENTS

2017 SOURCE OF GRANT FUNDING

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Technical Workshop on Olympus Microscope (BX53M), Metallographic Microscope & Stream Image Analysis Software

Bengkel anjuran Crest Group of Companies, IMT FTK, Nanosurf, FTK UTHM pada 10 - 11 Januari 2018 (Rabu dan Khamis) telah memperkenalkan asas dalam penggunaan mikroskop optikal dan juga pengenalan kepada teknik termaju dalam automasi imej dan pengendalian sampel, kebolehan akses dan analisis data yang dicerap di samping adaptasi kepada sistem mikroskopik untuk keadaan eksperimen khas.

Seramai 20 orang staf dan pelajar telah menyertai bengkel ini. Secara keseluruhan, bengkel ini telah memberi pengenalan penggunaan mikroskop untuk mendapatkan mikrostruktur dan analisis yang boleh didapati daripada imej Olympus Microscope untuk tujuan pembelajaran dan penyelidikan kepada staf dan pelajar.

Disediakan oleh,
Dr. Noraini Marsi

Technical Workshop on 3D Measuring Laser Microscope (LEXT OLS5000)


Disediakan oleh,
Dr Rosniza Hussin @ Isa
Resume Writing &
Job Interview Workshop

On 26th February 2018, Faculty of Engineering Technology in collaboration with Johor Bio Talent Development Centre, Advanced Technology Centre (ATC) and OSH-WE (Occupational, Safety and Health – work environment) focus group held the “Resume writing and interview workshop”. This workshop was organized by Assoc. Prof. Engr. Dr. Abdul Mutalib Bin Leman and Dr. Muhammad Bin Zulkibli. The workshop was opened to the public focusing on the undergraduate student (Year 3 and 4). Approximately, 145 of undergraduate students attended the event.

The speaker was Mr. Hans Tohl, Malaysia’s first certified professional resume writer. Mr. Hans spoke about various tips and tricks on resume writing and job interview. During the day, workshop participants had the opportunity to learn different resume format and the advantages and disadvantages of each. In the first session, students were exposed to the importance, fundamental as well as do and don’ts in writing a resume. The session had helped the students in knowing what to reveal in the resume and what to keep to themselves.

The afternoon session was followed with a job interview session. With so many “must read” advice article for interview success, the speaker had compiled the best tips for making sure participants win the interview “battle”. Topics included: what manager is looking for, type of interview and strategies for answering in an interview session.

At the end of the session, the participants in the workshop reached a new level of knowledge on transforming a resume into a powerful tool that will get them win an interview. Also, the participants had clearer understanding of the employer’s perspective and how to play into their needs effectively. Lesson learned, the participants will be able to stand out with an outstanding resume. This program helped in building the confidence among those who had joined.
On January 11, 2018 until February 11, 2018, Dr. Huda Bin A. Majid visited the University of Rennes 1, France to conduct field work on the research of Fabrication and Measurement of Metamaterial Antenna Structure at the Institute of Electronics and Telecommunications of Rennes (IETR). The fieldwork is aimed to fabricate and development of prototype measurements against metamaterial antenna structures. This test has focused on three key areas of antenna, metamaterial and 5G mobile networks. Dr. Huda has been assisted by Associate Professor Dr. Muzammil Jusoh from Universiti Malaysia Perlis (UniMAP) in implementing the fieldwork. For information, the research is under the sponsorship of the Fundamental Research Grant Scheme (FRGS). This research is also a joint collaboration of Research Center for Applied Electromagnetic (EMCenter) Universiti Tun Hussein Onn Malaysia (UTHM) and Universiti Teknologi Malaysia (UTM). As a result of the fieldwork, the appearance and measurement of the metamaterial antenna has been achieved. Most metamaterial fabrication has been done at IETR. However, three metamaterial designs were sent to the company for fabrication due to equipment constraints. All metamaterial antenna measurements have been performed at IETR.

