

# ALUMNI bulletin

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giving  
thoughtfully



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**Cover rationale:** Giving wholeheartedly without expecting anything in return will surely bring a sense of contentment, more so in offering fulfilment to those receiving. We believe it is a special way to engage and interact with, and to send a clear message to the recipient. The Malaysian Flag (Jalur Gemilang) flying as seen on the rear cover symbolises the National Day (31 August) and Malaysia Day (16 September) celebrations held every year.

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## From the Vice-Chancellor

I wish to firstly, thank everyone who have played their part in making USM great.

We continue to display strong progress in our finances, research grants, industrial and international collaborations, student and staff experience, well-being, and accomplishments - some of which are highlighted in this issue.

Our industrial partners in particular, have been extremely supportive in our continued quest to produce quality graduates and to remain relevant.

'Giving Thoughtfully' is an acknowledgement to altruism, displayed by USM citizens, and our strong supporters, towards championing the people and the planet.

Happy 65<sup>th</sup> Independence Day to all fellow Malaysians!

**Professor Dato' Dr. Faisal Rafiq Mahamd Adikan**  
Vice-Chancellor



## GOT NEWS?

- Are you moving?
- Started a new business?
- Doing a charity work?
- Received a promotion?

## STAY CONNECTED WITH USM

We'd like to hear from you. Email your stories to Alumni Development Centre [[dir\\_alumni@usm.my](mailto:dir_alumni@usm.my)]. Include your photo, full name, course and graduation year.

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# From DVC to Alumni

*Assalamualaikum w.b.t and Salam Sejahtera,*

Hoping that everyone is in good health and safely pursuing your daily routine. Campus life at Universiti Sains Malaysia (USM) has become more hectic with students being on campus and actively organizing their respective club and association activities. The campus has surely become livelier for the past three months. Alhamdulillah!

In ensuring that the campus stays lively, the University will continue to offer the safety, welfare and positive experiential learning for the students. And, to remain in the safe zone, adhering to the COVID-19 SOPs is a priority of the University. Such efforts are important, in preparation for all students to return to the University for the upcoming new 2022-2023 academic session.

The University continues to provide physical and psychosocial support for those students who are in need and for their wellbeing. In this respect, we are thankful for the support provided by the Persatuan Alumni, which has assisted in crowd funding initiatives to establish food banks as a way of helping the disadvantaged students.

Meaningful experiential learning is definitely one of the University's aspirations. The recent flood in some parts of the country has invoked the spirit of volunteerism among students. With the support of the Office of Deputy of Vice-Chancellor (Student Development Affairs and Alumni), students volunteered their time to help in every way they can to lend a hand to these communities via the several earlier mentioned university-based initiatives. Such projects are encouraged and supported as they would provide exposure to the students with the spirit of giving back to society, and at the same time capturing the real-life experience in working with various groups in society.

USM will keep striving to provide the best learning experiences for students and to contribute to the wellbeing of society, and at the same time allowing them to ponder and assimilate the idea of giving back thoughtfully towards greater nation-building objectives. It is against this backdrop that the University would like to reach out to all USM Alumni members to continue the support to our students' development process and to enrich their personal life experiences while pursuing their studies. We appreciate your continued support in all areas including extending financial support for students' projects, providing opportunities in recruiting students to pursue internship at your organizations, and inviting our students to participate in any potential programme organized by your organizations, which certainly will expose them to a more positive work experience in the real world.

We thanked each and every alumnus, as your gesture of giving back to your alma mater matters to us in enabling our students to continue to be HEBAT students. Do support us and the University is always eager to engage with every one of you. May everyone be blessed with good health and able to persevere with USM to create a well-rounded development in the future.

Thank you.

**Professor Dr. Azlinda Azman** (B.Soc.Sc 1992)  
*Deputy Vice-Chancellor Student Development Affairs and Alumni  
Universiti Sains Malaysia*



# USM FIRST UNIVERSITY

To Set Up A Metaverse Space Library@IPPT

Universiti Sains Malaysia (USM) became the first university in Malaysia to introduce a Metaverse Space Library located at its Advanced Medical and Dental Institute (IPPT) Bertam campus that offers a variety of digital environments connected to the virtual world without computers.

USM Vice-Chancellor, Professor Dato' Dr. Faisal Rafiq Mahamd Adikan said it has introduced the metaverse concept of virtual reality (VR) to the university's community because VR was making inroads in the mainstream of technology and had vast potential.

"In terms of education, metaverse can be a learning and teaching platform that integrates all information and entertainment in the three-dimensional virtual world and USM is coming to grips with technological advances in the education revolution of the new millennium.

"To enter the metaverse world, everyone needs a specialised device like a VR (head-set) set and currently the IPPT library in collaboration with the information technology division has developed an online internal system called 'VR Discovery' which is a 3D Data Management System.

"Through the internal system, it can transform library information source materials such as image materials, anatomical models, electronic books, documents and others into three-dimensional format," he said after the Metaverse Space opening ceremony at IPPT USM here two days ago.



**"In terms of education, metaverse can be a learning and teaching platform that integrates all information and entertainment in the three-dimensional virtual world and USM is coming to grips with technological advances in the education revolution of the new millennium."**

Faisal Rafiq said the source material is then automatically displayed on a web portal called 'GoVR' for access to more interactive three-dimensional formatted information by users.

"The uniqueness of the project is to explore and bring the world of virtual reality to the GoVR web portal using a headset."

He said the initiative is known as 'WebVR' which enables users to experience the immersive virtual reality technology in the library and improves the effectiveness of teaching and training conducted at USM.

**"To enter the metaverse world, everyone needs a specialised device like a VR (head-set) set and currently the IPPT library in collaboration with the information technology division has developed an online internal system called 'VR Discovery' which is a 3D Data Management System."**

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**"The Metaverse Space (Spatial) project at IPPT is to provide high-impact services that are different from existing conventional services through a more creative three-dimensional virtual reality platform."**

**- Hasniza Amno**

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Meanwhile, head of IPPT Library and project leader, Hasniza Amno said the Metaverse Space (Spatial) project at IPPT is to provide high-impact services that are different from existing conventional services through a more creative three-dimensional virtual reality platform.

"It is also part of the concept of edutainment in the library to create an immersive experience, where students are in a virtual interactive learning environment," she said.

Among those who were also present at the ceremony were USM Deputy Vice-Chancellor (Sustainability and Institutional Development) Professor Dr. Md Roslan Hashim; IPPT Director, Professor Dr. Tunku Kamarul Zaman Tunku Zainol Abidin; Acting Chief Librarian, Mohd Nasir Mohd Rashid and several heads of department.

*Text: Tan Ewe Hoe*



# USM ACQUIRES HIGHLY-ADVANCED ANALYSIS LABORATORY

To Assist in Global Archaeological Research

The Earth Material Characterisation Laboratory (EMCL) located at the Universiti Sains Malaysia (USM) Centre for Global Archaeological Research (CGAR) was launched by the Secretary-General, Ministry of Higher Education (MOHE), Dato' Seri Abdul Razak bin Jaafar.

The laboratory is specifically built for archaeological research, and is the only one available in Malaysia, in addition to being the best in Southeast Asia.

Other reputable universities worldwide having such a purpose-built laboratory, among them are Harvard University, Cambridge University and Tokyo University.

**“The age of an artefact (from materials based on quartz or feldspar) could also be determined using the OSL TL (optical stimulated luminescence) method which is available at EMCL and could directly identify the age of an archaeological site being studied.”**

**- Stephen Chia**

According to the Director of CGAR USM, Professor Dr. Stephen Chia Ming Soon, the lab, built at a cost of about RM17 million is equipped with the latest top-end instruments, which are utilised in archaeological research analysis.

The lab has acquired the ISO17025 accreditation by SAMM (National Laboratory Accreditation Scheme) in March 2022.

The lab provides facilities that are capable of analysing artefacts and earth materials brought in from the field. Information regarding the elements/chemical composition and mineral sources can be determined from each artefact studied.

Added Stephen Chia, the lab brings great importance in assisting the process of making interpretations regarding the manufacturing technology practiced by ancient communities and the resources utilised by them.

"Aside from that, the age of an artefact (from materials based on quartz or feldspar) could also be determined using the OSL TL (optical stimulated luminescence) method which is available at EMCL and could directly identify the age of an archaeological site being studied.

"It is essential for an artefact to be conserved and reconstructed to ensure that the artefact, upon discovery, could be preserved for a longer time period," he explained.

As such, EMCL has been equipped with a 3D-Xray and a ceramics lab. The lab is also offering analysis services to researchers and students within and outside of USM.

**"The laboratory is specifically built for archaeological research, and is the only one available in Malaysia, in addition to being the best in Southeast Asia."**



**"The lab provides facilities that are capable of analysing artefacts and earth materials brought in from the field. Information regarding the elements/chemical composition and mineral sources can be determined from each artefact studied."**

Among the equipment and accessories provided at EMCL are SEM (Scanning Electron Microscope) for imaging and chemical surface analysis, ICPMS (Inductive Coupled Plasma Mass Spectroscopy) for analysis of chemical material elements, XRF (X-Ray Fluorescence) for analysis of chemical material elements, XRD (X-Ray Diffraction) for the analysis of material chemical composition and OSL TL (Optical Stimulated Luminescence) for artefact dating analysis.

Other facilities available include a DNA Laboratory for conducting DNA analysis (ethnoarchaeology); a Ceramics Laboratory for ceramic analysis and ethnoarchaeological experiments; a 3D-Xray to conduct X-Ray analysis on an artefact; a Microscope Laboratory to analyse samples of surfaces, metallurgical items and geological samples; and an Archaeobotany, to analyse pollen for paleoenvironment reconstructions.

*Translation: Mazlan Hanafi Basharudin  
BM Text: Mohamad Abdullah*



# USM-NEXTGLASS SIGN MOU, Strengthens University-Industry Partnership



Universiti Sains Malaysia (USM) and NextGlass Technologies Sdn Bhd (NGT) recently signed a Memorandum of Understanding (MoU) to gain a better understanding of the capabilities of both parties in advanced technology and also to secure possible university-industry partnership.

According to USM Vice-Chancellor, Professor Dato' Dr. Faisal Rafiq Mahamd Adikan, the signing of this MoU is the first step in establishing a cooperative relationship between the USM School of Distance Education (PPJJ) and NextGlass.

"This collaboration provides an opportunity for both parties to cooperate and promote, develop and establish research, education and training programmes through the exchange of students and/or staff, joint academic programmes, and joint research and development programmes.

It will also allow both parties to conduct joint workshops and training programmes, exchange of publications, and any other academic linkages and cooperation that will be mutually identified and agreed by both parties from time to time," he said.

"Furthermore, this collaboration is a good platform for the university to improve the research culture/research acculturation and establish academia-industry linkages through good networking with the industry in general.

**"We want the future generation to be involved and evolved in the manufacturing sector that is set on cutting-edge technology in building smart glass and in R&D, and we call this as mutualism, because both the future generation and NGT will receive the benefits."**

**- Gideon Thor**

“We also look forward to the establishment of the USM-NextGlass Research Centre and hope that this research centre will be a one-stop centre for research and development activities, that will not only benefit our lecturers and NextGlass Technologies, but our students as well, where they can be more involved and gain more knowledge and experience on smart glass technology and related know-how from NextGlass,” he added.

Meanwhile, the Managing Director, NextGlass Technologies Corporation, Mr. Gideon Thor said, their first priority is for the collaborative efforts to achieve the highly ambitious and mutually beneficial objectives for the students and also NGT.

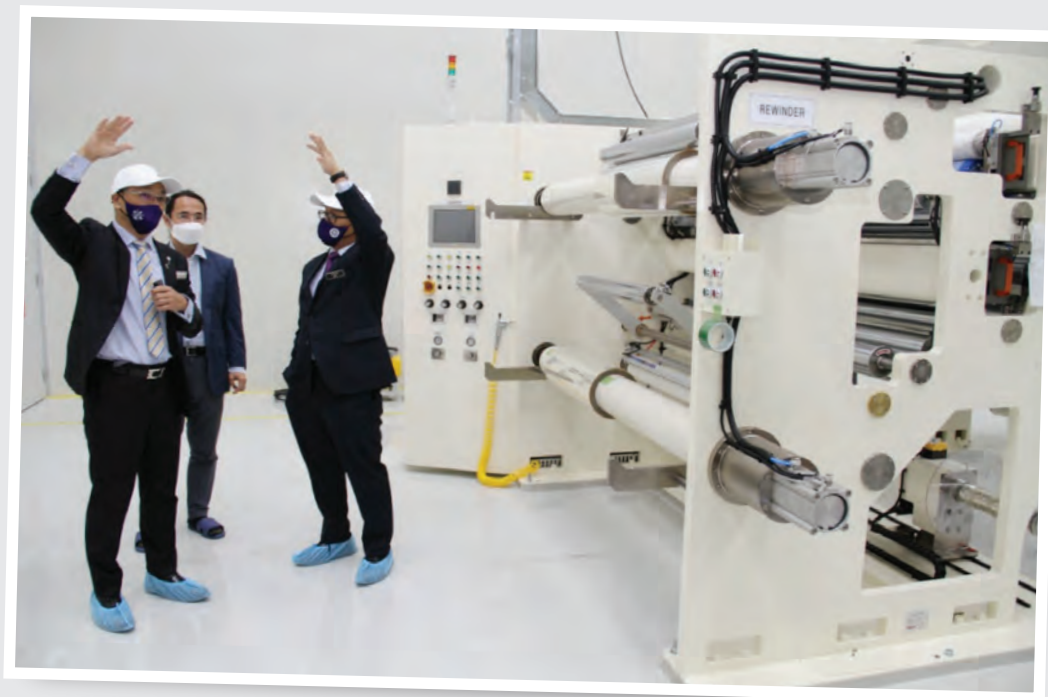
“We want the future generation to be involved and evolved in the manufacturing sector that is set on cutting-edge technology in building smart glass and in R&D, and we call this as mutualism, because both the future generation and NGT will receive the benefits.

“Hence, this MoU signing ceremony will be focused on the importance of innovative initiatives in encouraging strategic university-industry partnership and facilitating the transfer of skills and researches,” he added.

Furthermore, Gideon emphasised that the collaborative partnership initiated will be mutually beneficial and more effectively to promote the advancement of the professional and technical experiences and to uplift the knowledge and expertise further, in order to keep pace with modern times and the rapidly changing environments.

**“This collaboration provides an opportunity for both parties to cooperate and promote, develop and establish research, education and training programmes through the exchange of students and/or staff, joint academic programmes, and joint research and development programmes.”**

**- Faisal Rafiq**





“Moreover, as a leading high-tech smart glass technology, NGT is strongly determined to produce highly qualified products all over Asia as well as worldwide, and the established academic collaborations are jointly united to achieve these highly inspiring objectives and accomplishments, he said.

NGT is not involved in the glass manufacturing industry per say, but rather they manufactured smart films which will be inserted into the glass, giving it 'magical' properties.

The NGT production method is built on the foundations of innovation and technology. They started as a R&D company in Korea since 2015 and has since managed to reduce cost and improve the quality of the smart film and conductive film, by achieving breakthroughs in the production process and in acquiring alternative raw materials.

Their product range covers PDLC smart film, EC film, Barrier Film, Self-Cleaning Glass, and Photocatalyst plate. Use of such products are applicable on green buildings, automobiles, electronic gadgets, solar energy panels and in the advertisement industry.

NGT's main products are PDLC and EC, which are widely used and accepted by the whole world as building materials.

Also present were the Dean, USM School of Distance Education, Assoc. Prof. Dr. Zulnadi Yaacob; Operations Manager, NextGlass Technologies Corporation, Ch'ng Ker Sing; Director, USM Strategic Corporate Development Office, Muhammad Sabri Said; Deputy Dean (Research, Innovation & Industry-Community Engagement), School of Distance Education, ChM. Dr. Sumiyah Sabar; and delegations from both parties.

