

CEFORE: A Joint UMT-PETRONAS Pilot Project

Located off Pantai Tok Jembal, CEFOR combines wind, solar, and wave energy in one renewable hub. More than just a test site, it's a center for innovation, education, and community learning-driving clean energy awareness and empowering future talent.



In this issue

- UMT Empowers Future Leaders through Special Summit
- SRD2025: Igniting Innovation for Society through AI and Multidisciplinary Research
- UMT, Aquaria KLCC Launch Phase 3 of National Coral Conservation Mission
- UMT Co-organizes Landmark Seminar Graced by His Royal Highness Sultan of Terengganu
- UMT Expands Strategic Collaborations with Industry and International Partners
- WOW 2025 Reflects UMT's Unwavering Support for UNESCO's World Oceans Day campaign
- AKUATROP, Four Aquaculture Companies to Collaborate on High-impact Projects
- UMT Placed Higher in Latest QS World University Rankings, Affirming Its Excellence in Marine Science and Environmental Sustainability
- UMT at the Forefront of Regional Action Against Sea Level Rise

eISSN 2805-5578



In today's work environment, we are facing unprecedented challenges. Rapid technological advancements, evolving organizational needs, and shifting workforce demographics call for a more strategic approach to human resource management at Universiti Malaysia Terengganu (UMT).

Five key areas must be addressed by the Registrar's Office, and the university, in relation to human resources.

The first is the integration of Artificial Intelligence (AI) into work processes. However, many university's support staff lack the technological skills to adapt, and a slow-changing organizational culture hinders the digital transformation process. Therefore, the Registrar's Office will provide AI training tailored to various levels of understanding. This will reinforce the role of the Pusat Pembangunan Bakat & Inovasi (PPBI) in guiding digital transformation efforts.

The second is the increasing mismatch between employees' skills and the actual needs of the university. This mismatch is visible among recent graduates, who often lack practical skills and real-world competencies. Also, due to rapid technological changes, many existing skills become obsolete quickly without time to adapt. In response, we are working to ensure workforce readiness by implementing regular competency assessments and collaborating with PPBI. Career development plans will be realigned to focus on future skills. The third relates to building anti-fragile employees, who not only endure pressure but grow stronger through adversity. Conventional approaches to resilience no longer suffice. Therefore, we will introduce a more holistic employee development programme incorporating emotional intelligence training, stress management workshops, and the creation of psychologically safe work environments. Encouraging strong working relationships will also help employees thrive amid the challenges.

Another area is the shift from blue-collar jobs to new-collar jobs. Blue-collar work typically involves technical or manual labor, while new-collar roles demand high technological proficiency without necessarily requiring a degree. This shift aligns with national and ministerial emphasis on Technical and Vocational Education and Training (TVET). We must study these new-collar roles and align them with the current needs of the university. This includes designing clearer career pathways and recognizing experience-based skills, thus contributing to a more inclusive and competitive labor market.



**Ts. Wan Abdul Manan
bin Wan Abdullah**

**Registrar
Universiti Malaysia Terengganu (UMT)**

Finally, the university must prepare for the reality of a multi-generational workforce. Increased life expectancy and higher retirement ages mean that workplaces today comprise employees of various ages, with different needs and work styles. Some senior employees may feel sidelined, while younger employees demand greater flexibility and faster career progression. We have implemented initiatives to bridge the gap, including mentoring programmes, flexible working hour options, and inclusive leadership development. In addition, employee engagement surveys, open feedback sessions, and ongoing recognition efforts are vital to ensure that all generations feel valued and heard.

The Registrar's Office must now operate in a landscape that is complex, fast-changing, and uncertain. With a strategic, inclusive, and human-centered approach, we will turn these five challenges into strengths that will drive the long-term success of the university.