On February 8, 2018, a discussion session between UTHM representatives, UniMAP and Center for Electronic Warfare Information and Cyber, Cranfield University was held at the Center of Defense and Security, Cranfield University. The main focus of the discussion is on research collaboration between universities including the proposed research grant for the Newton Fund, the International Collaboration Fund (MOSTI) and other research grants from the United Kingdom.

On February 9, 2018, a discussion session between researchers from UTHM, UniMAP and Queen Mary University of London was held. The talk session took place at Queen Mary University of London. The main focus of the discussion is on research between universities including research grant proposals for Newton Fund, International Cooperation Fund (MOSTI) and other joint research grant from United Kingdom. UTHM representatives were also brought to visit research facilities on the THz measurement test which was a research in the early cancer hearing. In summary, many major issues and focus on joint research are discussed throughout the course. For those who wish to research at those universities, may apply for the International Collaboration Fund (MOSTI), Newton Mobility Grant and others.
A total of 7 lecturers and twelve students (graduate and postgraduate) representing the Faculty of Engineering Technology (FTK), Universiti Tun Hussein Onn Malaysia (UTHM) have been given the opportunity to participate in a student mobility program abroad to Seoul, South Korea. It was held on 27th January to 2nd February 2018. Through the branding of "Mobility and Benchmarking to Universities in Seoul" with the tagline "FTK invasion, Seize Seoul, Innovate technology" had inspired implementation for quality improvement purposed for the undergraduate and postgraduate programmes as well as assimilation of better learning environment and research culture that has not yet been applied in UTHM.

The educational visit were to Hanyang University and Yonsei University. At these universities, we were exposed to the latest technologies including 3D printers placed at university libraries for student use and they also had a developed research centre such as the Creative Design Mechanical Centre where it is open for 24 hours specialized for brain storming ideas of latest innovations. Their aims were basically to produce graduates that could contribute back for the community and also to produce highly skilled technology user. Highly instrumentation in laboratories were used as this contribute towards latest research skills and experimentation which are up to date with the global technology. The visit to Nami Island, participants had discovered new research ideas related to green technologies involved in the use of recycle products as a source for the island constructions such as bridge and some buildings created tins, glass and plastics bottles.

In addition, the program also had an immersion of local culture by visiting places such as Gyongbukgung Palace and the surroundings. We were exposed to a historical designed castle preserved and well maintained. The palace grounds also showcased 'guard exchange ceremony' that was held every morning as this summarized a few of cultural exposure of Korea. One thing that sparked anxiety among mobility participants was the use of T-Money cards. T-Money cards are the same as Touch n Go cards in Malaysia but this T-Money card can be used to purchase all types of stuff such as in convenience stores - 7 Eleven, G25 mart and Lotte market. The use of the T-card also implemented for all public transport in South Korea as this reduced the swipe of money exchange but instead using electronic device for any transactions.

Program leader, Prof. Madya Dr. Angzzas Sari and Dr. Chan Chee Ming also said they really did "Soaring Upward" in ensuring survival in South Korea. With a relatively expensive food price compared to Malaysia, we work in groups to prepare food and plan using public transports. With the spirit of "Soaring Upwards", we cannot relinquish but seek to improve the student’s soft skills, in particular in terms of communication skills and the spirit of cooperation with colleagues from UTHM, Hanyang University and Yonsei University in the development of global-minded professionals.
SAKURA Exchange Program in Science at Nagaoka University of Technology (NUT)

On 11th to 25th February 2018, 1 FTK staff and 2 students had visited Nagaoka University of Technology, NUT Japan for Research Exchange. The group has been working under Miyashita-Otsuka Laboratory for a research topic on Fretting Wear of Hip Implant. This project is a continuous project for 3 years duration from 2017 until 2019 and sponsored by Japan-Asia Youth Exchange Program in Science (SAKURA Exchange Program in Science) administered by Japan Science and Technology Agency. The activities around the program ranging from Laboratory experiments, Research Seminars, Finite Element modelling works and some social and recreational activities.