**“The collaborative partnership initiated will be mutually beneficial and more effectively to promote the advancement of the professional and technical experiences and to uplift the knowledge and expertise further, in order to keep pace with modern times and the rapidly changing environments.”**

**- Gideon Thor**



# USM TO DRIVE THE ECONOMIC GROWTH IN SOUTHEAST ASIA THROUGH THE DEVELOPMENT OF ANGKASA-X

## USM Earth Station And Space Technology Centre

Development of an Earth Station at the Universiti Sains Malaysia (USM) Engineering Campus in Nibong Tebal will become an impetus in driving the regional economy, as internet communications can now be enhanced to reach a more advanced level.

According to the Director of USM Engineering Campus, Professor Dr. Nor Azazi Zakaria, the space industry is reported to reach a value of USD1 trillion by 2049. It is expected that 75,000 LEO (Low Earth Orbit) communication satellites will be launched by 2030.

"Communication satellites can be commonly found in a higher geostationary orbit (30,000 km). However, advanced technology has now made it possible for satellites to be placed in lower orbits, namely LEO orbits (500 - 600 km)," explained Nor Azazi.

Space satellites will form an important investment for Malaysia, as the country becomes a base for the ASEAN region, considering that approximately 50% of the Southeast Asian population has no access to the Internet.

He added further, the capability to access the Internet, and the use of information and communications technology will have a broad impact in the region, as it will be the key in spurring economic growth and improving lives in the near future.

Nor Azazi also said that, this inclusive technology is important for the people in raising the standard of living and education, while reducing poverty and raising the capability of the workforce within the context of business development, healthcare and public safety among others.

Moreover, the groundbreaking ceremony for the Earth Station X at the USM Engineering Campus in Nibong Tebal will become a pinnacle in the cooperation regarding space engineering education.

The Earth Station will serve as the platform for the Angkasa-X satellite mission, simultaneously providing the room for satellite development and assembly laboratory that will become the catalyst for the development of the space industry ecosystem in Malaysia.

USM has set aside a 2-acre area to build the Angkasa-X Earth Station and a laboratory in setting up the Space Technology Centre for the Angkasa-X private company for the purpose of Research and Development (R&D), and Assembly, Integrating and Testing (AIT) to build and to operate the Angkasa-X A-SEANSAT.

"This centre also provides basic facilities for students and professionals to gain further 'hands-on' experience in satellite research and development.

"The cooperation between these two parties would also allow the development of the 'first-of-its-kind' professional engineering courses in Asia that would be offered to USM postgraduate candidates in building their technical capability, skills and experience. This professional course will be conducted with the cooperation of a private partner that would provide the training materials," said Nor Azazi.

*Translation: Mazlan Hanafi Basharudin  
BM text: Mohamad Abdullah*



## USM-PARAMIT SEALED MOU To Collaborate On Skills and Talent

Universiti Sains Malaysia (USM) has sealed a Memorandum of Understanding (MoU) with Paramit Malaysia Sdn. Bhd. to jointly work on the aspects of the 'People Agenda' in the development of talents and enhancing skills through a win-win collaboration.

Through this collaboration, USM and Paramit Malaysia will embark on several activities that will help to bridge and foster closer ties between an industry player and the academic community.

Among the collaborations suggested included the internship programme for USM undergraduates, apprenticeship under JaminKerja Job Guarantee Programme for USM fresh graduates, participation in USM's Career or Recruitment Fairs, and certificate and upskilling programmes for existing employees of Paramit.

USM Deputy Vice-Chancellor, Research and Innovation, Professor Dato' Ir. Dr. Abdul Rahman Mohamed signed the MoU on behalf of USM, representing the Vice-Chancellor, while Paramit was represented by its Country Manager, Michel Van Crombrugge.

The signing was done in the presence of the USM School of Electrical and Electronic Engineering Dean, Professor Ir. Ts. Dr. Shahrel Azmin Sundi @ Suandi and Paramit Malaysia HR Manager, Suriati Abdul Samad.

Abdul Rahman said, "The approach used in this collaboration is in line with the USM H.E.B.A.T agenda, that is to create a conducive ecosystem in developing H.E.B.A.T students to increase the graduates' employability values.

"Besides that, it will also provide an ecosystem that nurtures continuous skills enhancement and promotes lifelong learning for the talents at Paramit," said Abdul Rahman, while adding that USM is enthusiastic in this collaboration with Paramit Malaysia which is now called 'the factory in the forest'.

Abdul Rahman hoped that this MoU will pave the way for future collaboration in upskilling training and increasing the graduate employability (GE), which will further boost the university-industry cooperation on both sides.

Meanwhile, according to Michel, through this collaboration, Paramit Malaysia would help to prepare market-ready graduates through mentoring and practicing real-world experience, in terms of upskilling and driving the career enhancement of employees.

"For Paramit Malaysia, we aim to enhance our capability by merging our existing expertise together with the expertise from USM in the exchange of technical know-how.

"Subject matter experts (SMEs) from specific fields in technology for example, may share their technical expertise in identifying and recommending solutions in manufacturing technology," he said.

Also present at the signing ceremony were the USM Director of Industry Network, BJIM, Dr. Shaizatulaqma Kamalul Ariffin; Director, Operations and Engineering, Paramit Malaysia Sdn. Bhd., Nachiappan K Nachiappan and delegates from Paramit Malaysia Sdn. Bhd.

*Text: Nur Farrah Ezlin Mohd Suhaimi*

*Photo: Mohd Fairus Md Isa*



## Be On The Lookout For Another Round of “LIFE AND MIDLIFE” PROGRAMME

The Universiti Sains Malaysia (USM) HEBAT Development Centre has successfully organised the ‘LIFE’ Programme Workshop, which involved 57 key USM personnel, comprising of 10 members of the organising committee, 13 ‘LIFE’ coordinators, 27 ‘MidLIFE’ coordinators and 7 strategisers.

The objective of this workshop was to create, revise and enhance the key contents, engagement, assessment and industry-involvement elements of the programmes based on the previous ‘LIFE’ Programme in September 2021.

USM Vice-Chancellor, Professor Dato’ Dr. Faisal Rafiq Mahamd Adikan and Deputy Vice-Chancellor Student Development Affairs and Alumni, Professor Dr. Azlinda Azman attended the second day of the workshop to oversee and advise on the progress on the ideas presented regarding the programme.

Faisal Rafiq said that, he is fully supportive of this kind of programme and was quite amazed on how much it could boost the potential of USM students to be ahead of the crowd, by having key knowledge and networking skills and obtaining opportunities with the industry, community and government sectors.

“I trust and believe in every one of the coordinators, as I know their capabilities and their ideas that are truly aligned with the main objective of the university, which is to produce graduates with the HEBAT elements in them.”



**“I trust and believe in every one of the coordinators, as I know their capabilities and their ideas that are truly aligned with the main objective of the university, which is to produce graduates with the HEBAT elements in them.”**

**- Faisal Rafiq**

"I am looking forward to this 'LIFE' Programme, as this programme has created a huge success last year, even though it could only be done through the online platform, which was very difficult I believe."

So with today's presentation, I must say that this year's 'LIFE' programme would be much better and more interesting, as we might be able to do it physically; so let's hope for the best," he added.

In addition, Azlinda said that she and the Student Development Affairs and Alumni Division (BHEPA) will be ready to give a hand whenever needed and she was also very happy with the outcomes of the workshop.

Also present were the key players behind The LIFE Programme, among them were Dr. Kumitaa Theva Das; Assoc. Prof. Dr. Muhizam Mustafa; Assoc. Prof. Dr. Mohd Hafizal Mohd Isa; Dr. Anwar Allah Pitchay; Assoc. Prof. Dr. Muhamad Saiful Bahri Yusoff; Dr. Syaheerah Lebai Lufti; and several others.

**"Faisal Rafiq said that, he is fully supportive of this kind of programme and was quite amazed on how much it could boost the potential of USM students to be ahead of the crowd, by having key knowledge and networking opportunities with the industry, community and government sectors."**

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Brief introduction of  
**The LIFE Programme  
è Living an Inclusive  
Fulfilling Experience**

Conceptualised after the education system of the best universities in the world, The LIFE Programme is the brainchild of USM that re-envisions learning and empowering students with perspectives and skill sets needed to thrive in the world.

Hence it breaks the mould of conventional classroom-style learning. It emphasises real-life engagement.

The spirit of the LIFE Programme encompasses the sense of belonging and aims to instil the USM DNA in its students. This will enable students to break out of their bubble by allowing an exploration of self, knowing their society, and knowing the world around them.

The courses are designed to embody sustainable health, financial stability and a sustainable environment.

*Text: Mohamed Hadri Iman Mohamed Hazli  
Photo: Mohd Fairus Md Isa*



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Awesome Family  
of PAUSM!  
Join us today.







## TNC HEPA LANCAR CHAPTER ALUMNI PPPJJ-ADE@USM & Kolaborasi The Bricks

Timbalan Naib Canselor, Hal Ehwal Pembangunan Pelajar dan Alumni, Profesor Dr. Azlinda Azman melancarkan Chapter Alumni PPPJJ-Alumni of Distance Education (ADE)@USM yang bakal menjadi perantara antara alumni dan pihak pengurusan universiti dalam merencana pelbagai aktiviti dan program demi memajukan lagi Universiti Sains Malaysia (USM) amnya dan Pusat Pengajian Pendidikan Jarak Jauh (PPPJJ) khususnya.

“Syabas dan tahniah kepada PPPJJ atas usaha menubuhkan Chapter ini dan ianya pasti memberikan manfaat kepada keseluruhan alumni pusat pengajian di samping menjadi medan kepada alumni untuk menyumbang idea, kepakaran, kewangan dan tenaga dalam mencapai matlamat mengekalkan kecemerlangan universiti,” kata Azlinda.

Azlinda melancarkan Chapter tersebut dalam Majlis meraikan graduan dan Jamuan Hari Raya PPPJJ yang diadakan sejurus selepas tamat Sidang Kedua Belas, Upacara Konvokesyen ke-59 USM yang menyaksikan seramai 622 graduan PPPJJ tahun 2021 menerima ijazah masing-masing selepas tertangguh akibat pandemik COVID-19.

Pada majlis yang sama, Azlinda turut melancarkan Kolaborasi The Bricks & PPPJJ iaitu usaha Unit Penjanaan Pendapatan dan Perundingan, PPPJJ dan Pusat Pembangunan Hebat, BHEPA dalam penjanaan pendapatan melalui The Bricks Siswaniaga@USM.

Menurut Dekan PPPJJ, Profesor Madya Dr. Zulnaidi Yaacob kedua-dua usaha ini adalah salah satu pencapaian yang membanggakan bagi pusat pengajian, dan ianya tidak terlaksana tanpa penglibatan dan usaha para pelajar, alumni serta warga PPPJJ.

**“Syabas dan tahniah kepada PPPJJ atas usaha menubuhkan Chapter ini dan ianya pasti memberikan manfaat kepada keseluruhan alumni pusat pengajian di samping menjadi medan kepada alumni untuk menyumbang idea, kepakaran, kewangan dan tenaga dalam mencapai matlamat mengekalkan kecemerlangan universiti.”**

**- Azlinda Azman**

“Saya berharap para graduan dan juga alumni PPPJJ akan terus memberikan sokongan dan membantu dalam meningkatkan kecemerlangan pusat pengajian dan saya menyeru agar usaha ini tidak terhenti hari ini,” tambah Zulnaidi.

“Saya juga merakamkan ucapan terima kasih kepada alumni perintis PPPJJ tahun 1982 (yang pada ketika itu dikenali sebagai Pengajian Luar Kampus) USM iaitu Dato’ Ishak Haji Mohamed, atau lebih dikenali sebagai Pak Sako yang turut hadir dan menaja sebahagian jamuan untuk para graduan,” ujar Zulnaidi.

“Harapan saya agar para alumni akan terus bekerjasama dengan PPPJJ untuk menganjurkan sebarang aktiviti samada aktiviti kemasyarakatan, sosial mahupun rasmi.

*Teks: Nor Rafizah Md Zain  
Foto: Noor Alif Asyraf Amran*



## THE WHITE SEA, THE WHITE COAT THE WHITE GEMS of The USM Pharmaceutical Sciences School



**“As a pharmacist, especially in the clinical and community settings, you are to keep the trust bestowed upon you by anyone who may come to you to obtain simple solutions for their various medical conditions.”**

**- Habibah A Wahab**

A total of 118 final-year students from the Universiti Sains Malaysia (USM) School of Pharmaceutical Sciences will graduate after five (5) hardworking years to equip themselves with the knowledge and skills to become a pharmacist.

Recently, the White Coat Ceremony was held successfully, with all the students taking their oath to mark their readiness in becoming a fully responsible and trustworthy pharmacist.

The above ceremony has been organised annually by the school since 2006, to symbolise the commencement of the students' journey, from being a pharmacy student to becoming a pharmacist, and today, this ceremony has marked its 50th anniversary.

The School of Pharmaceutical Sciences Dean, Professor Dr. Habibah A Wahab in her speech said, this is only the beginning, but it signifies an important first step that will send a powerful message to many that the students are willing and ready to dedicate their time, effort and knowledge to serve others.

“As a pharmacist, especially in the clinical and community settings, you are to keep the trust bestowed upon you by anyone who may come to you to obtain simple solutions for their various medical conditions.”



“As I conclude, it occurs to me that my remarks may be overwhelming however, I pray that all of you will spread your wings and contribute to society in your own way - be it in the clinical, industry or community settings;” she said as she ended her speech.

Meanwhile, a distinguished alumni member of the School and also former USM Vice-Chancellor, Professor Emeritus Tan Sri Dato’ Dzulkipli Abdul Razak also encouraged all the students to give their best and become a proud pharmacist.

“As a pharmacist, we should know that people don’t really care about what you want to do, whether you said this is for the community, but people are more interested in what you do and how you serve.”

Also present were alumnus of the School of Pharmaceutical Sciences, Prof. Datuk Dr. Allan Mathews; Dean of the Faculty of Pharmacy, Padjadjaran University, Indonesia, Prof. Dr. apt. Ajeng Diantini; Director, Centre for Drug Research, Profesor Dr. Vikneswaran A/I Murugaiyah; and Director, National Poison Centre, Dr. Nur Azzalia Kamaruzaman.

*Text: Mohamed Hadri Iman Mohamed Hazli  
Photo: Shahnizam Ab Rahim*

**“As a pharmacist, we should know that people don’t really care about what you want to do, whether you said this is for the community, but people are more interested in what you do and how you serve.”**

**- Dzulkipli Abdul Razak**





## REUNION ANGKASARAN, PERTEMUAN YANG DIRANCANG SELAMA 11 TAHUN "PANGGUNG SASARAN USM 50 TAHUN 1972-2022" *Reunion ANGKASARAN #1 (70an, 80an, 90an & Milenium)*

Panggung Sasaran merupakan 'makmal' melempiaskan ekspresi kreatif bagi pelajar jurusan drama dan teater sejak kursus ini ditawarkan di Universiti Sains Malaysia pada tahun 1971. Panggung ini mula digunakan sepenuhnya pada tahun 1972. Sebelum ini, panggung ini digunakan oleh pihak tentera British sebagai lapangan sasaran latihan menembak. Sebelum tahun 1972, bangunan ini dikenali sebagai Blok 86. Tone Brulin, pensyarah teater ketika itu yang berasal dari Belgium berpendapat bahawa tempat tersebut perlu dinamakan secara khusus dan para pelajar mencadangkan nama Sasaran diberikan. Pelajar yang terlibat dalam persembahan teater itu menamakan kumpulan mereka sebagai Kumpulan Angkasaran.

Kumpulan Angkasaran sejak itu telah mengadakan teater keliling di serata pelosok negara sehinggalah dapat mementaskan drama berjudul "**Naga-Naga Dimana Kau, Naga-Naga Siapa Kau**" di Taman Ismail Marzuki, Jakarta, pada tahun 1974.

Kursus seni teater yang kali pertama ditawarkan di Malaysia berada di tengah-tengah kursus sains dan teknologi di Universiti Sains Malaysia yang bermula pada tarikh itu telah menjadikan Panggung Sasaran sebagai tempat lahirnya tokoh teater di Malaysia yang tersohor hingga peringkat antarabangsa. Antara nama-nama besar adalah Hatta Azad Khan, Zakaria Ariffin, Marion D'Cruz, Kee Thuan Chye, Ahmad Tamimi Siregar, Allahyarham Zaibo, Allahyarham Samat Salleh dan pelapis baru, Arja Lee.