UMT Empowers Future Leaders through Special Summit

By Shafie Umardi@Kamarol Bahrin & Muhammad Hisyamuddin Szali, Centre for Student Development and Empowerment

Universiti Malaysia Terengganu (UMT) recently hosted a special summit aimed at empowering the next generation of national leaders, in line with the aspirations of the Ministry of Higher Education (MOHE).

iFUTURE@UMT 2025, themed “Innovating Leadership: Empowering Youth for a Digital Future,” brought together hundreds of students from various local institutions, including Universiti Malaysia Kelantan (UMK), Universiti Sultan Zainal Abidin (UniSZA), and the Institute of Teacher Education, Dato’ Razali Ismail Campus.

Notably, this year’s edition, held at Dewan Sultan Mizan, UMT, also welcomed participation from international students representing countries such as India, Bangladesh, Indonesia, Pakistan, Nigeria, Iran, and Jordan, adding a cross-cultural dimension to discussions and networking collaborations.

A key highlight was the dialogue session featuring esteemed national figure Dato’ Dr. Hj Roslan Hussin, Director General of the Malaysian Nationhood Academy. The session provided a critical platform to discuss the role of youth in the digital leadership ecosystem and the nation’s future.

UMT Vice-Chancellor Professor Ir. Ts. Dr. Mohd Zamri Ibrahim congratulated the organising committee, especially the UMT Student Representative Council (MPP) led by Muhammad Aqasha Mukris bin Zainuri, for the success of this high-impact initiative.

“This achievement is highly significant in advancing the Student Empowerment Agenda at UMT. It is more than just a programme; it marks a major leap towards producing globally competitive graduates with cross-cultural experiences and international leadership readiness,” he stated.

Meanwhile, Chief Student Secretariat Qistina Wafiyah Shahrul Nizam emphasised the programme’s major impact in shaping student leadership character and innovative thinking in the digital age.

The event also marked a historic moment with the pre-launch of the UMT Student Icon Awards (AIS) 2025, the university’s highest recognition platform for excellence in leadership, innovation, volunteerism, entrepreneurship, sustainability, and intellectual pursuits.

AIS 2025 comes with a new, more exclusive format aligned with the MOHE’s Tokoh Siswa Awards, and introduces new categories, opening up more opportunities for outstanding students to be recognised. Winners will receive certificates of



appreciation, a special trophy, and a gold bar as a symbol of the highest honour bestowed on UMT students.

With strong support from the Ministry of Higher Education and the Malaysian Nationhood Academy, alongside the commitment of the entire university community, iFUTURE@UMT 2025 has proven that today’s students are not only ready but are fully capable of leading the future at a global level.

SRD2025: Igniting Innovation for Society through AI and Multidisciplinary Research

By Assoc. Prof. Dr. Noor Hafizah Abd Rahim & Ms. Haszailianawaty Mat Razali

A special event that reflects UMT's commitment to nurturing talent, embracing emerging technologies, and delivering innovations that serve society took place on campus recently.

The event, the 8th Annual Student Research Day (SRD2025), was held on 22 June at Dewan Sultan Mizan, celebrating a vibrant showcase of research excellence and cross-disciplinary innovation.

Themed "Innovations for Society: AI and Multidisciplinary Solutions for Tomorrow," SRD2025 was organized by this year's secretariat, the Faculty of Computer Science and Mathematics (FSKM). It brought together diverse student researchers, industry professionals, educators, and guests from local and international institutions.

A total of 72 outstanding projects were selected from 1,763 final-year UMT students, 31 under Final Year Project I and 41 Final Year Project II. The latter was categorized into technology, science, or social science research track. The projects tackled real-world challenges across AI applications, maritime innovation, environmental monitoring, education, social sciences, and economic analysis, demonstrating the breadth and impact of multidisciplinary research.

Unique to SRD2025 was the inclusion of 21 participants from nine external universities, including three international institutions. Seven attended physically, while 14 joined virtually, reflecting the event's growing global reach and recognition.

To strengthen academia-industry links, 25 expert juries from various professional sectors were invited as evaluators. Their feedback offered valuable insights for students.