This program is a success and the students got some valuable experience during this exchange on how research being conducted in NUT. Sharing session and tea-time session are weekly activities between students and their supervisor. This tea-time gives opportunity for students and supervisor to get along with each other outside of research work. Another interesting activity is morning seminar where a student from the lab present about a journal literature selected by their supervisor. After the seminar there was question and answer session and it was interesting and gave lots of information and knowledge on their area of study for each of the student itself. Students also have summarised and presented two weeks of their research work on last day at NUT.

The exchange partner from NUT Associate Professor Otsuka Yuichi expressed his satisfaction and his desire that this exchange programme should continue in the years to come after our final presentation. This exchange programme has not only been a memorable experience but has also provided a platform for exploration in research collaboration between the two universities in future.
An OBE Workshop at Asian Conference on Engineering & Science (ACENS), Osaka, Japan (6th to 8th February, 2018)

Organized by the Higher Forum (www.prohef.org), the Asian Conference on Engineering and Science (ACENS) is a circuit event provide scholars, researchers and practitioners in the field a platform to exchange ideas on interdisciplinary research and practices in all fields of engineering, technology, sciences and beyond. Together with colleagues AP Dr. Alina Shamsuddin (Dept. of Building & Construction Engineering, FKAAS UTM), Dr. Chan Chee Ming from FTK were invited to conduct an OBE Workshop at the event. The workshop was targeted academicians and practitioners alike in the engineering, technology and science areas, with emphasis on the philosophy and strategic implementation of an industry-aligned outcome-based learning in universities. Issues, challenges and development of OBE implementation at UTM for the past decade were shared with participants from various parts of the world during the 1.5-hour long workshop. It was not only a lively discourse with colleagues from different countries, more importantly was perhaps the opportunity to showcase UTM’s exemplary academic managemnet system and putting the University on the map as a forerunner in modern day technical education and training at tertiary level.

Prepared by,
Dr Chan Cee Ming
The first meeting of ATC-FG FTK was held on 14 February 2018 at Bilik Perbincangan FTK (Wing kiri), UTHM Pagoh. The meeting had involved the suggested activities for the 2018 activities, nominated potential postgraduate students for the Student Chapters Committee and also introduced the latest focus group for the faculty.

ATC Meetings

The first meeting of ATC FTK Student Chapter Meeting was held on 12 February 2018 at Bilik Mesyuarat 2, UTHM Pagoh. This meeting was conducted to arrange the position of student according their ability as a member of SCC 2018. In addition, this meeting also produced ideas for the upcoming activity for 2018.

Calibration and Measurement System Course


Kursus ini dibuka sepanjang tahun oleh pihak SIRIM Berhad terutama kepada pensyarah, staf pengajar, badan-badan korporat untuk mendalami lebih mendalam tentang kalibrasi dan sistem pengukuran. Melalui kursus ini, peserta diberikan pendedahan tentang kepentingan kalibrasi alat-alat pengukuran, bagaimana untuk membuat kalibrasi bersama pihak SIRIM Berhad serta sedikit pengenalan berkaitan dengan ketidakpastian (uncertainty) dalam bidang pengukuran. Di samping itu, kursus ini mendedahkan kepentingan pengukuran dahubungannya terhadap akta-akta yang terdapat di Malaysia.
Industrial Talk on “The Qualities of Successful Textile Engineering Technologist”

On 25th February 2018, a seminar has been conducted by the Department of Mechanical Engineering Technology, Faculty of Engineering Technology special for students who are now pursuing for Bachelor of Mechanical Engineering Technology (Industrial Textile) with honours. The seminar was delivered by En Juraini Bin Muslim who work as a Senior Quality Manager for PETZL Manufacturing Malaysia Sdn. Bhd. The seminar was intentionally organized in order to give an exposure to the student about the textile industries.

En Juraini has experience in technical textile industry for more than 24 years. He possesses multiple skill in a variety of fields. This include working in field like Textile Technology that range from yarn manufacturing, weaving to apparel industry including technical textile, quality management system, PPE product for mountaineering organization management and material management. He started his career as an officer in Penfabric Sdn. Bhd. for 9 years. He was also involved in material management for Body Fashion (M) Sdn. Bhd. He was assigned to set up lab facility in new factory for Triumph International in India and Thailand. He is currently attached with PETZL Manufacturing Malaysia Sdn. Bhd. as Senior Quality Manager.