**"Tujuan pertemuan bukan sahaja untuk saling mengeratkan hubungan silaturahim antara alumni dengan USM, malah turut memberikan peluang kepada pelajar-pelajar drama dan teater bertemu untuk menerima suntikan motivasi apabila mereka menamatkan pengajian nanti!"**





Sebagai mengenang usia 50 tahun panggung ini, ahli kumpulan Angkasaran USM yang masih aktif sebagai aktivis seni di seluruh negara telah mengambil inisiatif bersama-sama Bahagian Drama dan Teater, Pusat Pengajian Seni dan Dewan Budaya USM untuk mengadakan pertemuan julung-julung kalinya dengan menghimpunkan kumpulan tahun 1970an, 80an, 90an dan milenium pada 16 Julai 2022 bertempat di Dewan Pasiban dan acara kemuncaknya berlaku di Panggung Sasaran. Pertemuan julung kalinya ini telah dirancang sejak sebelas tahun lepas (2011). Usaha mengumpulkan ahli yang dimulakan melalui aplikasi facebook telah dapat menggabungkan ahli bermula daripada pelajar kumpulan pertama dan pelajar-pelajar yang menyertai kursus Sijil Seni Kreatif selama setahun yang kemudiannya terus menyambung pengajian ke kursus ijazah sarjana muda dan seterusnya ke peringkat sarjana.

**“Panggung Sasaran merupakan ‘makmal’ melempiaskan ekspresi kreatif bagi pelajar jurusan drama dan teater sejak kursus ini ditawarkan di Universiti Sains Malaysia pada tahun 1971.”**

Tujuan pertemuan bukan sahaja untuk saling mengeratkan hubungan silaturahim antara alumni dengan USM, malah turut memberikan peluang kepada pelajar-pelajar drama dan teater bertemu untuk menerima suntikan motivasi apabila mereka menamatkan pengajian nanti.

**“Tone Brulin, pensyarah teater ketika itu yang berasal dari Belgium berpendapat bahawa tempat tersebut perlu dinamakan secara khusus dan para pelajar mencadangkan nama Sasaran diberikan.”**

Antara alumni yang hadir adalah, Dato’ Azahar Abu Bakar (mantan Ketua Pengarah Istana Budaya), Dato’ Ahmad Tamimi Siregar (industri perfileman), Dato’ Mahd Najib Ahmad Dawa (mantan Ketua Pengarah Balai Seni Negara), Prof. Madya Aminah Raphor dan Encik Hamzah Tahir (Pensyarah UITM) dan Encik Rosnan Nordin (Pengarah Jabatan Kebudayaan dan Kesenian Negara), Encik Shapee Che Embi, (Pengarah Jabatan Kebudayaan dan Kesenian Negara Negeri Pulau Pinang) serta Dr. Zainal Abdul Latiff mantan pensyarah Universiti Malaya yang merupakan tokoh alumni paling senior, kumpulan kedua 1973.

Acara yang berlangsung selama satu hari tersebut dipenuhi dengan sesi ramah mesra, mengenang kembali sejarah Sasaran bersama pelajar dan bersama-sama menonton persembahan pelajar tahun akhir di Panggung Sasaran dengan teater berjudul ‘Nyonya Nyonya’ pada sesi sebelah malam. Amatlah diharapkan pertemuan kali ini akan memberikan suntikan untuk siri pertemuan yang lain terutama yang membabitkan pelajar sebagai persediaan menjadikan bidang teater sebagai salah satu industri di Malaysia.

*Teks: Halimi MN  
Suntingan: Azlina Md Sadik  
Rujukan: The Leader (2008)*

# PAUSM

## PRIHATIN BANTU PELAJAR

Program Food Bank Siswa merupakan satu inisiatif Persatuan Alumni Universiti Sains Malaysia (PAUSM) dalam usaha membantu golongan mahasiswa khususnya yang kurang berkemampuan untuk mengurangkan beban pelajar agar mereka mampu menumpukan perhatian terhadap pembelajaran. Program kali ini telah dilaksanakan di Kampus Induk dan Kampus Kejuruteraan melalui program penyediaan makanan bermasakan dan diedarkan kepada pelajar setiap hari.

Menyedari fokus kedua dalam Matlamat Pembangunan Mapan (SDG) yang meletakkan Kelaparan Sifar, PAUSM berharap dengan inisiatif ini pelajar akan dapat memberikan penumpuan terhadap pembelajaran dan peperiksaan tanpa perlu memikirkan isu kelaparan. Program ini bukan sahaja bertumpu kepada mahasiswa B40 sahaja tetapi semua mahasiswa termasuk mahasiswa antarabangsa.

Program yang dijalankan ini telah mendapat kerjasama SC Mart di Kampus Induk dan Lemari@Kejut di Kampus Kejuruteraan. PAUSM kini dalam usaha untuk meneruskan program ini di Kampus Kesihatan pula.

Menurut Dr. Zul Fahmi bin Mohamed Jaafar, Pengarah Program Food Bank Siswa "Sumbangan banyak diterima daripada alumni USM. Sumbangan ini diterjemahkan dalam bentuk program yang mampu memberikan manfaat semula kepada mahasiswa yang memerlukan. PAUSM berharap alumni USM dapat terus memberikan sumbangan dalam memastikan program ini dapat diteruskan dalam jangka masa yang lebih panjang".

Setakat ini setiap hari sebanyak 30 bungkus makanan disediakan dan diedarkan kepada pelajar sepanjang minggu peperiksaan. Pelajar dapat menikmati makanan yang disediakan khususnya pada waktu makan tengah hari.

Maklum balas pelajar juga amat baik dan memberangsangkan. Rata-rata pelajar menyatakan mereka telah hampir kehabisan wang untuk membeli makanan pada hujung semester dan tidak mahu meminta daripada keluarga kerana mengenangkan kepayahan keluarga di kampung.

"Kami amat berharap inisiatif seperti ini akan membantu pelajar menumpukan perhatian dan fokus terhadap pembelajaran dengan perut yang berisi. Malah, PAUSM sentiasa prihatin dan mengambil berat beban yang dihadapi oleh mahasiswa khususnya ketika kos sara hidup semakin meningkat", Dr. Mohamed Maliki Bin Mohamed Rapiee, Presiden PAUSM.

Berbekalkan semangat dan sambutan yang baik daripada alumni dan penerima, pihak PAUSM akan meneruskan program Food Bank Siswa seperti ini dengan lebih meluas dan terancang pada masa akan datang. Sehubungan itu, kami mengalu-alukan sumbangan berbentuk kewangan ke dalam tabung kebajikan PAUSM.

Sumbangan boleh di buat melalui akaun berikut:

**CIMB BANK**  
**PERSATUAN ALUMNI USM**  
**800 382 0049**



Semoga segala usaha murni kita semua membawa kebaikan kepada lebih ramai mahasiswa. Terima kasih.

*Teks: Mohd Hafiz Ali Mohd Anuar*  
*Suntingan: Azlina Md Sadik*

# MINDEN JOKERS ...the beginning!

The year 1979. USM Academic session 1978-79. Second semester. The place – Block 11 lobby (fronting Block 307), Desasiswa C, USM. Time - After lunch. The place was already buzzing and full with players when I arrived. Most of them were there ... Atoi, Syed Haris, Paizin, Mansor Chot, Mahadi, Mahbor, Mortadza, Sabaruddin, Kok Heng, Jackson Lim, Teoh and Tajud to name just a few, as obviously I cannot recollect the whole list of guys who were there!

Some chit-chatting, some smoking and others playing cards ... gin rummy. An earlier message was circulated few days earlier, calling for the meeting. The meeting of a newly assembled USM rugby team. The rugby season was on the horizon and soon the Inter Varsity Mobil Cup tournament would be held in Kuala Lumpur. There was that glimmer of anticipation, after all, this was a rugby meeting, among rugby guys!

At that time, the majority of the USM rugby players had left the team, with some graduated, while some being in the final year had decided to focus on their studies and give way to newer players. Tajud had led the initiative calling for the discussion. There was simply the need to plan the team for the coming season, to discuss about training sessions, friendly games, recruitment of players etc.



It was a well-known fact among the rugby circle then that Varsity teams in the Klang Valley were renowned for their own 'glamour' names—UPM as SERDANG Angels, UiTM (Institute Teknologi MARA then) as INTEKMA Lions, UTM as TECH Pirates, UM as Varsity BLUES and UKM as UKM Bandits. They played more games and more illustrious, being located in the Klang Valley area.

For USM, it was simply known as USM Rugby Team! We had players then like the late (Dato) Salman Ahmad, (Dato) Bob, Zamani and Ismail who were from the Malay College Kuala Kangsar. Their obsession with those Kiwis, the least I would imagine was them naming the team as USM RED! Why USM REDS? Simply because the team wore red jerseys (similar analogy to the black jerseys associated within that famous team neighboring Australia!). No. The team was simply USM Rugby Team!

Anyway, we felt then that it was timely for USM rugby team to have a new name! A catchy unforgettable name! Our very own identity and a name that will stick forever!



**“An honor. A pride. A moment to cherish, to be recognized and be part of MINDEN JOKERS’s history! A legacy. Once a JOKER always a JOKER. And I’d rather be a Joker. A MINDEN JOKER!”**

The JOKERS family grew significantly within a short span. We had the MAMA JOKERS meant for girlfriends. We also had ASSOCIATE JOKERS for friends who followed and supported us during all those games – Baharuddin, Rosli Anak Burung, Abu Hasan, Malek, Joe and Naja ... who can ever forget Naja!

Those were the days ...

Time indeed flies. It has been 42 years! The MINDEN JOKERS (presently known as USM JOKERS) continues to stand proud and merry, establishing itself and creating uproar in the Malaysian rugby scene. An incredible journey! A surely proud, amazing and joyous experience. Growing up and playing rugby for MINDEN JOKERS was fun and enjoyable. There were hiccups, ups and downs, joys and sorrows, but the memories will always linger forever and ever. Never mind the losses, the broken noses, collar bones and limbs, we took it all on our stride!

But for the story of the MINDEN JOKERS, gratitude and thanks must go to fellow JOKERS especially Tajud who initiated and led that afternoon session in Block 11 Desasiswa C, without which there would never have been any MINDEN JOKERS! Similar gratitude and thanks to Kim Guan who suggested the name JOKER and other brother JOKERS old and new, past and present, young and veteran who had contributed so much to MINDEN JOKERS. Not forgetting to all supporters ... BABY JOKERS, MAMA JOKERS and ASSOCIATE JOKERS who have kept the JOKERS camaraderie, spirit, and flag flying proudly until the present day. Similar gratitude to other rugby mates and enthusiasts who have acknowledged the existence and presence of MINDEN JOKERS.





A few have left us - Azmi Tom, Duan Anak Gajah, Jabar Bujang and Kok Heng. May they be blessed. I am sure they would be equally proud of where MINDEN JOKERS is now today.

This write-up would not have been made possible without Tajud, Hamdan and Baharuddin for all the points, photographs and keeping MINDEN JOKERS's memories alive ... to Madziah (Med) for chipping and helping as usual ...and to my dear friend Malek for the whistleblowing and keeping the rugby ball rolling, editing and spicing this write-up ... capturing those moments without smartphones, laptops and tablets. No Whatsapp, Facebook, YouTubes and TikTok or what have we got now!! I wonder how it would be like if we had those then!

To be able to write on the MINDEN JOKERS is an awesome, fulfilling task. As a former JOKER, there was no pressure except for the struggle in trying to recall those memories, the snapshots in your mind and to relive those great moments again ... after 42 years!!! But a JOKER doesn't easily forget. Little did I realize such a name would become a legacy. An honor. A pride. A moment to cherish, to be recognized and be part of MINDEN JOKERS's history! A legacy. Once a JOKER always a JOKER. And I'd rather be a Joker. A MINDEN JOKER!



<b>MINDEN JOKERS</b>		
<b>The Squad</b>		
<b>PROPS</b>	<b>HOOKER</b>	<b>ANCHOR</b>
Azmi Abdullah (Tom)	Hasan Adly Sabaruddin	Mansor Ali
Paizin		
Mortadza	<b>WING FORWARDS</b>	<b>QUARTERS</b>
Nazarene Zuber	Tajudin Akash	Tajuddin Atoi
Din	Hamdan Kamarudin	Jabbar Abdullah
Jabar		Shaiful Bahrim
Bujang Phng	<b>SCRUM HALF</b>	Aminuddin Yaakop
	Zaini	Mustapha Yen
<b>2nd Row</b>	Ng Kok Heng	Zakaria Zain
Abdullah Din		Hong Kim Guan
Syed Haris S Mohamed		Mahadi Silamsuddin
Jackson Lim		Mahbor
		Teoh

*Text: Ab Jabbar Abdullah  
 Edit: Isyam Amran  
 Source: FB Arena Sukan USM  
 Photo: Idrus Rapie*



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snippets

## COASTAL COMMUNITIES on Oyster Farming

### What were your proudest moments during these community projects?

I have been working with the coastal communities since 1995, starting with the womenfolk of Johor Islands on giant clam conservation. Then in 2001, I started working with the coastal communities on oyster farming.

My proudest moment was to see the smiles in the faces of the communities that I worked with, from the low-income communities in the remote coastal areas and islands. In addition to that, being accepted and a part of the community as a "family member" is of ultimate self-achievement. It feels good to have many families welcome us into their homes and care for us. It is not only us providing the impact in their livelihood but the community teaching us about how to be human in the world outside the ivory towers.

In the coastal areas, most of the womenfolk were housewives and depended solely on their husbands as the sole breadwinner and responsible for their children's education. Creating an opportunity for them to generate income through oyster farming and take the lead in some small businesses supporting their husbands and children does make a difference in their livelihood. The smiles on their faces when the scientists were able to make a difference to their livelihood is the reward. All the tiredness, tribulations and many failures are no longer felt when we know that our science has been successfully translated to these communities and put to good use.

Seeing champions arising from the communities is like seeing our own family members "graduating" and able to have a better future for themselves, their children and their community. These champions will then be our "ambassadors" to continue translating the science to others, converting research solutions to actions.

### What is the biggest challenge you faced to ensure the success of the project?

The biggest challenge that I had to face is to gain acceptance from the community. Being of different race, religion and culture had indeed posted the biggest hurdle to get up-close to the coastal communities who are mainly Malays.

As a scientist, I cannot just enter a village and told the local community what is best to do or what the scientist feels is best for the community. Working with the community is not as direct or easy as following any manual/modules/procedures/instructions/SOPs as in the laboratory. We must first gain the trust of the community through listening, observing and understanding. Trustworthiness is important to secure a long-term relationship between the scientist and community before the empowerment / engagement can be conducted. The scientist needs to secure the trust and acceptance from the communities to ensure the translational research knowledge can be done impactfully.



*Aileen is actively encouraging the rural coastal communities in Malaysia to culture oysters to promote "green aquaculture" as well as to create an impactful sustainable income as well as protecting the environment*

Being a Chinese female marine scientist can be very challenging, especially when I need to work closely with mainly Malay-male dominated coastal communities. I have to show respect first instead of expecting to be respected. It is important to understand the community's culture, religion and beliefs. It is important to be accepted as part of the community or even better, their family members, before we can truly work with the community. We have to have an open mind to learn from the community; there are a lot of local knowledge that are amazing and should be documented. Working with the community is all about co-learning and co-production of knowledge and findings.

Working with the local community needs a lot of perseverance and patience. We have to be able to juggle and create a balance between listening to their opinion and sharing ours. We have to stay positive at all times to be able to maintain our stamina both physically and mentally.

### What is the future direction of the project(s)?

I believe that the development of community engagement will be vital in charting the country's future on many scales. Local experiences of one community may be translated to other communities needing the same opportunities elsewhere but probably need some adjustments to be accepted and implemented. In translating the findings of the research, it is probably important to bear this in mind so that it is more applicable and accepted to the intended communities.

At the same time, the borderless nature of the ocean (since I am a marine scientist) meant that collaboration is vital. Providing opportunities and encouraging participation to 50% of the world's population, the womenfolk, is a necessity if we are going to survive the next century.