"Overall, I found the quality of the projects very impressive," said Sarinadia Safri, Quality Engineer from Chubb Insurance Malaysia. "The ideas developed were highly relevant to industry needs. The students demonstrated strong technical skills, confident communication, and clear mastery of their work, reflecting both careful preparation and effective mentorship."

The project "Integrated Pharmacy Storage System" by Song Kai Xuan from FSKM won the Grand Award for its innovation, technical excellence, and potential impact on healthcare management.



Over 370 school students and 40 teachers from 18 schools across Terengganu visited SRD2025 and attended a talk that introduced artificial intelligence in a fun and relatable way, aiming to inspire the younger generation to explore careers in tech and innovation.

The selected 41 projects will be published in the UMT-Journal of Undergraduate Research (UMT-JUR) and other indexed journals, extending their academic contribution beyond the event.

SRD2025 was more than an academic showcase. It was a celebration of youthful creativity, multidisciplinary collaboration, and future-facing innovation. It was an inclusive platform that welcomed ideas from across borders and disciplines. Following its success, UMT now looks forward to an even more impactful SRD2026.

UMT, Aquaria KLCC Launch Phase 3 of National Coral Conservation Mission

By Associate Professor Dr. Tan Chun Hong

Universiti Malaysia Terengganu (UMT) and Aquaria KLCC collaborated recently and officially launched Phase 3 of the Guardian of the Reefs campaign, continuing a national initiative to restore coral reefs in Malaysia.

This new phase introduced the Coral Adoption Programme, aimed at encouraging greater public and corporate participation in marine conservation.

The launch event, held at Aquaria KLCC, was officiated by Dato' Simon Foong, Chairman of Aquaria KLCC; Dato' Haji Azahari Haji Othman, Deputy Director General (Development) of the Department of Fisheries Malaysia; and Professor Ir. Ts. Dr. Mohd Zamri Ibrahim, Vice Chancellor of UMT.

A live coral fragging demonstration was conducted by Associate Professor Dr. James Tan Chun Hong from UMT's Faculty of Science and Marine Environment, showcasing the scientific techniques involved in reef restoration.

During the campaign's Phase 2 in 2024, more than 1,000 coral nubbins were restored at Pulau Bidong through an RM200,000 collaboration. This milestone marked a shift from education and awareness to direct ecological action. Phase 3 will build on these efforts by expanding public access and corporate engagement through the Coral Adoption Programme.

The programme offers structured adoption packages to individuals and organisations. For the public, contributions range from RM10 to RM350 and include items such as coral-themed pins, e-certificates, pouches, and conservation newsletters.

For companies, tax-exempted contributions are aligned with Environmental, Social and Governance (ESG) and Corporate Social Responsibility (CSR) commitments. Corporate participants will receive documentation of measurable environmental outcomes and opportunities for employee and stakeholder engagement.

During the launch, Aquaria KLCC presented a symbolic cheque of RM52,500, representing 150 coral adoption packages sponsored by its employees and guests. The programme targets the restoration of 3,000 coral nubbins and aims to expand the coral garden to 2,000 square metres by the year 2027.



Coral reefs play a critical ecological and economic role, supporting more than 25% of marine species despite covering less than 0.1% of the ocean floor. They provide coastal protection, support fisheries and livelihoods, and are key to Malaysia's marine biodiversity. However, these ecosystems are increasingly threatened by climate change, pollution, and unsustainable tourism. The Coral Adoption Programme offers a practical, science-based approach to addressing these challenges and mobilising community involvement.

UMT and Aquaria KLCC remain committed to enhancing public awareness and national capacity for marine conservation. This partnership demonstrates that effective conservation requires collaboration between research institutions, the private sector, government agencies, and the wider community.

For more information or to participate in the Coral Adoption Programme, visit: [To support the movement or adopt a coral, visit UMT's Coral Conservation page](#) or follow [@officialUMT](#) on social media.