Civil Engineering and Architecture Research, Innovation and Design Competition (RiDeC) is an event held every semester at Politeknik Port Dickson, as a mini expo of the final year students R&I products as well as outputs. The civil engineering students put up their 2-semester long group R&I output, mainly of tangible products or reference charts, while the architecture students exhibit individual design efforts for a given architectural theme. As the Academic Advisory Panelist for the Diploma in Civil Engineering programme at PoliPD, Dr Chan (FTK) was invited to be a judge of the civil engineering projects, as well as to deliver a short motivational talk to the students during the closing ceremony of the event. The students displayed commendable levels of creativity, innovation and initiative of the products were evaluated in terms of feasibility, cost-effectiveness and ‘green’ values.
The seminar started with a brief explanation from En. Juraini about the background of PETZL Manufacturing Malaysia Sdn Bhd. Petzl is actually a personnel name. His full name is Fernand Petzl and he is the founder of the PETZL Group. Petzl is an explorer where most of the time he went for caving and climbing with his friends. The company’s mission is to offer practical solutions that allow people to progress. With the strong passion for exploration, they came out with a trademark which is “access the inaccessible”. They continuously invent the products and provide solutions that allow sports enthusiasts to access the inaccessible places in day or night. The beginning of the adventure for the Petzl brand when his son Pierre and Paul started to expand their production in 1970.

Next he continue with the processing steps that was applied in PETZL Manufacturing Malaysia Sdn. Bhd. Firstly is concept. Concept of any equipment that they are going to manufacture were obtained from the trouble that was experienced by the athlete or sport enthusiast when they went for any of the sports like mountaineering or climbing. Based on the concept, they will try to brainstorm in a team and come out with a design. The equipment was design precisely so that it will fulfil all the standards and safety regulations. This is crucial so that the user will feel safe whenever they use the equipment designed and made by PETZL.

Next step is testing. A number of testing were done on the equipment that have been made. This is to ensure the product produced can long lasting and can withstand any load or force that was applied on the equipment. Once the standards and the features have been confirmed, then only they continue with the production. In production, they practice the lean production system where any waste in term of time, energy and cost were eliminated. Last step is the distribution. Products that have been produced was then distributed to their outlet so that it will reach the potential customer easily.

On top of that, En Juraini also share with the students what are the main sector in textile industries. There are four main sectors. First sector or known as primary sector is polymer, spinning, weaving, knitting and dyeing. Next sector is garment manufacturing. Third sector is manufacturing of textile goods. The last sector is departmental store, merchandiser, retailer and entrepreneur. The students were told to choose any sector that they favour the most. Once they know their interest, then only they can focus on gaining knowledge that are related to that sector.

Before he end his speech, En Juraini share with the students what are the values that the industries expected from the fresh graduates. First value is students must has a strong leadership skill. They must be able to lead and ready to be led by a person who are more senior compared to them. They must know how to collaborate with other people creatively. Next is student must has a strong discipline because attitude play the most important role in shaping a great individual so that they can achieve something bigger wherever they go. In order to avoid them from left behind, the student must has an open minded and they also must has a continuous improvement mind-set.

Program was continued with the question and answer session between students and En Juraini in order to help students to obtain a clear picture on industrial textile or specifically technical textile. After the session end, the event end with souvenir giving session. Then the guest was led to the dining table for a lunch together with the lecturers.
Industrial Visit at PK Agro Industrial Products Sdn. Bhd.