*Aileen works closely with the coastal communities, making a difference in their lives. Her main principle is to provide "hope" to the bottom billion.*



*The smiling faces of the community who had been impacted by science through community engagement*

***"We have to have an open mind to learn from the community; there are a lot of local knowledge that are amazing and should be documented."***

The local coastal communities now have started to enjoy the benefits from the oyster farming activities, where oysters can be sold continuously after the first 8-10 months of culture. With the income they have generated, the culturists now are able to purchase their own oyster seeds to sustain the farming. Oyster farming is a sustainable activity because it is clean aquaculture and involves minimal investment after the setup of the floating cages. The local communities can extend their farming activities in the future by building more floating cages to increase the holding capacity for the oysters.

The community will be able to expand its culture system once more income has been generated from the sales of the oysters. The local communities will be able to sell their oysters to the industries for further processing of products such as frozen oysters, dry oysters, oysters in saline water and industries dealing with food technology or pharmaceutical companies.

There is an opportunity for the local communities to be social entrepreneurs when they are taught to manage their own eco-tourism business through oyster farming. Oyster farming can be an approach to eco-tourism as well as public awareness for environmental protection (following the Model Quintuple Helix). With the involvement and commitment of local communities, the oyster industry can take off in Malaysia.



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snippets

## MORE THAN 4000 STINGLESS BEEKEEPERS

Have Been Trained  
Under My  
Community Projects

### What were your proudest moments during these community projects + implementation?

Have you ever seen insects fly and get trapped behind a car's window? They try to escape by knocking on the transparent window and would end up dead the next day. Relatedly, I've watched the beekeeping community try to release a small bee that's trapped and the bee is back alive freely. Doing so needs one to have a great level of empathy. Yes, empathy! one feeling that connects us all and other creatures.

And this empathetic nature translation from the beekeepers symbolizes the success of the message that I am trying to convey. It is also the greatest pride in my life. Eventually, our contentment as scholars peaks when the knowledge and inspiration we bring forward are welcomed and is life-changing to other people. Alhamdulillah, to date, more than 4000 stingless beekeepers have been trained under my community projects.

**“The most blessed thing in this world is the sacred knowledge; when we can learn, understand, and inspire others to do good, that is sacred.”**

For the general public, honeybee and stingless bee (kelulut) are merely insects that produce honey. However, as for me, they are the army of the Almighty Creator that are inspired to pollinate the seeds of trees that give us oxygen and food, provide natural resources, and sustain life continuity and survivability. And from the bees, honey is crafted, which grants cure for humans (An Nahl : 68-69). Unfortunately today, these tiny creatures are threatened with chemical pesticides and continuous rural development. This makes bee conservation and honey-upholding efforts crucial as missions to prosper humankind and mother nature.

The impact? A flourishing symbiosis exists between the beekeepers and bees contributes to socioeconomic well-being in line with ecological conservation. Moreover, honey that was previously marketed along the night market floor is now transformed into a premium product.

This symbiosis is a vision for the Kelulunomic project that I am now pioneering. It is my personal passion that allows me to sleep in peace. To top that, Kelulunomic has been recognized as an outstanding translational research project by the MOHE. This work has also been proudly engraved on a special national stamp and it is something that I could not be more proud of.



**Dr. Zul with community**



Ladang commercial developed

### What is the biggest challenge you faced to ensure the success of the project?

"The most blessed thing in this world is the sacred knowledge; when we can learn, understand, and inspire others to do good, that is sacred" .... my late father once said. Alhamdulillah, I am now in USM and this institution has a clear mission to empower the bottom-end of society in transforming their socio-economic well-being. But superior to that, as a Malaysian, I hold on the first principles in the pillars of the country, the Belief in God. Therefore, my every step in the community program is based on the goal of upholding the first pillar, besides upholding the mission of USM. The role of teaching and doing research is a responsibility as an employee, but inspiring society is an obligation for me, both as a scholar and as a citizen.

**“A flourishing symbiosis exists between the beekeepers and bees contributes to socioeconomic well-being in line with ecological conservation. Moreover, honey that was previously marketed along the night market floor is now transformed into a premium product.”**

Meaning, when Allah states in the Quran that honey is a cure, it is not a hypothesis, but a fact that needs to be upheld. The same applies to when we manage halal, riba, zina other issues. In the mission of upholding the honey industry, the biggest challenge is to instil adoration for bees and to change the public's perception towards honey. That means, the fundamental challenge is a change of mindset, which is difficult and can only be changed if society is rightly inspired. At the same time, the honey industry is flooded with over 90 per cent of artificial honey, unsustainable farming, and non-hygienic post-harvesting management. Hence, the industry needs a total solution.



Premium honey developed

The solution I use is a moon-shot model where a mission is to produce Natural, Clean, and Good Quality honey. This mission ensures that "real" honey can be marketed and provide income to the main stakeholders, the beekeepers. As a result, the conservation and production activities of honey will continue. This whole scenario will open for supporting innovation and allows scientists in the fields of entomology, engineering, industrial technology, medicine, chemistry together with the involvement of other agencies. The co-involvement will play a big role in the community, working in close cooperation on the same mission. This creates an ecosystem that brings together many new stakeholders and accelerates the process of raising bees and producing honey. As for me, I developed patented innovations such as the MUSTAFA-Hive and HILDA System until the birth of spin-off Brainey Sdn Bhd along with halal-certified honey factory, HACCP, GMP, and ISO2200.

Alhamdulillah, the challenge of instilling the love for bees and honey can now be overcome in line with USM's motto, "Transforming higher education for tomorrow's sustainability". And it's even more motivating for me when the inspiration entrusted by my father can be fulfilled in tandem with the first national principle of the country.



Source: <https://mediapermata.com.bn/inovasi-usm-ternak-kelulut-bantu-komuniti/>

**“Alhamdulillah, the challenge of instilling the love for bees and honey can now be overcome in line with USM's motto, "Transforming higher education for tomorrow's sustainability.”**

**What is the future direction of the project?**

I define success as the ability to bring impact and achieve life's dreams, not by rank, title nor position. My dream of life is to position honey as an approved treatment in clinical settings and to further uphold God's word that honey is the cure.

The direct impact of the Key Performance Indicator (KPI) on the community is something that can be achieved through community programs. An example is knowledge and skills (know-how) that are transferred to the villagers. However, this impact is rarely pursued by university lecturers as many fail to distinguish between community service (CS) versus community engagement (CE) and thus, causing community programs to be considered an additional burden. CE is a process of mutual empowerment for researchers and communities. I leveraged CE into a field research space and translated the scientific narrative for the direct benefit of the community and that gave me KPIs in tandem with KIP, whilst still being on track to pursue my life's dream of elevating honey reputation.

I have invested nearly ten years focusing on the aspects of kelulut farming, beekeepers development, and international certification for kelulut honey products. Now, my current focus is to streamline the traceability system of kelulut honey products where some biosensor and IoT (Internet of Things) initiations are being developed. Several clinical trials are underway where one study has been completed and the kelulut honey product is expected to be officially used at the clinical level soon.



**With international collaborations**

Continuous efforts to increase the number of beekeepers are also a priority in the future to meet the growing demand. Towards this end, continuous collaboration with TERAJU and other public universities as well as farmers' associations such as the Darul Nairn Entrepreneurs of Stinglee bee Society (DRONESS) and JBEEES continued to be performed. In the end, my greatest idol is Prophet Muhammad (peace and blessings be upon him) who inspired me to fight to humanize myself. Other humanitarian figures such as Nelson Mandela, Mahatma Gandhi, and Mother Teresa have also proven that the struggle to empower humanity is at the core of life.



# TRSM | Top Research Scientists Malaysia 2021 | Academy of Sciences Malaysia

**Prof. Dr. Tang Thean Hock**  
Advanced Medical and Dental Institute (AMDI)  
Email: tangth@usm.my  
Tel: (+6) 04-562 2302

Research interests | RNA Biology

## RESEARCH QUALITIES

In my opinion, the two most important attributes of a research scientist in order to be effective include diligence and perseverance. A research scientist should always be diligent in carrying out research by persistently engaging in the development of his or her research while continuously gaining knowledge via voracious reading. Reading is crucial to keep pace with the latest developments in science. A research scientist should also be perseverant, always strive to overcome obstacles while on the research journey to reach the milestones aspired. Perseverance is a key attribute that can continuously propel a researcher forward without any thoughts of giving up.

## RESEARCH WORK

My research work is mainly focused on the identification of non-protein coding RNAs (npcRNAs), which are the key players of the pathogenesis underlying infectious diseases. A plethora of npcRNAs has been translated into molecular diagnostic applications, particularly PCR assays. We are also interested in aptamers, a class of synthetic npcRNAs that could bind to a variety of targets and have vital diagnostic/therapeutic implications. We have pioneered the first aptamer laboratory in Malaysia, specialized in the development of aptamers for diagnostics and therapeutic applications.

## ORIGINAL RESEARCH

My major research achievement was the discovery of the short tandem repeats arrays of prokaryotes that are transcribed and processed into smaller CRISPR RNAs, which contributed to the mosaic puzzle piece in solving the questions that lead to the development of the CRISPR/Cas9-based genome editing tool. In addition, we have also discovered the target specific-synthetic molecular recognition elements known as nucleic acid aptamers. Several aptamers for diagnostic and therapeutic purposes are in-line for patent application.

**“My research work is mainly focused on the identification of non-protein coding RNAs (npcRNAs), which are the key players of the pathogenesis underlying infectious diseases.”**



# TRSM 2021 | Top Research Scientists Malaysia

Academy of Sciences Malaysia

**Prof. Dr. Boon Seng**  
School of Chemical Engineering  
Email: chobs@usm.my  
Tel: (+6)04-599 6418

Research interests | **Functional Polymeric Membrane, Composite membrane for fouling mitigation, Product recovery from waste using membrane technology, Integrated and energy efficient membrane technology for Water reclamation**

## RESEARCH QUALITIES

Nowadays, research scientists are exposed to an ever-challenging ecosystem in which they are not only required to carry out fundamental research, but their research must be able to apply in the industry via collaboration with industry and must be able to bring significant impact to the society at large. This requirement pushes the researchers out of their comfort zone with new research philosophy that the scope of work must be transformed from fundamental research to commercialized products or processes. Researchers must be more sensitive to industrial needs and the proposed solution should take into consideration the global challenge such as energy requirements, the circular economy as well as its sustainability. Besides, time management and financial planning skills are also other crucial criteria of researchers to ensure that the research activities could achieve maximum output within the limited timeframe and shrank budget over the years.

## RESEARCH WORK

My research is focused on the material and process design that enable the maximum recovery of valuable resources from waste. The material involved in the functional or responsive material could harvest the targetted molecule at a minimum expense of energy and cost. Currently, the membrane separation process with the aid of functional/responsive polymer was employed to retrieve nutrients, metal ions, and water from wastewater.

## ORIGINAL RESEARCH

Currently, I am leading a group on resource recovery from aquaculture effluent. This research aims to convert the liable wastewater treatment process to a profit-generating wastewater re-cycling process. The research is expected to bring impact to the SDG #4 on clean water and sanitation whereby we intend to improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials to the receiving water body, and substantially increasing recycling and safe reuse of the water for the aquaculture industry.

**“Researchers must be more sensitive to industrial needs and the proposed solution should take into consideration the global challenge such as energy requirements, the circular economy as well as its sustainability.”**





# TRSM 2021 | Top Research Scientists Malaysia

Academy of Sciences Malaysia

Prof. Ir. Ts. Dr. Zuhailawati Hussain  
School of Materials and Mineral Resources Engineering  
Email: zuhaila@usm.my  
Tel: (+6)04-599 5258

Research interests | Metallurgy/Metal Matrix Composite

## RESEARCH QUALITIES

Research scientist must have curiosity about their work to explain how and why things happen. Curiosity will motivate scientist in finding solution or become creative to overcome any limitation in finding the answers. Critical thinking and detail-oriented are another qualities that assists scientist to analyse data and information in developing new theories. Scientists must be patient and communicate effectively with research team to share information for correct conclusion, as the early hypothesis could be wrong. The most important, the true scientist must be humble and bias free in decision or making judgement.

## RESEARCH WORK

As professional engineer trained in the field of materials engineering, I implement selection, formulation, microstructure and fabrication of novel alloys and metal composites in creating new potential advanced materials for human being. These include the advancement in orthopaedic implants based on new, safe and biocompatible titanium as well as biodegradable magnesium alloys that potentially can provide high performance medical service to the society. Intensive works in development of sustainable cutting tool material helps in eliminating the use of hazardous cobalt, which is commonly used as binding matrix in metal cutting industry. Patents are secured on severe plastic deformation techniques to produce high conductivity high strength copper nanocomposites as well as ultrafine grain aluminium alloy with high mechanical properties.

## ORIGINAL RESEARCH

My research emphasizes on the development of novel metal alloys and metal matrix composites including surface engineering and welding of metal. Environmental friendly manufacturing methods and sustainable advanced material with unique and high-performance characteristics are developed to benefit human beings.

**“Curiosity will motivate scientist in finding solution or become creative to overcome any limitation in finding the answers. Critical thinking and detail-oriented are another qualities that assists scientist to analyse data and information in developing new theories.”**





# TRSM 2020

## Top Research Scientists Malaysia

Academy of Sciences Malaysia

Professor Ir. Dr. Nor Ashidi Mat Isa  
School of Electrical and Electronic Engineering  
Email: ashidi@usm.my  
Tel: (+6)04-599 6003

Research interests | Computer Vision • Computational Intelligence

### RESEARCH QUALITIES

- **Curious** - Eager to know or learn new knowledge and skills
- **Dream big and dare to fail** - Not too afraid to try. Dare to take risks and be fearless.
- **Creative** - Able to think outside the box and imagining things that cannot be seen.
- **Patient** - Able to accept or tolerate failures without losing motivation and continue to find the right answers to each failure
- **Detail-oriented** - Close attention to details is important in research development.
- **Critical thinker and problem-solver** - Able to thoroughly analyze information, make critical decisions to solve research gaps and provide critical discussion on the research outcomes obtained.

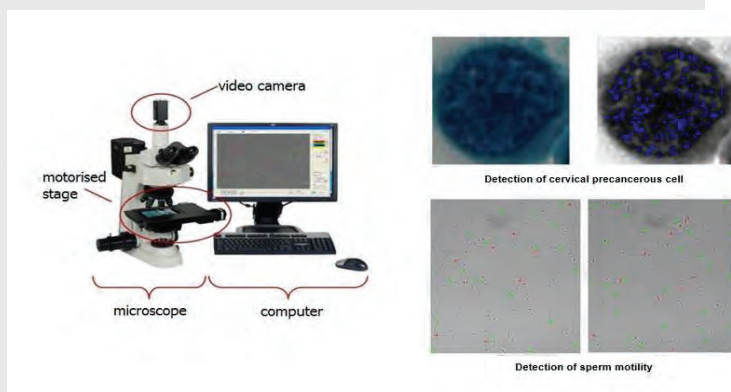
### RESEARCH WORK

- Constantly review our goals, vision, progress and achievements. Observing progress and achievement can motivate our self-esteem.
- Continue to refresh our goals and objectives to be relevant to the current research environment.
- Maintain the momentum of our research.
- Get advice from a mentor and share your research with mentees. A good research support group with similar interests can continue to motivate us.
- Position ourselves with positive and motivated researchers.
- Reward ourselves when we have completed a goal.
- Maintain optimal physical and mental health.

### ORIGINAL RESEARCH

#### Intelligent Diagnostic Systems

- Development of intelligent diagnostic systems by integrating between machine vision, image processing and/or artificial intelligence.
- Past and Current Intelligent Diagnostic Systems: Cervical Precancerous Diagnostic System Based on Pap Smear and ThinPrep Images, Sperm Motility Detection System Based on Semen Sample Video, Breast Cancer Diagnostic System Based on Mammogram Images, Defect Detection System Based on X-Ray PCB Solder Joint Images, Defect Detection System Based on Microwave Nondestructive Testing.



#### Fundamental Research on Image Processing

- Formulation of new or modified version of noise filtering, contrast enhancement, image segmentation, features extraction, features selection algorithms.

#### Fundamental Research on Artificial Intelligence

- Formulation and development of new and modified architecture and learning algorithm of artificial neural networks, deep learning neural network, unsupervised clustering, meta-heuristic algorithms.