As part of the university – industry engagement program, four Universiti Tun Hussein Onn Malaysia (UTHM) staffs under the Innovative Manufacturing Technology (IMT) Research Group, Faculty of Engineering Technology has visited PK Agro Industrial Products (M) Sdn. Bhd. on 14 February 2018 to seek for cooperation opportunities, especially in the innovative technology development, facilities management, and production enhancement. The UTHM delegation, led by Dr. Salwa Mahmood was welcomed by the PK Agro Industrial Products (M) Sdn. Bhd. Plant Manager, Mr. Ponganunt Noparat, together with a number of the factory’s senior staffs. The visit started with institution introductory presentation from both side, followed by a short discussion and site visit. During the site visit, our delegation had been demonstrated and explained to the poultry feed manufacturing process as well as the factory operation management which is based on online system. We also had the opportunity to visit the quality control department that allocates laboratory and sampling area. UTHM delegation leader, Dr Salwa said “We are delighted with this visit and we had identified few potential areas that we can work on. One of our student had successfully completed his final year project with PK Agro last year and we want to contribute more.” PK Agro Industrial Sdn. Bhd. is a subsidiary company of Charoen Pokphand Malaysia, also known as CP Group Malaysia. Incorporated since 1974, this conglomerate consists of two major business groups, which are Agro Industry & Foods Business Group and Aquaculture Business Group.

Industrial Based Project’ pelajar kursus Industrial Engineering and Quality Management (BNJ30403)

Pelajar Sarjana Muda Teknologi Kejuruteraan (Loji) yang mengambil subjek Industrial Engineering and Quality Management (BNJ30403) Section 3 dibawah penyeliaan Dr. Salwa Mahmood telah mengambil inisiatif untuk mengadakan lawatan ke industri sebagai sebahagian dari keperluan Industrial-based Project untuk pemerhatian dan melakukan sebarang penambahbaikan berkaitan dengan kejuruteraan industri dan pengurusan kualiti. Melalui projek seperti ini, pelajar mendapat pendedahan berkaitan situasi sebenar di dalam industri serta melibatkan diri untuk memberikan cadangan penambahbaikan kepada pihak industri. Di akhir semester, pelajar perlu membuat pembentangan berkaitan dengan penambahbaikan yang telah dibincangkan dalam bentuk berkumpulan. Satu salinan laporan pelajar turut diserahkan kepada industri yang terlibat di akhir semester. Melalui pembelajaran secara teori di dalam kelas, para pelajar dapat mengaitkan antara teori dan pengalaman sebenar di industri di samping berpeluang memberikan cadangan penambahbaikan kepada pihak industri. Industrial-based Project seperti ini memerlukan sokongan dari pelbagai pihak khususnya pihak fakulti dan pihak industri.
Majlis rundingan kerjasama antara Universiti Awam dan Swasta dan G-Pro Technologies bersama Malaysian Textile and Apparel Centre (MATAC) dan
Majlis menandatangani memorandum persefahaman (MoU) antara UTHM dan Malaysian Textile and Apparel Centre (MATAC)

Pada 12 Oktober 2017 bertempat di Sime Darby Convention Centre, Kuala Lumpur, telah berlangsung majlis rundingan kerjasama antara MATAC dan beberapa Universiti Awam dan Swasta serta syarikat G-Pro Technologies dengan disaksikan oleh Timbalan Ketua Setiausaha dan beberapa wakil dari Kementerian Perdagangan Antarabangsa dan Industri Malaysia (MITI). Majlis ini melibatkan kolaborasi 4 buah Universiti Awam iaitu Universiti Tun Hussein Onn Malaysia (UTHM), Universiti Kebangsaan Malaysia (UKM), Universiti Kebangsaan Malaysia (UKM), Universiti Kebangsaan Malaysia (UKM), Universiti Teknologi MARA (UiTM) dan Universiti Teknologi Malaysia (UTM). Universiti Swasta yang terlibat pula adalah Monash University manakala syarikat yang turut sama bekerjasama adalah G-Pro Technologies dan Generasi Fesyen Aktif Sdn. Bhd.


Seterusnya pada 22 November 2017 bertempat di Dewan Sultan Ismail, UTHM satu majlis menandatangani memorandum persefahaman (MoU) antara UTHM dan Malaysian Textile and Apparel Centre (MATAC) telah berlangsung. Naib Canselor UTHM, Prof Dr Wahid bin Razzaly telah menandatangani dokumen bagi pihak UTHM manakala MATAC telah diwakili oleh Presidennya, En Seow Hon Cheong.

Kerjasama ini diharapkan dapat membuka peluang yang lebih besar kepada aktiviti penyelidikan dan perundingan melalui perkongsian pengalaman dan pemindahan teknologi khususnya dalam bidang Teknologi Kejuruteraan (Tekstil dan Pembuatan). Pembangunan profesional staf dan kebolehpasaran graduan juga berpotensi untuk ditingkatkan. Penerimaan sebuah agensi yang menaungi ratusan industri tekstil di Malaysia seperti MATAC dijangka dapat menyediakan dan meningkatkan ruang untuk graduan UTHM bekerja dan menjalankan latihan industri. Seterusnya jaringan hubungan yang lebih formal dengan industri di peringkat kebangsaan dapat ditingkat selain menaikkan imej UTHM.

Disediakan oleh,
Dr Azrin Hani Abdul Rashid
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BIM FG rangka jalinan kerjasama bersama MDP

Satu pertemuan antara wakil Kumpulan Fokus Building Intelligent Management (BIM FG) bersama En Muniri dari Jabatan Kejuruteraan dan Bangunan, Majlis Daerah Pontian (MDP) telah diadakan pada 12 Mac 2018. BIM FG diwakili oleh Dr. Faridahanim binti Ahmad, Dr Mariah binti Awang dan Sr. Dr. Mohammad Ashraf bin Abdul Rahman selaku ketua penyelidik BIM FG. Objektif pertemuan ini adalah bagi mewujudkan penyelidikan kolaboratif antara BIM FG dan MDP melalui rangkaian ini, inisiatif perkongsian serta promosi. Pertemuan ini telah mengenalpasti beberapa projek dan program berpotensi untuk dikolaborasikan selain berjaya mencekamkan idea dan pendedahan baru yang berimpak tinggi dalam memantapkan lagi usaha penyelidikan dan inovasi di kalangan ahli BIM.

Industrial Visit

Lawatan Industri Pelajar Sarjana Muda Teknologi Kejuruteraan Mekanikal(Pembuatan) ke National Metrology of Institute Malaysia (NMIM), SIRIM Berhad

Pada 22 Januari 2018, dua orang staf Jabatan Teknologi Kejuruteran Mekanikal, Fakulti Teknologi Kejuruteraan, Dr Azrin Hani Abdul Rashid dan Dr Siti Hana Nasir bersama dengan dua orang pelajar pasca siswazah FTK kerapeluang mengadakan lawatan kerja ke Fibre and Biocomposite Centre (FIDEC), Malaysian Timber and Industry Board (MTIB) yang terletak di Banting, Selangor. Lawatan tersebut dijalankan bagi mencari peluang sangkutan pelajar pasca siswazah dan juga kerjasama penyelidikan berkaitan pembangunan yarn dari serat Kenaf. Dalam lawatan tersebut, delegasi kami diberi peluang untuk melihat peralatan yang terlibat dalam pemprosesan serat Kenaf sehingga menjadi struktur yarn. Perbincangan turut dijalankan bagi mencari ruang dan peluang kolaborasi bagi memantapkan lagi penyelidikan berkaitan pembangunan serat Kenaf ini.

Justeru pada 13 Februari 2018, pihak FIDEC mengadakan kunjungan balas ke Makmal Tekstil, FTK bagi melihat sendiri kekuatan bidang Tekstil di UTHM. Delegasi FIDEC diketuai oleh Timbalan Pengarah FIDEC, Dr Loh Yueh Feng hadir bersama tiga orang staf. Dr Loh ternyata kagum dan mengakui bahawa FTK mempunyai kekuatan dan fasiliti yang mantap dalam bidang tekstil khususnya dalam pemprosesan yarn dan juga pengujian tekstil. Pihak FIDEC dilihat amat berminat untuk bekerjasama dengan FTK dan berharap agar kerjasama penyelidikan dapat diteruskan dalam bidang yang dipersetujui bersama.