## Tidak Mahu Ditelan Zaman, ALUMNI USM JULUNG KALINYA CIPTA WAYANG KULIT ANIMATRONIK

Wayang kulit merupakan satu kaedah pementasan teater yang menggunakan patung-patung yang diukir daripada belulang untuk persembahannya, iaitu dengan teknik bayang melalui pantulan cahaya ke atas kelir menerusi watak-watak yang digambarkan pada patung atau boneka belulang tersebut.

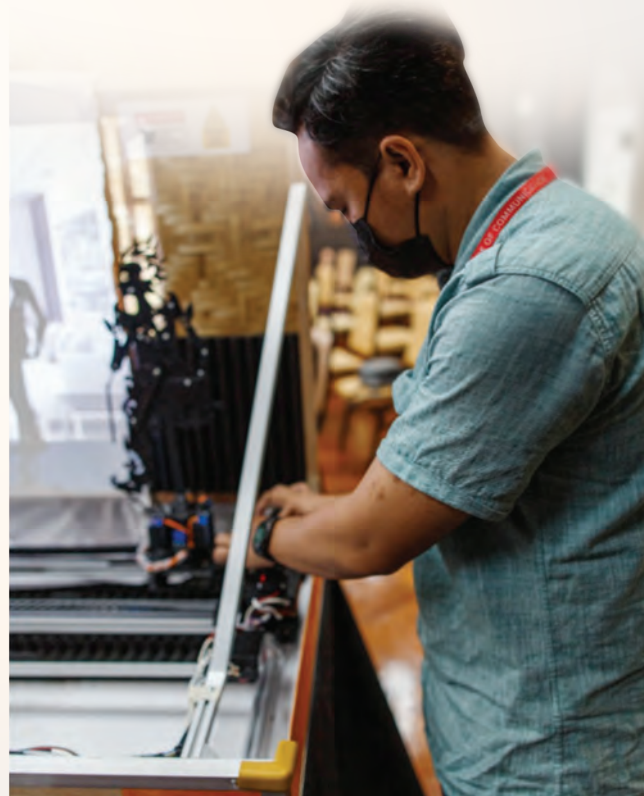
Pun begitu, persembahan seni tinggalan warisan yang terkenal di nusantara itu bukanlah satu persembahan yang mudah untuk disaksikan pada hari ini.

Apatah lagi, karya kebudayaan yang tinggi nilainya itu memerlukan sekumpulan orang yang mempunyai pengetahuan dan kemahiran bagi menjamin kualiti persembahan dapat memberikan hiburan dan dalam masa yang sama turut diisi dengan teladan.

Atas kurangnya persembahan-persembahan wayang kulit dan kekhuatiran seni itu makin hilang ditelan zaman, alumni dari Pusat Pengajian Seni, Universiti Sains Malaysia (USM), Ahnaf Hakimi Ahmad, 33, tampil dengan idea dan inovasi yang mengujakan.

Beliau mengetuai sekumpulan individu membangunkan wayang kulit animatronik (WKA): satu projek khusus persembahan wayang kulit dengan gabungan teknologi robotik bersama-sama seni persembahan wayang kulit, pertama kali dihasilkan di negara ini.

**“Justeru, saya rasakan selain berinovasi, WKA juga dapat menjadi satu medium ke arah mengurangkan kos persembahan, yang mana ia adalah salah satu faktor kurangnya persembahan wayang kulit tradisional dipersembahkan pada hari ini.”**



Menurutnya, cara WKA dipersembahkan adalah sama seperti wayang kulit tradisional namun yang membezakannya, WKA sepenuhnya dikendalikan secara robotik tanpa perlu melibatkan kehadiran fizikal para pemain wayang kulit termasuk Tok Dalang, pemuzik, krew dan sebagainya.

Ahnaf Hakimi yang juga graduan ijazah sarjana muda Seni Halus, 2015 dan Sarjana Instruksi Multimedia (2018) ketika ditemubual berkata, idea untuk menghasilkan WKA mula tercetus apabila terdapat kurangnya persembahan wayang kulit pada masa kini.

Tambahan pula katanya, dalam menjayakan satu-satu persembahan wayang kulit, modal kewangan diperlukan untuk kos-kos yang terlibat termasuk bayaran upah kepada Tok Dalang, pemuzik, krew dan individu lain yang terlibat.

"Justeru, saya rasakan selain berinovasi, WKA juga dapat menjadi satu medium ke arah mengurangkan kos persembahan, yang mana ia adalah salah satu faktor kurangnya persembahan wayang kulit tradisional dipersembahkan pada hari ini.

"Jika kos dapat dikurangkan, persembahan wayang kulit dapat dilakukan secara lebih kerap," ujar beliau yang mempunyai kemahiran dalam bidang multimedia dan robotik.

Mengulas lanjut mengenai WKA, beliau mengakui projek berkenaan bermula dari cetusan ideanya dan dijayakan sepenuhnya olehnya.

**"...karya kebudayaan yang tinggi nilainya itu memerlukan sekumpulan orang yang mempunyai pengetahuan dan kemahiran bagi menjamin kualiti persembahan dapat memberikan hiburan dan dalam masa yang sama turut diisi dengan teladan."**



“Bermula dari rekaan mekanikal, sistem komputer dan pengaturcaraan, saya lakukan sendiri dengan berbekalkan pengalaman yang ada.”

Manakala dari segi reka bentuk watak wayang kulit, ia dihasilkan oleh Yaya-Okita (artis komik) dan juga audio menggunakan khidmat Wak Long Music & Art Center bersama Dalang iaitu Mursyid Md Hussein, yang juga alumni USM,” katanya.

Beliau juga menjelaskan, penghasilan WKA dibuat dengan penuh teliti kerana ia memerlukan penyelidikan, pemerhatian, pembangunan reka bentuk dan juga kerja-kerja pertukangan.

“Kesemua ini memerlukan dedikasi yang tinggi kerana proses ini memerlukan ketahanan dan keboleh-ulangan yang tinggi bagi menjamin kualiti persembahan wayang kulit ketika dimainkan.”

Ahnaf Hakimi juga menegaskan, beliau yakin inisiatifnya itu dapat memberikan impak yang meluas, khususnya dalam menarik minat generasi masa kini untuk mengetahui dan menghayati seni wayang kulit.



**“Penghasilan WKA dibuat dengan penuh teliti kerana ia memerlukan penyelidikan, pemerhatian, pembangunan reka bentuk dan juga kerja-kerja pertukangan.”**

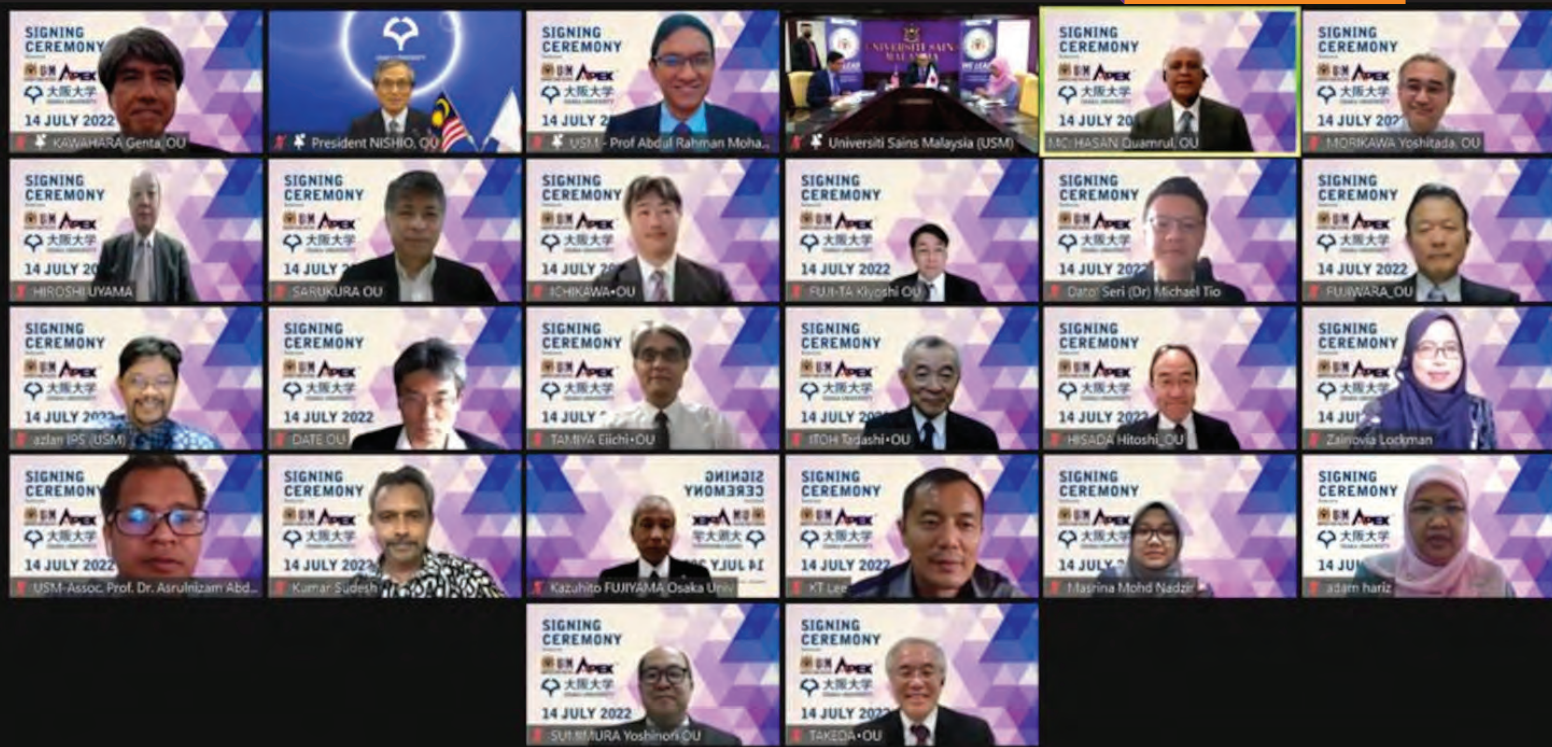


“Dengan adanya WKA, pengunjung dapat melihat, mengenali, merasai dan mempelajari pergerakan robotik dan sistem kawalan automatik yang dibangunkan dalam WKA. Ia sedikit sebanyak dapat memberikan pendedahan terhadap kepentingan revolusi dalam memastikan kelangsungan seni budaya warisan berzaman dapat diwariskan dari generasi ke generasi.

“Saya turut berharap agar generasi muda masa kini dapat memelihara warisan seni yang tidak ternilai harganya ini. Selain itu, rekaan WKA ini dapat menarik minat mereka dalam menceburi teknologi robotik yang boleh diaplikasikan dalam pelbagai perkara pada zaman ini,” ujar beliau lagi.

Wayang Kulit Animatronik pertama kali dipamerkan di Muzium dan Galeri Tuanku Fauziah, USM dan ia terbuka untuk semua pengunjung sehingga hujung Julai depan.

*Teks: Marziana Mohamed Alias  
Suntingan: Mazlan Hanafi Basharudin  
Foto: Nor Amin Zainal Kamarudin*



## USM CHOSEN AS MEMBER OF OSAKA UNIVERSITY ASEAN CAMPUS:

Smart Partnership  
To Achieve Impactful  
Research Output

Universiti Sains Malaysia (USM) has been selected as a host in Malaysia, joining the establishment of the Osaka University ASEAN Campuses, as both universities embark on a new level of partnership.

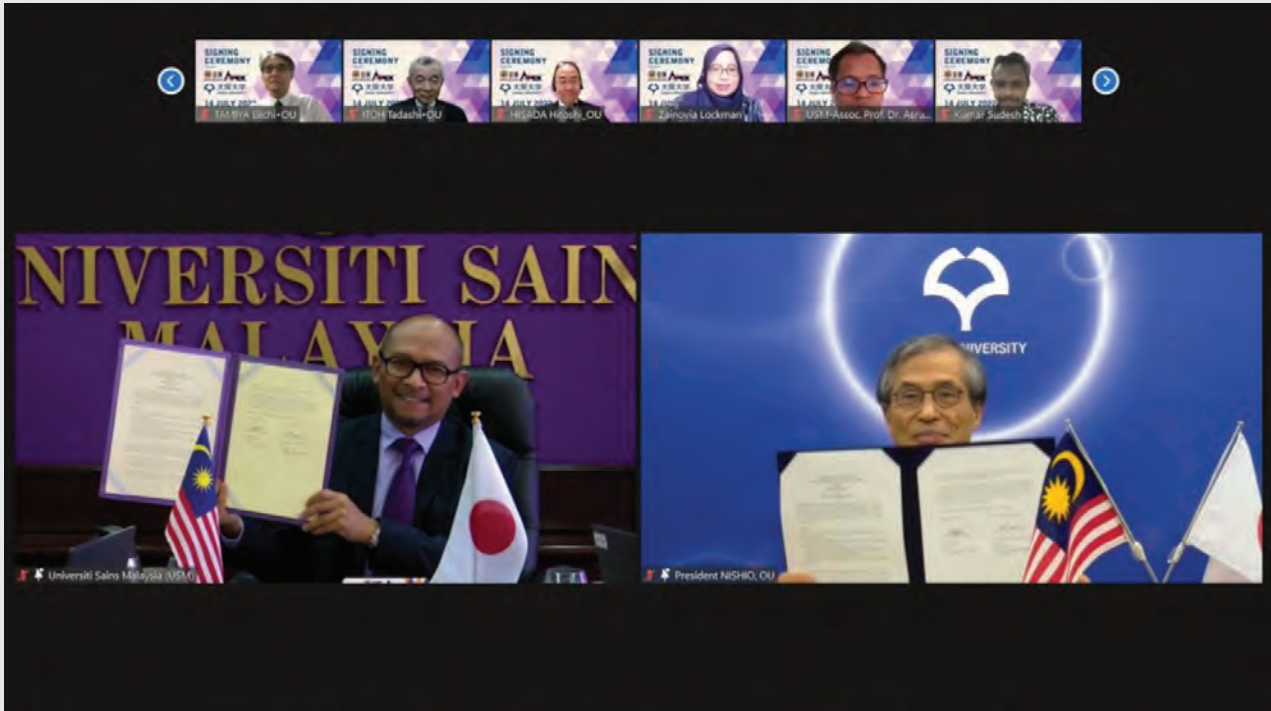
Both parties officially affirm the partnership through the Signing Ceremony of Addendum, which also indicates that USM together with Osaka University (OU) will be committed to strengthen their relationship beyond research laboratories.

USM Vice-Chancellor, Professor Dato' Dr. Faisal Rafiq Mahamd Adikan said, the documents signed will ensure that there will be commitment in terms of more meaningful cooperation such as in establishing and strengthening OU-USM joint laboratories for carrying out joint research activities, developing and conducting international joint/double degree programmes, and participation in university-industry collaboration.

**“We have been making accelerated research progress in the field of advanced materials, engineering (water and environment), health and well-being and cultural, heritage and community development, as portrayed by the increasing number of publications and citations for the past five years.”**

He added that, USM has also provided a designated office at the USM-Toray Building and USM shall facilitate the use of lecture halls and other facilities, if so required.

“I have been made to understand that the Osaka University ASEAN Campus Sustainable Development Goals Co-creation Network is comprised of several research areas such as on climate change, air pollution, food loss and plastic waste, which match well with the strength of USM’s researchers.



**“I have been made to understand that the Osaka University ASEAN Campus Sustainable Development Goals Co-creation Network is comprised of several research areas such as on climate change, air pollution, food loss and plastic waste, which match well with the strength of USM’s researchers.”**

“We have been making accelerated research progress in the field of advanced materials, engineering (water and environment), health and well-being and cultural, heritage and community development, as portrayed by the increasing number of publications and citations for the past five years.

“Seeing the similarity in research interest, I fully support the move towards research collaboration not only between OU and USM but with industries who are interested to participate in USM-OU in university-industry collaboration,” he said during the virtual ceremony held recently.