**Lawatan dari delegasi Center for Composites, UTM Skudai**

Advanced Technology Centre (ATC), FTK menerima kunjungan delegasi Center for Composites (CfC), UTM Skudai pada 5 Disember 2017 yang lepas. Delegasi yang diketuai oleh Pengarah CfC, Prof. Madya Dr Mohd Yazid Yahya berminat untuk mengadakan lawatan ke Makmal Tekstil, Jabatan Teknologi Kejuruteraan Mekanikal, Fakulti Teknologi Kejuruteraan bagi meninjau kelengkapan yang berpotensi untuk dijalankan penyelidikan dan perundingan bersama. Perbincangan berkaitan peluang kerjasama penyelidikan antara UTHM dan UTM dalam bidang struktur komposit turut ditumpukan dalam lawatan ini.

Susulan dari lawatan tersebut membuka hasil apabila geran CRG (Collaborative Research Grant), UTM telah diluluskan pada 8 Mac 2018 dengan amoun RM100 ribu melibatkan kerjasama antara UTM, UTHM, UTEM dan UPNM untuk penyelidikan yang bertajuk “Development of stab and ballistic resistance flexible body armor” Tempoh penyelidikan ini adalah selama 24 bulan iaitu bermula 1 Mei 2018 sehingga 30 April 2020. Semoga dengan kerjasama ini akan dapat terus meningkatkan kecemerlangan penyelidikan UTHM di samping mengukuhkan hubungan kerjasama yang baik antara UTHM dan UTM khususnya.
**Awards**

**FTK gondol 4 emas dalam iCompEx’18**


Dalam pertandingan ini, kesemua kumpulan penyelidik yang diwakili FTK telah berjaya memenangi Emas.

1. **Ir Mohd Hairi Osman, Prof Madya Dr. Suraya Hani Adnan, Neo Chee Kang, Noor Khazanah A Rahman dan Mohd Luthfi Ahmad Jeni.**
   Use of Waste Optical Disc in Concrete to Promote Sustainable Development in Construction Industry

2. **Ts. Mohamad Luthfi Ahmad Jeni, Ir. Mohd Hairi Osman, Prof Madya Dr. Suraya Hani Adnan, Noor Khazanah Abdul Rahman, Sr. Dr. Mohammad Ashraf Abdul Rahman dan Azman Jaafar.**
   The Study on Used of Ceramic Industrial Waste as Replacement Material of Fine Aggregate in Concrete Mix

3. **Sr. Dr. Mohammad Ashraf Abdul Rahman, Dr. Mariah Awang, Mohd Kamaruzaman Musa, Dr. Nurdalila Saji, Kamarul Aini Mohd Sari, Dr. Mohamed Zuhaili Mohamed Najib dan Abdul Harith Masod.**
   DeCoustic Ceiling – Decorative Acoustic Ceiling

4. **Dr. Mazatusziza Ahmad, Dr. Nasrul Fikry Che Pa, Kenchana Vijayakumaran, Faqihah Che Azaz dan Teng Hui Chen.**
   Active Food Packaging Film.

Tahniah diucapkan kepada semua kumpulan penyelidik FTK ke iCompEx’18 kerana telah berjaya mengharumkan nama FTK.

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**Biotalk @BP How to Brew the Bio Lifestyle in Our Culture**

Bioeconomy has the potential to cut across various industries and transform Malaysia into a high-income nation, with an inclusive and sustainable economy. The potential that lies in it is vast and it is yet to be fully utilize. However, as bioeconomy continues to boom over the years, the public has still yet to be aware on the importance of bioeconomy and how much we rely on it. We do believe to progressively developing bioeconomy, it is crucial to nurture the understanding of it among the public. Hence, the objective of BioTalk is to promote and to encourage this idea across the State of Johor.
BNA team members have been involving in community service responsibility (CSR) at Kg. Orang Asli Kangkar Senangar, Batu Pahat, Johor. Heading by Dr. Faizal Tajul Baharuddin, the CSR that get the intentions of Senator Orang Asli Semenanjung Mr. Isa Ab. Hamid and the Director of Jabatan Kemajuan Orang Asli Johor (JAKOA) is purposely to conduct a study and contribute the ideas and knowledge on the water scarcity issues related to insufficient clean water supply that experienced by the village resident since 40 years ago.

In this early stage, other research teams AP Dr Nor Haslina, Dr Hasnida, Dr Nor Hazren, Dr. Nuramidah and Dr. Mimi Suliza are now conducting a preliminary study mainly on water quality of several resources available on-site in Environmental Engineering Technology Laboratory, UTHM (Pagoh Hub Education).

At the moment, the study is in good progress and perhaps, this work could contribute a significant change to the quality of life for the people at Kg, Orang Asli Kangkar Senangar. Meanwhile, since this work requires expertise in various fields, more experts are welcome to join and make this project successfully accomplished.
UPCOMING CONFERENCES

JUNE

238th International Conference on Civil and Environmental Engineering (ICCEE)
1st-2nd June 2018, Kuala Lumpur, Malaysia
Submission: 23rd April 2018
Link: http://academicsera.com/Conference2018/Malaysia/6/ICMRP/

JULY

2nd ASEAN Academic Network International Conference on Innovation Science and Environment Technology 2018
3rd-4th July 2018, Langakawi, Malaysia
Submission: 15th April 2018
Link: https://aiciset2018.weebly.com/

26th International Congress on Technology Engineering & Science (ICONTES)
19th-20th July 2018, Kuala Lumpur, Malaysia
Submission: 10th May 2018
Link: http://icontes.org

2018 International Conference on Data Mining and Big Data (DMBD 2018)
20th-22nd July 2018, Singapore
Submission: 20th April 2018
Link: http://www.dmbd2018.net/

AUGUST

2nd Recent Development in Mechanical and Manufacturing Engineering Technology International Conference (MMETIC 2018)
10th-12th August 2018, Langkawi, Malaysia
Submission: 30th April 2018
Link: http://mmetic.weebly.com

3rd Engineering Technology International Conference (ETIC 2018)
15th-16th August 2018, Melaka, Malaysia
Submission: 30th April 2018
Link: http://etic2018.uten.edu.my/
International Conference CEAT-ICGSCE 2018 Joint Conference
5th-6th September 2018, Kuala Lumpur, Malaysia
Submission: 15th April 2018
Link: http://ceat-icgsce.com

2018 International Conference on Image and Video Processing (ICIVP 2018)
8th-10th September 2018, Macau, China
Submission: 20th April 2018
Link: http://www.icivp.org/

5th International Conference on Biotechnology Engineering (ICBioE2018)
19th-20th September 2018, Kuala Lumpur, Malaysia
Submission: 15th April 2018
Link: http://iium.edu.my/icbioe/2018

IEEE TENCON 2018
28th-30th October 2018, Jeju Island, South Korea
Submission: 21st May 2018
Link: http://www.tencon2018.org/

2018 11th International Conference on Computer and Electrical Engineering (ICCEE 2018)
12th-14th October 2018, Tokyo, Japan
Submission: 25th May 2018
Link: http://www.iccee.org/

2018 the 5th International Conference on Advances in Electronics Engineering (ICAEE 2018)
27th-29th October 2018, Kuala Lumpur, Malaysia
Submission: 10th June 2018
Link: http://www.icaee.org/

2nd International Conference on Applied Sciences and Industrial Technology (ICASIT 2018)
13th-15th November 2018, Malacca, Malaysia
Submission: 30th June 2018
Link: http://www.icasit2018.com

Academics World477th International Conference on Environmental Science and Development (ICESD 2018)
2nd-3rd November 2018, Putrajaya, Malaysia
Submission: 24th September 2018
Link: http://www.academicsworld.org/Conference2018/Malaysia/9/ICESD/

2018 International Conference on Electrical Engineering and Control Technologies (EECT 2018)
1st-3rd December 2018, Singapore
Submission: 1st June 2018
Link: http://www.eect2018.org/