Also present at the ceremony were President of Osaka University, Dr. Nishio Shojiro, USM Deputy Vice-Chancellor (Research & Innovation), Professor Dato’ Ir. Dr. Abdul Rahman Mohamed, Executive Vice-President of Osaka University, Dr. Kawahara Genta and key university officials from both institutions.

Meanwhile, USM Deputy Vice-Chancellor Research & Innovation, Professor Dato’ Ir. Dr. Abdul Rahman Mohamed added, the smart partnership between both parties is aimed at finding solutions that matter to human kind, solutions to global challenges and working together in contributing to the Sustainable Development Goals.

He also said, a programme worth mentioning is the Osaka University International Certificate Programme, where five subjects are given focus, namely Advanced Industrial Biotechnology, Nanoscience and Nanotechnology as Manufacturing Core, Introduction to Computational Materials Design, Frontier Engineering Science: An Introduction through STEM-Centered Learning, and Halal Science, Technology and Innovation (HaSTI).

“USM has the strength in most of these subjects and I am confident our students and staff will partake in the programme as well,” he said.

*Text: Marziana Mohamed Alias*

# HEBAT ROCKET

Ignites Skies and  
Brings Historic Success to  
USM and Malaysia



The final Spaceport America Cup results were announced on ESRA's website recently and USM is proud to announce that the magnificent team, USM Wau Rocketry Team was placed 7th in the respective category and 12th in the overall Spaceport America Cup 2022.

The USM Wau Rocketry Team praised USM, which provided them the support to reach for the sky. The team also thanked Malaysia Airlines for flying them to compete in the Spaceport America (SA) Cup 2022 in New Mexico, USA.



On June 23, a team of Malaysian university students successfully launched the first fuel-propelled, heavier-than-air rocket in the Spaceport America Cup in New Mexico, the United States.

“It was truly a great exposure and experience for us, and most importantly, we are truly indebted to Universiti Sains Malaysia (USM) which had supported us all the way in our endeavours at the Spaceport America Cup 2022.”

This was mentioned by USM Wau Rocketry team leader Vanmitha Athimoolan, upon reaching Malaysian shores with all her teammates and advisor, Dr. Norilmi Amilia Ismail, who had done their best in the competition held in the USA.

**“Spaceport America Cup 2022 is the world’s largest intercollegiate rocket engineering conference and student rocket launch competition.”**

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**“The team named their rocket, HEBAT Rocket, which stands for H-Hardwork, E-Experience, B-Believe, A-Achieve, T-Together.”**

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Vanmitha added, “We wish to thank all our sponsors, in particular Malaysia Airlines, for sponsoring the flight tickets for most of our trip to the States.”

She also added: “This is the best performance from a Malaysian team at the competition, ever. A year ago, we started the HEBAT project from scratch, with no real rocketry experience. Huge shoutout to Yie Jian Chee (USM Alumni) for being the best mentor and guided us from scratch to where we are now.

“We’d also like to thank every single member of the team, advisors, @usmofficial1969, @usm\_engineering and our sponsors for believing in us. We came and we showed the world what we are capable of. We’ll be back with another cool project soon.



**“It was truly a great exposure and experience for us, and most importantly, we are truly indebted to Universiti Sains Malaysia (USM) which had supported us all the way in our endeavours at the Spaceport America Cup 2022.”**

**- Vanmitha Athimoolan**

Spaceport America Cup 2022 is the world’s largest intercollegiate rocket engineering conference and student rocket launch competition. For this competition, students from all over the world will gather at this world-class spaceport facility to launch their self-built rocket.

Students are tasked to launch solid, liquid and hybrid rockets to targeted altitudes of 10,000 and 30,000 feet.

Adding further, Vanmitha said, this was also a platform that could give the opportunity for engineering students to get the bigger picture of what practicality is all about, after they have gained the knowledge and input during their studies at USM.

“USM has provided us with the best education in assisting us to participate in a major project, and which is a big achievement in our lives,” she said.

The mission of the project was to launch a rocket at 10,000 feet and recover it safely and deploy a Nanosat that lands autonomously by using quadcopter technology.

The Wau Rocketry team consisted of 9 Aerospace Engineering students, 2 Chemical Engineering students and 1 Mechanical Engineering student. The team named their rocket, HEBAT Rocket, which stands for H-Hardwork, E-Experience, B-Believe, A-Achieve, T-Together.

They are the first Malaysian team to participate in the Spaceport America Cup 2022 that was held in New Mexico, USA from 20 to 25 June 2022. The competition was organised by the Experimental Sounding Rocket Association (ESRA).

*Text: Marziana Mohamed Alias and Hafiz Meah Ghouse Meah  
Editing: Mazlan Hanafi Basharudin  
Photo: Mohd Fairus Md Isa and USM Wau Rocketry Team*



# TETUPAI

"Tetupai, small in nature and deceptively insignificant in visual presence but...it supports and ensures the stability of the whole structure."

## Philosophy behind the name, who gives it and what does it mean?

### Professor Ir. Dr. Taksiah A. Majid:

Literally resembling the Squirrel, "tetupai" refers to a design component that is found in traditional vernacular houses. Although it is small in nature and deceptively insignificant in visual presence, "tetupai" supports and ensures the stability of the whole structure. This lounge was named and officiated by Vice-Chancellor of USM, Professor Dr. Faisal Rafiq Mahamd Adikan on 23rd May 2022.

## What is the concept behind this development?

### Professor Ir. Dr. Taksiah A. Majid:

Tetupai Lounge adopted the concept of biophilic industrial design. It involves the consideration and incorporation of natural lighting, natural ventilation, exposure to the external environment and internal flow. Professor Aldrin Abdullah, and his designer teams from School of Housing, Building and Planning, HBP, USM developed the concept for the Tetupai Lounge.



## How is it funded?

### Professor Ir. Dr. Taksiah A. Majid:

The main sources of funding were from the Enterprise Fund of the School of Civil Engineering, the contribution from BHEPA and our Alumni. Special sponsorships for the table tennis, floor vinyl tiles, tea corner, retractable roof were from the staff and alumni.

### Ir. Ts. Kamarul Badlishah Kamarulzaman:

Although we are still new and just had our first AGM on May 2022, my awesome teammates have agreed to contribute a total amount of RM5k - RM10k to the construction and some of us were personally contribute to its interior together with furniture too. I think we are all in the same page when it comes to this decision as soon as we heard about the school wanted to build a brand-new learning space for their juniors. As seniors, we just really want them to appreciate and enjoy what we once did not have the chance with as students before.

**What is the function and uniqueness of Tetupai?**

**Professor Dr. Mohd Suffian Yusoff:**

As a Dean, I really think that TETUPAI is not all about a physical transformation of a room but the change that we made from how confined it used to be to a better and convenient open space area surely will theoretically bring out the best in our staff and students. I believe TETUPAI will change the paradigm of how a room is not just a room but it can also be a space that brings a lot of benefits to people who are using it.

**Professor Ir. Dr. Taksiah A. Majid:**

This is a new space for students and staff of School of Civil Engineering where they can study, refresh, socialize and exercise. This new space is also the first of its kind in Engineering Campus where it opens to all USM staffs, alumni and visitors.

**Who are the main players in making this possible?**

**Professor Ir. Dr. Taksiah A. Majid:**

It started in August 2021, when I was Dean where I shared a short video of the Postgraduate Room 1 located on the 1st floor of the School of Civil Engineering to Professor Aldrin Abdullah, the former Deputy Vice-Chancellor, Student Development Affairs & Alumni. After the first meeting, full commitment to transform Postgraduate Room 1 was given by the volunteer team consisting of designer and lecturer lead by Dr. Nooriati Taib from the School of Housing, Building and Planning. Her team consisted of Dr. Mariati Taib, Puan Puteri Salamah Abd Aziz and three students: Mohd Pirdaus Bedu, Amer Qusyairi & Hazeeq Asyraf. A strong team of technical support staffs headed by Mr. Zulkifly Hashim and Mr. Rasidi Razak facilitated the renovation work within the period of 9 months. The commitment from the technical and administrative staffs also contributed to the speedy completion of the Tetupai Lounge. Not to forget, our beloved alumni! They truly the definition of a saying that some students graduate, but they in fact don't leave or at least their heart is. Despite the fact that most of them have been successful in their respective fields, they still think of what they can do to bring a better version of the school to its current students, particularly in term of how they could contribute to a better learning environment for them.

**“Tetupai Lounge adopted the concept of biophilic industrial design. It involves the consideration and incorporation of natural lighting, natural ventilation, exposure to the external environment and internal flow.”**





“I believe TETUPAI will change the paradigm of how a room is not just a room but it can also be a space that brings a lot of benefits to people who are using it.”

**How it is being used, who gets to use, what activities take place in Tetupai Lounge?**

**Professor Ir. Dr. Taksiah A. Majid:**

Tetupai Lounge is specifically designed for all staffs and students of School of Civil Engineering. It also welcomes all USM community and alumni to use it. Events like school gathering, students gathering, meeting, discussion etc take place in Tetupai Lounge. It also serves as a space for the school to welcome local and international visitors to School of Civil Engineering.

**Professor Dr. Mohd Suffian Yusoff:**

In addition to that, our main goal is not only for its users to be comfortable but we also want them to be happy to be able to do other activities at the lounge too. Hence, there are various facilities provided such as a TV, a ping pong table, printers etc.

- **Professor Dr. Mohd Suffian Yusoff**  
*Dean of the School of Civil Engineering, USM*
- **Ir. Ts. Kamarul Badlishah Kamarulzaman**  
*President of School of Civil Engineering Alumni*

- **Professor Ir. Dr. Taksiah A. Majid**  
*Lecturer and Former Dean of the School of Civil Engineering, USM*

“The commitment from the technical and administrative staffs also contributed to the speedy completion of the Tetupai Lounge. Not to forget, our beloved alumni!”



Text: Siti Faizah Abdul Halim • Editing: Mazlan Hanafi Basharudin • Photo: Muhammad Taufik Abdul Rahman

## “USM, Seribu Satu Kenangan dan Pengalaman Yang Mendewasakan.”

- YB Dato' Mansor Othman

‘USM mendewasakan saya.’

Berikut ialah perkara pertama yang disuarakan oleh Timbalan Menteri Alam Sekitar dan Air Malaysia, YB. Dato' Mansor Othman ketika diajukan pertanyaan berkenaan makna universiti ini kepada beliau sebagai alumni pada awal wawancara bersama tokoh hebat tersebut baru-baru ini.

Menurutnya, Universiti Sains Malaysia (USM) sangat dekat pada hati serta mempunyai nilai sentimentalnya yang tersendiri apatah ketika beliau bergelar mahasiswa di universiti ini, saiznya masih kecil dan tidak sebesar sekarang.

Pengalaman sebagai salah seorang pelajar pada awal penubuhannya dahulu suatu perkara yang tidak mudah untuk dilupakan, dengan situasi we knew one another very well, gerakan pelajarnya aktif dan sistem pembelajarannya sedikit berbeza daripada sistem pembelajaran pada hari ini.

“*Student days are very memorable*” kata Mansor.

**“Sambil ketawa, beliau turut berkongsi kenangan yang masih diingati hingga hari ini antaranya Hari *Speaker's Corner* yang sering diadakan pada setiap hari Rabu di depan Dewan Kuliah A...”**

Tambahan pula dengan pengalaman beliau yang sempat bergelar 'pelajar nakal' bersama beberapa rakan baik seperti Allahyarham Tan Sri Abdul Rahman Sulaiman (Mantan Pengerusi BERNAMA), Tan Sri Datuk Mustafa Mansur (Pro-Canselor USM), Tan Sri Idris Jusoh (Pengerusi Lembaga Kemajuan Tanah Persekutuan) dan Chow Kon Yeow (Ketua Menteri Pulau Pinang) pada ketika itu.

Sambil ketawa, beliau turut berkongsi kenangan yang masih diingati hingga hari ini antaranya Hari *Speaker's Corner* yang sering diadakan pada setiap hari Rabu di depan Dewan Kuliah A, aktiviti yang juga telah menimbulkan kemarahan pensyarah Sains Politik, Mansor Merican kerana program tersebut bertembung dengan jadual kursusnya yang menyebabkan ketidakhadiran ramai pelajar ke kelas.

Serta pengalaman seluruh kelas yang bukan bersedih sebaliknya bergembira ketika didenda keluar kelas kerana tiada seorang pun pelajar yang bersedia untuk mengaku kesalahan membaling kapal terbang kertas yang tepat mengenai pensyarah yang sedang mengajar pada ketika itu.

Selain itu, Mansor turut menyatakan betapa bertuahnya menjadi pelajar USM dari dahulu hingga kini yang sentiasa mendapat sokongan penuh daripada pihak pengurusan kampus termasuklah Naib Canselornya.

Menurut beliau, Tan Sri Hamzah Sendut yang memegang jawatan sebagai Naib Canselor pada ketika itu contohnya, seorang yang sering memberikan sokongan kepada para pelajarnya dan mereka sangat bertuah mempunyai beliau sebagai Naib Canselor.

**“Pernah memegang jawatan sebagai Timbalan Ketua Menteri I Pulau Pinang, Mansor turut menyatakan bahawa pengalaman serta pendedahan di USM juga menjadi pencetus agar beliau lebih peka dalam berfikir, merancang serta melaksanakan setiap program serta isu yang berkaitan dengan rakyat dan terus memberikan khidmat kepada masyarakat terutama dalam kalangan masyarakat B40.”**



Namun, di sebalik kenakalan dan kehidupan pelajar yang penuh dengan drama, ia juga yang telah menjadikan beliau sebagai YB. Dato Mansor Othman pada hari ini kerana di USMlah beliau berjaya membentuk sahsiah diri dan seterusnya menjadi asas laluan kerjayanya selepas itu.

Sebaik sahaja menamatkan pengajian Ijazah Sarjana Muda Sains Kemasyarakatan pada tahun 1976, mantan Timbalan Menteri Pengajian Tinggi ini memulakan kerjaya pertama beliau di universiti ini sebagai pembantu penyelidik sebelum menjadi felo penyelidik selepas itu.

Beliau juga pernah memegang jawatan sebagai Timbalan Pengarah di Pusat Penyelidikan Dasar dan Kajian Antarabangsa (CenPRIS) dan seterusnya bergelar Pengarah di jabatan yang sama sebelum bersara dengan gelaran Profesor Madya dan seterusnya melanjutkan kerjaya beliau dalam bidang politik negara.

Pernah memegang jawatan sebagai Timbalan Ketua Menteri I Pulau Pinang, Mansor turut menyatakan bahawa pengalaman serta pendedahan di USM juga menjadi pencetus agar beliau lebih peka dalam berfikir, merancang serta melaksanakan setiap program serta isu yang berkaitan dengan rakyat dan terus memberikan khidmat kepada masyarakat terutama dalam kalangan masyarakat B40.

**“Pengalaman ketika terlibat dengan demonstrasi semasa bergelar pelajar contohnya, dan pengalaman bertugas di CenPRIS yang merupakan satu-satunya pusat sepertinya pada masa itu dalam membentuk dasar-dasar kerajaan berjaya menjadi asas pada semangat tokoh ini selain menjadi titik tolak kerja kemasyarakatan yang sering disertai serta diketengahkan oleh beliau hingga hari ini.”**

Pengalaman ketika terlibat dengan demonstrasi semasa bergelar pelajar contohnya, dan pengalaman bertugas di CenPRIS yang merupakan satu-satunya pusat sepertinya pada masa itu dalam membentuk dasar-dasar kerajaan berjaya menjadi asas pada semangat tokoh ini selain menjadi titik tolak kerja kemasyarakatan yang sering disertai serta diketengahkan oleh beliau hingga hari ini.

Turut tidak dilupakan beliau ialah ketua jabatan, guru-guru serta rakan-rakan sekerja di USM seperti K.J. Ratnam yang tidak pernah kedekut dalam berkongsi pengalaman serta mengajar beliau pada masa itu dan seterusnya menjadi tulang belakang di sebalik kejayaan beliau sebagai tokoh yang sangat dikenali pada hari ini.

“USM bukan sahaja membentuk diri saya pada hari ini, tetapi juga menjadi pemangkin terhadap setiap aktiviti kemasyarakatan yang telah saya pelopori serta sertai dari masa ke masa,” kata beliau.

Pada akhir wawancara, Mansor menyeru agar semua alumni USM beramai-ramai kembali ke USM untuk menyumbang bakti bukan sahaja kepada universiti tetapi juga kepada golongan terkebahawah dan seterusnya membuktikan bahawa produk USM bukan sahaja berjaya tetapi mempunyai nilai kemanusiaan juga.

*Teks: Siti Faizah Abdul Halim  
Suntingan: Azlina Md Sadik  
Foto: Muhammad Taufik Abdul Rahman*







## My First Crush

“Universiti Sains Malaysia (USM) has been one of the amazing stepping stones in my life. It all started in 1986 when I was 16 years old, and my school Sekolah Menengah Sains Tun Syed Sheh Shahabudin visited USM. The moment when the bus parked at Dewan Tunku Syed Putra (DTSP) in USM, I fell in love with the University. Without knowing what attracted me or why USM, I’ve made up my mind that USM will soon be the University to pursue my studies,” said Dr. Nil Farakh Sulaiman, a graduand in Bachelor of Arts with Education, 1994.

**“The knowledge and skills I learned in USM had molded me to be where I am right now.”**

Nil Farakh is now the Director at Pusat Genius Kurnia, a government-run purpose-built centre providing pre-school education and early

intervention for children six years and below who are diagnosed with Autism Spectrum Disorder (ASD). The unique thing about this centre is that the interior architectural work, which looks like a giant Swiss cheese located along Jalan Sentul Perdana in Kuala Lumpur. It is one of the few buildings in the country specially-designed to accommodate children with autism.

In sharing my success habit, I would say, do start your day early. During my days in USM, I started to train myself to become an early riser. I will normally wake up around 4.00 a.m. and do my revision. After performing my ‘Fajr’ prayers, I will take a nap before beginning my day and that has become a success habit for me until now.

Other than that, in every challenge there is always an opportunity. As a double major student, it was a challenge to keep up and to graduate on time. However, with the seniors offering great help, I managed to complete the course on time.

I also remember the advice from my academic advisor, being successful does not mean we know everything. It is true that when we teach, we need to be one step ahead of the students. At the same time, try not to portray that you know everything. If we don’t know, be honest and admit that we don’t know. Show them that you are working with them to find a solution. This is to nurture the students to be aware that even teachers are still learning and will keep on learning. It is important to be abreast with the current needs of the era.

Another great thing about doing a double major, Arts (English) and Science (Biology), I have learned to use both sides of my brain. Honestly, I am not really good with Arts since my English was just at the basic level. However, everything changed when I needed to analyze the script of the movie called ‘On The Pond’. The students needed to analyze the grey areas in the movie. This does not happen in Science. It is all about facts, connection and cause and effect. It is pretty straight forward in Science, but Arts teaches you to dig beyond logic. I have to say the skills I learned had helped me with my PhD. in Literature and also enriched my command of the English language.

The knowledge and skills I learned in USM had molded me to be where I am right now. Autism is not my niche; it's the typical kids. We used the term 'typical' for normal kids. At Genius Kurnia, I started learning the autism spectrum and the unique behaviour that they have. Although focusing on children with autism, Genius Kurnia also enrolls students with other disabilities such as cerebral palsy and children with multiple disabilities, students with hearing or visual impairment along with autism. These were among the major challenges for me as a typical person, but now I have become an advocate for autism.

Furthermore, early intervention education is considered new in Malaysia. However, I would welcome more graduates to venture into this line as every day, the demand is increasing. With an increase in autism diagnoses, more expertise (and experts) will be needed in this line. For those who are interested in this line, they may pursue their degree in the Health Sciences, with a speciality in Occupational Therapy, Speech Therapy, or you may pursue your studies in Special Education, Early Childhood Education. As we know, autism awareness among the public is increasing, but Malaysians need to learn what their weaknesses and strengths are, just like how we want them to be trained to be like us, the 'typical' persons. Instead of trying to mold them to be a typical person, why don't we learn to understand them. As a typical human, we too have our strengths and weaknesses.

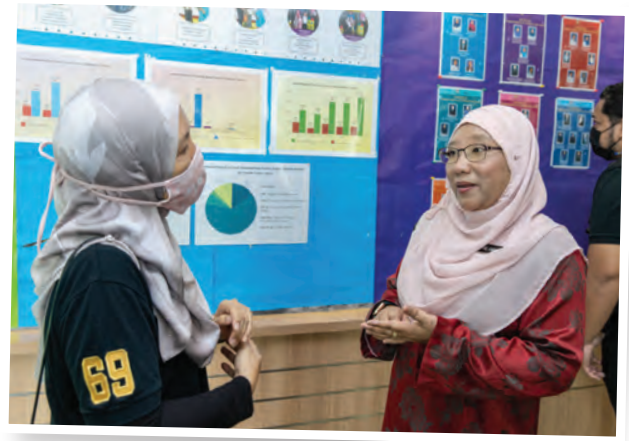
In fact, we can train them to use their unique characteristics to contribute to us, the typical community. Just like how this centre was built. Architect Mumtazah Mustajab planned the centre by drawing inspiration from the experiences of her 13-year-old son who has autism. She tries to 'enter' into his world and his mind to understand what he wants and what he needs. Thus, this unique centre was built by taking into account the whole autism spectrum. Inside, the compound's four blocks are designated into sections: high stimulus zone, low stimulus zone, buffer zone and an outdoor play area. Signboards are accompanied by visual images for easier comprehension. The school hosts a variety of spaces suitably designed for its special needs students, namely intervention rooms, calm rooms, movement rooms, therapy rooms, a gymnasium and classrooms.

It would be great if more students could venture into the field of special needs education, especially autism. We don't deny that there are some autism cases which are a bit hard to handle since there is a spectrum. However, with early intervention, we could nurture them according to their own unique spectrum. We could create more awareness to the public, to fit in with the autism or special needs community.

Sharing on how I manage my subordinates, I am a generation-X working with the millennials. The millennial generation can easily connect with the Internet of Things (IoT). They have a lot of creativity in using the IoT, but I found that they rarely know how to prioritise and choose the best option. Hence, we will be learning from each other on each advantage that we have. My task is to structure the information given to me. I always ask a lot of questions for them to ensure that they know what topics to be given focus the most.



I believed, to adapt and being flexible with each other is the key to handle an organization. My staff had successfully increased the number of followers in social media and I, on the other hand will assist in filtering the content for posting. My role is to highlight on the long-term goals. The new generation will normally plan for the short-term goals. So I will guide them to expand the ideas to be sustainable. As of now, they have shown incredible ideas by developing the DIY education materials, since most of the materials are expensive and not many parents can afford to have them. We are lucky however, to have a lot of support and passion from the staff and parents. Our sessions are usually conducted for two hours, where parents will also be involved in teaching their child the routines at home.



For your information, 'KURNIA' means 'GIFT'. Even though our focus is ASD, we normally include all special needs child when we provide awareness, because they are all gifted children. Through online platforms, we are able to reach more people from each state in Malaysia. When more Malaysians are 'Aware', we need to create the 'Understanding' and when they understand, we want to ensure the 'Acceptance', and finally Malaysia needs to 'Embrace' these gifted people. We hope that we will soon be like many other western countries, which give opportunities for them to be what they want to be.

My advice for students is to be work-ready; you have to understand that you are in the transition from being students to practitioners. I understand many Universities are now engaging with the industries to expose the students with the reality of work. Genius Kurnia is also part of the industry, and we accept interns. We will normally teach them that not all that they have learned can be applied at the current situation. They would still need to observe and have awareness about the environment. This is the place where they will be exposed to activities during their internship and they need to socialize with the parents and communities as well.

The best memories in USM is uncountable. Like I said, I knew that USM was a place I would love to be a part of. I registered and was accepted into Matriculations. The next four years at USM were full of great people and wonderful experiences. In USM, I had the opportunity to explore the culture in Penang and as I am a Kelantanese, USM offered me a diverse experience in culture and adventure during my study years. One great thing that I can ever forget was, I love spending my time at the library where I did my colorful mind-mapping notes and the next thing I noticed, my notes then became references for my colleagues. The notes were basically all over the class.

Opportunity is the best thing you can ask for in any academic institution. USM offered me that opportunity and I am eternally grateful.

**“With an increase in autism diagnoses, more expertise (and experts) will be needed in this line.”**

The most challenging task as a Director is to manage the human resource and to motivate the staff. But like I said earlier, there is an opportunity in every challenge. I would always remember to adopt the

Pygmalion Effect. Just like in the study conducted by Rosenthal and Babad in 1985, which stated:

“When we expect certain behaviours of others, we are likely to act in ways that make the expected behaviour more likely to occur.”

The work of Rosenthal and Jacobsen (1968), among others, shows that teacher expectations influence student performance. Positive expectations influence performance positively, and negative expectations influence performance negatively. Rosenthal and Jacobson originally described the phenomenon as the Pygmalion Effect.

So, never look down on the talent, as it will affect the talent according to what you perceive them to be. I would usually assign them tasks to be executed personally; this is to know how far they can challenge themselves. I have realized that most of them are able to execute the task given, even if it will be a bit behind schedule.

One example, we hosted a 'Karnival Semarak Kurnia' and I would have to say that the pandemic was a blessing, since our hall can only accommodate about 300 people per session. Hence during the pandemic, we have explored promotional exercises via recordings and webinars, which can reached the whole of Malaysia. This is the great effort from our passionate team.

**“Pemimpin bukan sahaja perlu menjadi contoh kepada kakitangan, namun perlu berani mengambil tanggungjawab. Jika ada dalam kalangan anggota organisasi berbuat salah, tindakan perlu diambil sewajarnya.”**



*Alumni Bulletin* berkesempatan menemubual salah seorang alumni terbilang Universiti Sains Malaysia (USM) yang juga tokoh yang cukup tersohor dengan ketegasan dan keberaniannya memerangi jenayah rasuah dan salah guna kuasa di negara ini. Beliau yang dimaksudkan ialah Mantan Ketua Pesuruhjaya Suruhanjaya Pencegahan Rasuah Malaysia (SPRM), Tan Sri Abu Kassim Mohamed (Sarjana Muda Sains Sosial, 1972).

Kepimpinan beliau tidak dapat disangkal. Sehingga kini, beliau yang juga pernah berkhidmat sebagai Ketua Pengarah Pusat Governans, Integriti dan Anti-Rasuah Nasional (GIACC) itu masih aktif menabur keringat dan idea kepimpinan di pelbagai peringkat komuniti. Terkini, beliau turut dilantik sebagai Profesor Adjung di salah sebuah Universiti Awam bagi membina modul yang berkaitan dengan pembangunan tingkah laku asertif, iaitu sifat yang berpegang kepada satu prinsip dan dapat menyatakan luahan hati secara terang tanpa menimbulkan sebarang konflik.

Banyak hal yang dibicarakan bersama beliau. Ternyata, figura yang berasal dari Kuala Lumpur ini mempunyai pelbagai cerita dan ‘tips’ yang boleh dijadikan panduan, baik untuk memperkasakan ilmu mahupun untuk menjadikan kita sebagai individu yang lebih baik dari semalam. Antaranya, beliau menyentuh aspek kepimpinan dan pentingnya untuk para belia Universiti mengoptimumkan masa dan potensi mereka ketika berada di kampus. Ikuti temubual khas bersama beliau dalam edisi kali ini.

# KEPIMPINAN

## Dari Sudut Pandang Tan Sri Abu Kassim Mohamed

### 1. Bolehkah Tan Sri kongsi rahsia kejayaan sebagai antara tokoh pemimpin yang dikenali di negara ini?

Saya percaya kita perlu mempunyai matlamat yang jelas dan memberikan fokus untuk mencapai objektif yang ditetapkan. Saya sentiasa memvisualisasikan apa yang saya mahu dalam sesuatu perkara ataupun kerja yang saya lakukan. Saya mempraktikkan perkara ini sejak dari muda lagi kerana visi yang jelas adalah hal utama yang akan saya titik-beratkan dalam sesuatu tindakan.

Sebagai contoh, ketika saya mengetuai SPRM, saya mengkaji erti kejayaan atau ‘success’ dalam kerja-kerja anti-rasuah. Bila saya dapat memvisualkan erti ‘success’ dalam hal ini, ia memudahkan saya untuk menjalankan amanah yang digalas.

## 2. Sejak bila Tan Sri mula mengenal erti kepimpinan?

Saya belajar banyak perkara ketika diberikan peluang sebagai pelajar USM. Saya membaca pelbagai jenis bahan bacaan termasuk majalah, jurnal dan sebagainya. Pada ketika itu, jurnal 'Aliran' agak popular kerana ramai pensyarah USM yang menulis di dalamnya, antaranya Chandra Muzaffar. Melalui pembacaan tersebut, saya banyak belajar mengenai *idealism* yang membantu membawa saya ke satu tahap bagi mencapai kejayaan dalam sesuatu bidang!

Saya juga belajar untuk memberikan teguran secara terbuka dan berhemah. Saya masih ingat ketika memberikan laporan berkenaan seorang pensyarah yang tidak menggunakan bahasa Melayu sepenuhnya ketika mengajar, mengikut syarat yang sepatutnya. Keesokannya, saya diperli di dalam bilik kuliah. Namun saya bangga dan masih boleh tersenyum kerana disebabkan teguran berkenaan, saya dapat melakukan perubahan. Pensyarah berkenaan mengajar dengan menggunakan bahasa Melayu dengan sepenuhnya. Itu yang penting bagi saya.

Ada beberapa kelas yang saya ingat, salah satunya mengenai pembangunan manusia. Ia sangat bermanfaat dan boleh diaplikasikan dalam keseluruhan karier kerana kita belajar cara untuk memberi respon kepada manusia, persekitaran dan sebagainya. Ia sangat membantu kerana pada akhirnya kita tahu sememangnya ada dua perkara yang sangat penting dalam kehidupan khasnya dalam karier, iaitu kemahiran berkomunikasi dan menulis.

Saya turut belajar isu interaksi antara manusia. Saya dihantar mengikuti program mobiliti ke Jepun, hadiah kemenangan setelah terpilih sebagai penerima pingat emas pertama USM untuk kategori kepimpinan. Di sana, pendedahan diberi lebih meluas dan ternyata benar, lebih luas kita menimba pengalaman di Universiti, ia akan menjadikan kita lebih matang dari yang lain. Bagi saya, ia juga salah satu faktor saya sentiasa di hadapan dan sering dipilih untuk menjadi pemimpin.

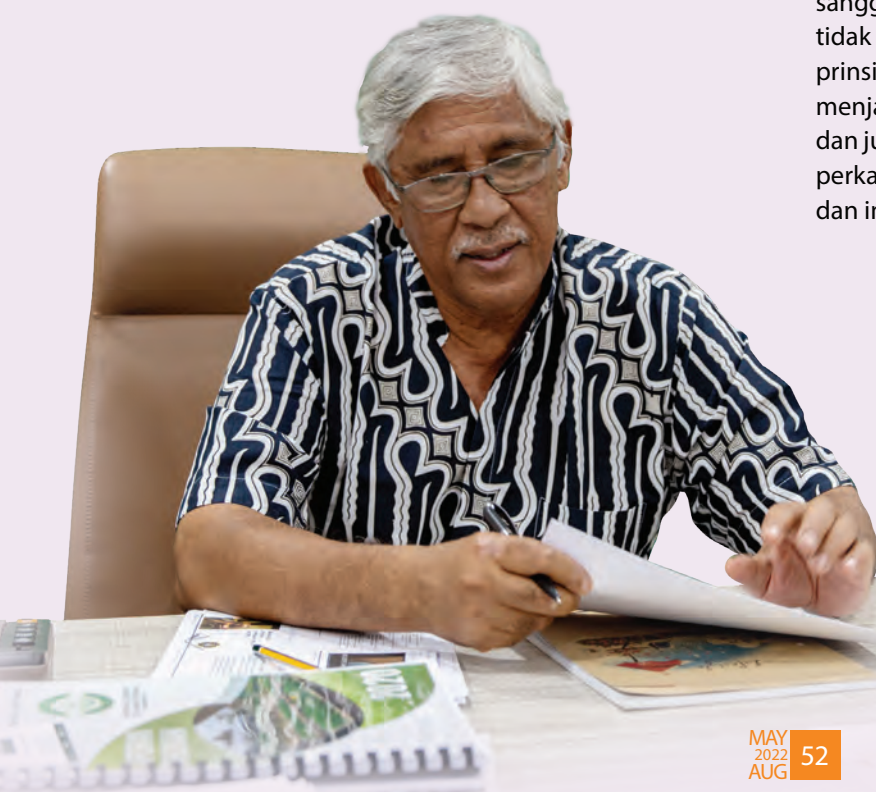
## 3. Apakah yang mendorong Tan Sri untuk berani memimpin?

Seperti yang saya katakan, '*a good leader must have a very clear visual*'. Saya tidak gentar untuk bercakap benar. Dalam sesebuah organisasi, cara kita menyampaikan sesuatu perkara atau tugas, memberitahu perkara yang betul dalam keadaan yang betul adalah amat penting. Saya juga tidak suka penipuan. *Don't lie to anybody*. Apa jua perkara yang tidak betul, kita kena tegur.

Kita perlu mempunyai prinsip. Saya gemar membaca dan saya ada terbaca mengenai satu perkara yang menarik dalam tulisan Stephen Covey iaitu manusia akan mencapai satu tahap bahagia atau kepuasan, bergantung kepada prinsip yang dipegang. Kalau seseorang itu gemar bermain saham, kalau sahamnya naik, beliau akan gembira, begitu juga dengan '*family person*'. Kalau ketika hendak keluar rumah dan berlaku pertelingkahan, maka satu harinya di luar akan menjadikannya tidak gembira.

Kalau kita percaya dengan prinsip, maka kita akan sanggup untuk melepaskan sesuatu dan berserah. Kita tidak boleh menjual prinsip yang dipegang. Selain prinsip, kita juga berlu ada maruah. Maruah dalam menjaga nama baik diri sendiri, keluarga, masyarakat dan juga negara. Jangan pernah memperdagangkan dua perkara ini kerana ia adalah asas kepada kewibawaan dan integriti dalam diri kita.

**"Saya sentiasa memvisualisasikan apa yang saya mahu dalam sesuatu perkara ataupun kerja yang saya lakukan. Saya mempraktikkan perkara ini sejak dari muda lagi kerana visi yang jelas adalah hal utama yang akan saya titik-beratkan dalam sesuatu tindakan."**



#### 4. Bagaimanakah Tan Sri mengembeling sumber manusia dalam organisasi dan memastikan mereka sentiasa berupaya memberikan yang terbaik?

Dalam pekerjaan, memahami kemampuan dan keupayaan staf di bawah seliaan serta memahami tingkah laku mereka adalah amat penting. Ia boleh menentukan sama ada kita boleh menguruskan sekumpulan manusia untuk terus bermotivasi ketika bekerja atau sebaliknya.

Saya sentiasa menerapkan konsep memahami tingkah laku dan memenuhi ruang yang ada untuk meningkatkan prestasi kakitangan di bawah seliaan, selain berusaha untuk mewujudkan suasana kerja yang produktif dan kondusif.

Saya turut mempraktikkan amalan untuk mengenali karakter setiap kakitangan dan percaya dengan usaha membantu mereka menutup jurang yang ada, di mana ia akan dapat membina semangat dan keyakinan untuk mereka sentiasa memberikan yang terbaik dalam tugas.

Sebagai contoh, jika pegawai saya mempunyai bakat yang cukup cemerlang dalam penulisan, namun tidak mampu untuk melakukan 'public speaking', saya akan pastikan beliau menguasai dan mengoptimimumkan skil yang ada, dan saya akan lakukan bahagian yang tidak dikuasainya. Ia perlu saling melengkapi.

Namun jika saya tidak memahami keupayaannya dan memaksa beliau melakukan perkara yang tidak dikuasainya, ia akan memberikan tekanan kepadanya dan tiada manfaat buat diri beliau dan juga organisasi.

Selain dari itu, kita juga perlu sentiasa berbuat baik kepada semua kakitangan. Bila kita memberikan layanan

yang baik, mereka pun akan memberikan reaksi yang sama dan melahirkan rasa 'inclusiveness' dalam menjalankan tugas masing-masing.

Pemimpin bukan sahaja perlu menjadi contoh kepada kakitangan, namun perlu berani mengambil tanggungjawab. Jika ada dalam kalangan anggota organisasi berbuat salah, tindakan perlu diambil sewajarnya. Jika tidak, kita akan mewujudkan satu persekitaran yang negatif kepada orang lain dan pada akhirnya akan menjadi satu budaya yang tidak baik dan menganggap tidak mengapa jika berbuat salah.

#### 5. Apakah nasihat Tan Sri kepada semua pemimpin?

Dalam hidup kita, paling penting adalah mempunyai tujuan hidup yang jelas. Saya juga suka untuk mengingatkan diri sendiri dan semua supaya jangan amalkan budaya 'double-standard'. Saya amat cenderung memerangi budaya negatif ini kerana perbuatan ini tidak mendatangkan sebarang faedah.

Kita juga perlu berani berkata benar. Kena berani mengatakan tidak, apatah lagi terhadap perkara yang salah. Sekurang-kurangnya dengan menyatakan tidak pada benda yang salah, kita dapat mengelak daripada berlakunya perkara-perkara yang tidak baik dan merugikan diri sendiri, organisasi dan juga negara.

Saya juga ingin mencadangkan di Universiti atau di sektor-sektor awam misalnya, wujudkan satu program atau kursus untuk meningkatkan kemahiran mengatakan tidak tanpa menimbulkan kesan sampingan. Kita perlu membudayakan amalan mengatakan tidak dengan cara yang baik tanpa konflik. Ini yang saya maksudkan dengan tingkahlaku asertif.

#### 6. Apakah pengalaman paling manis Tan Sri di kampus Minden USM?

1. Menjadi Penerima Pertama Pingat Emas USM dalam Kepimpinan. Ia adalah satu perasaan yang sukar digambarkan dan terasa amat dihargai.
2. Bertemu dengan pasangan hidup, Puan Sri Bebee Rasheedah Zachariah Merican.
3. Bertemu dengan sahabat-sahabat sesama Universiti.

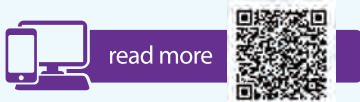
Sahabat di Universiti adalah sahabat yang jujur dan ikhlas yang sentiasa bersama ketika susah dan senang, sahabat yang dekat di hati sehingga ke hari ini. Pengalaman bersama rakan-rakan di Lembah Durian USM adalah antara yang tidak boleh dilupakan kerana di situlah kami berkumpul menunggu durian jatuh, memasak lemak ketam dan sebagainya. *It's really interesting to be a student!*



## USM AND CMUH TAIWAN SIGNED MOU to Promote Academic Exchange

The Universiti Sains Malaysia (USM) Advanced Medical and Dental Institute (IPPT) in Bertam recently signed a Memorandum of Understanding (MoU) with the China Medical University Hospital (CMUH) Taiwan.

The MoU was signed through a virtual ceremony conducted using the Webex video conferencing platform and streamed live in the official IPPT Facebook.



Text: Tan Ewe Hoe

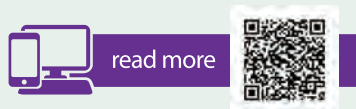


## MORE NEUROSURGEONS FROM USM for The Nation's Needs



Universiti Sains Malaysia (USM) has now produced 110 out of 152 recognised local neurosurgery specialists in the country, based on the latest data acquired from the National Specialist Register (NSR).

As said by USM Specialist Neurosurgeon, who is also a highly-experienced lecturer in surgery, Professor Dato' Dr. Jafri Malin Abdullah, the number however is still far from fulfilling the actual demand in the country.

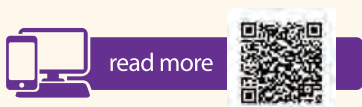


## KSU MOSTI MELAWAT CEMACS, Kagum Dengan Hasil Kajian

Ketua Setiausaha Kementerian Sains, Teknologi dan Inovasi Malaysia (MOSTI), Datuk Zainal Abidin Abu Hassan telah mengadakan lawatan ke Pusat Kajian Samudera dan Pantai (CEMACS) Universiti Sains Malaysia (USM) untuk melakukan tinjauan singkat serta berbincang mengenai potensi kolaborasi bersama di masa hadapan.

Ketibaan beliau disambut oleh Naib Canselor USM, Profesor Dato' Dr. Faisal Rafiq Mahamd Adikan; Pengarah CEMACS, Profesor Dato' Dr. Aileen Tan Shau Hwai dan disertai warga staf dan pelajar CEMACS yang lain.

KSU MOSTI kemudiannya diberikan taklimat khas oleh Naib Canselor dan Pengarah CEMACS.



Teks: Mohamed Hadri Iman Mohamed Hazli  
Foto: Shahnizam Ab Rahim



## USM COLLABORATES WITH MAG To Build A FOSA System

The signing of the Memorandum of Agreement (MoA) between Universiti Sains Malaysia (USM) and Malaysia Aviation Group (MAG) is intended to set up a Flight Operations Safety Audit (FOSA) system with the goal of automatically analysing and mining data into line operations as part of the Threat & Error Management (TEM) programme.

Apart from that, this partnership, which has continued for more than two years, will also be realising other 2 aspects, namely, to achieve a lean operational management as well as to conduct knowledge transfer through training, internships and industry lectures between both organisations.

This was said by the USM Deputy Vice-Chancellor Research and Innovation, Professor Dato' Ir. Dr. Abdul Rahman Mohamed during his opening speech at the signing ceremony of the MoA, held at the School of Mechanical Engineering, USM Engineering Campus.



read more



*Text: Siti Faizah Abd Halim  
Photo: Muhammad Taufik Abdul Rahman*

## Minden Pioneers 50<sup>th</sup> Anniversary

### Tabula Rasa Farewell

### Hi Tea

17<sup>th</sup> Dec 2022 • 230pm  
PAUM Clubhouse • Petaling Jaya







Block 13

## STRENGTH FROM WITHIN

Aptly known as the ‘infantry armskote’, the old Blocks 13, 14 and 15 were once part of the high security corridors of Minden Barracks armaments. Tucked away in a secluded precinct, it was here that routine deployments of combat weapons took place. These buildings continue to stand the test of time and are silent witnesses of many glorious deeds. An ‘armskote’ is another word for ‘armoury’.

Originally designed for Malarial and Hygiene Control unit in 1938, the use of these buildings for such purpose was short-lived. As World War II started a year later and rapidly progressed, military logistical matters escalated in number and took precedence. The buildings were then requisitioned by the army high command to be used as a light infantry weapon repository.

“When a soldier joins the military, one of the first things he receives is a weapon. He must learn to dismantle and assemble a gun. The gun had to be cleaned, dry and oiled by the soldier before handing over to the designated ‘armskote,’” ex-serviceman Abu Hanifah said, adding that all military personnel were required to turn in their firearms after use.

He revealed that Block 13 was where all the rifles and light-machine Bren guns were stashed whilst the hand grenades were stocked in Block 15.

“Even in those days, weapons were hoarded like gold for they were regulated items in the encampment,” Hanifah pointed out. “Double-armed guards were stationed at the checkpoint as the first line of defense”.

He recalled the security around Block 14 as being very tight, monitoring round the clock and of every visitor’s movement. The guards were authorised to shoot any intruder.

**“The charm of this secluded enclave remains encapsulated in time. The once forbidding buildings have transformed into a genial and familiar landmark that we see in Hadhanah Pusat Islam (Nursery of Islamic Centre, USM) today.”**



The classroom



Outdoor play area

The charm of this secluded enclave remains encapsulated in time. The once forbidding buildings have transformed into a genial and familiar landmark that we see in Hadhanah Pusat Islam (Nursery of Islamic Centre, USM) today.

Although the war days are over, these refurbished old buildings are continuing to serve 'battles' but this time for peace to reign. From the sterile high security environment of the bygone years, one can notice the stark difference it is now vibrant with the recital of prayers, the joyful sounds of kids in the nursery.

'Strength from within' is how the pre-school sums it up. Just about everywhere in the gathering space, the interior walls are adorned with valuable and insightful reminder: "Allah, The Most Powerful". Many prayers written on the walls have powerful truths, if discovered, can help motivate the child's confidence. The children will not have to load rifles, but they must be familiar with their routine lessons and learn them by heart. They may be preschoolers but they are taking all that is taught like good soldiers.

Just as weaponry being central to the soldiers' world, the preschoolers too have their own 'smart weapon'- the *du'a* (prayer) – to guide them face life's challenges. The Messenger of Allah (peace and blessings upon him) said, "*Du'a* is the believer's weapon." The true believer is always in direct and constant interaction with Allah, his beloved and his Lord. In fact, the pre-schoolers are doing just that – seeking blessing in a fun and engaging way.

**"Just as weaponry being central to the soldiers' world, the preschoolers too have their own 'smart weapon'- the du'a (prayer) – to guide them face life's challenges."**



Children reciting du'a

The rhythm of children chanting *du'a* (prayer before lesson) is one of the common prayer:

**"O' Allah, open for us Your Wisdom;  
And bestow open us Your Compassion,  
O' The Most Merciful,  
O' Allah, Give us knowledge,  
And Make us understand..."**

**"Through its "smart start" programme, the age-appropriate chores for pre-schoolers are designed to stimulate the social, emotional, mental and physical growth of young children."**

"Teach them when they are young and the values will remain with them for the rest of their life," said senior caregiver, Ustaz Rhaffor. He pointed out that the *du'a* gives the children an early start in developing strong, meaningful prayer habits.

"The basic *du'as* are easy to memorise and an average child knows more than her parents did at the same age," he added with a chuckle.

Thus far, Hadhanah goals have remained clear: Bringing every child in direct and constant interaction with Allah. Through its "smart start" programme, the age-appropriate chores for pre-schoolers are designed to stimulate the social, emotional, mental and physical growth of young children. Indeed the 'spiritual weapons' exist alongside the preschooler daily activities are no ordinary weapons. On the contrary to the lethal weapons that once stored in these buildings, the 'weapons' now issued to the children are to enable them to negotiate the minefields in life and emerge as a better person.

*Text and photo: Rusli Jamaluddin*

# BHEPA ACTIVITIES

## STUDENT SUPPORT SERVICES

50% OFF  
Desasiswa Fee for B40 under e-kasih

RM61,325      RM9,840  
• Tabung Kebajikan Pelajar   • Tabung Azman Hashim  
Financial aid in various need (eg: emergency in health related problem & death)



## SCHOLARSHIPS

RM651,200  
from 20 donors  
(Individuals & Industries)



## COUNSELLING UNIT

• COUNSELLING PROGRAMME

21 Programmes  
4,112 Participations

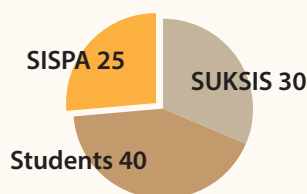


## GOLD MEDAL AWARD AND BOOK AWARD

8 Main Gold Medal Award RM32,000 / academic session  
90 Gold Medal Award RM45,000 RM500 / recipient  
32 Book Award RM8,000 RM250 / recipient



## VOLUNTEER WORK • TALENT DEVELOPMENT CENTRE

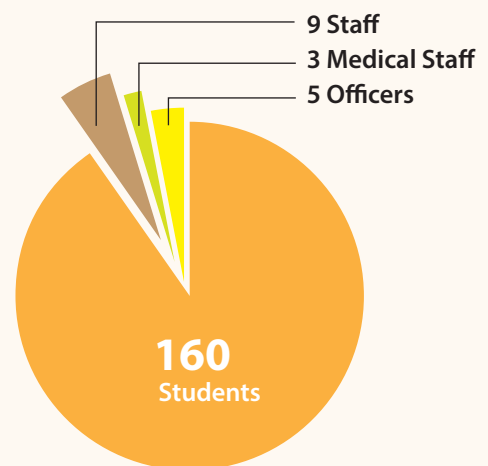


Hospitality during Convocation Week



The Hajj Operation Phase 1 & Phase 2

ASEAN Dengue Day  
60 students



Baling Flood Relief Mission



WELCOME TO USM  
#AlumniUSM

Happy  
**65<sup>TH</sup> MERDEKA!**

from  
Alumni Development Centre