UMT Co-organizes Landmark Seminar Graced by His Royal Highness Sultan of Terengganu

By Associate Professor Dr. Riswadi Azmi, Ihsan Centre, UMT

The National Archives of Malaysia and Universiti Malaysia Terengganu (UMT) recently co-organized the Asia-Pacific Heritage Seminar: The Personal Letters of Baginda Omar, which was graced by the presence of His Royal Highness Al-Wathiqu Billah Sultan Mizan Zainal Abidin ibni Almarhum Sultan Mahmud Al-Muktafi Billah Shah for a special declaration ceremony.

His Royal Highness was present to graciously officiate the declaration of the *Personal Letter Collection of Baginda Omar* as an official UNESCO Memory of the World documentary heritage. The collection is recognised under the Memory of the World Committee for Asia and the Pacific (MOWCAP) by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

His Royal Highness also officiated the historic seminar held at UMT's Sultan Mizan Hall.

Also in attendance were Her Royal Highness the Sultanah of Terengganu, Sultanah Nur Zahirah, and His Highness the Crown Prince of Terengganu, demonstrating the royal institution's strong support for the preservation of the nation's documentary heritage.

The two-day seminar that received support from the Ministry of National Unity was attended by over 500 participants from across the country, including researchers, academics, historians, and students from various institutions of higher learning.

Baginda Omar, the 9th Sultan of Terengganu who reigned from 1839 to 1876, is remembered as a capable and visionary ruler who strengthened state governance, expanded diplomatic relations, and upheld Islamic values and the welfare of his people.

The *Personal Letter Collection of Baginda Omar* comprises 56 letters dated between 1848 and 1858, showcasing the Sultan's wisdom in statecraft and foreign relations, particularly with the Riau-Lingga Sultanate, the Kingdom of Siam, and the British. This collection was first declared a National Heritage in 2010 and later received UNESCO recognition on 8 May 2024 in Ulaanbaatar, Mongolia.



Also launched during the event was a book titled "*Warkah Baginda Omar, Sultan Terengganu IX (1839–1876): Warisan Agung Alam Melayu*" authored by Associate Professor Dr. Riswadi bin Azmi, Director of the Ihsan Centre, UMT. The book offers historical insights and analysis of the royal letters, written in classical Jawi script, highlighting courtly etiquette and the Sultan's diplomatic acumen and concern for his people's welfare. It elevates royal documents as vital cultural artefacts that preserve national identity and historical memory.

The seminar featured 13 presenters across four main sessions discussing political and diplomatic dimensions, economics, linguistic style, as well as cultural and religious aspects. This initiative serves as an important platform to strengthen academic research and public awareness of the historical significance of the nation's documentary heritage.

This recognition not only elevates Terengganu's heritage but also underscores Malaysia's role as a regional leader in the preservation of historical documents and the world's intellectual treasures.

UMT Expands Strategic Collaborations with Industry and International Partners

By Syarifah Noormaisarah Tuan Besar, International Centre

Universiti Malaysia Terengganu (UMT) recently signed two significant agreements: a Memorandum of Agreement (MoA) with Irshad HR Consulting Sdn. Bhd. and a Letter of Intent (LoI) with Hainan Tropical Ocean University, China, marking an important step in UMT's ongoing efforts to enhance graduate employability and expand international collaboration in marine and aquatic sciences.

Carried out under the theme "*Kreatifpreneur: Cabaran Inovasi Menjana Impak*", the programme involved 30 undergraduate students and three staff members from the Faculty of Fisheries and Food Science (FPSM).

The MoA with Irshad HR Consulting formalises the launch of the K-Youth Development Programme, a two-year initiative designed to equip UMT's penultimate-year students with vital soft skills and technical know-how. Through this programme, students will undergo structured training sessions and receive valuable industry placement opportunities to boost their career readiness. UMT's UMT-GEM unit will play a supporting role by providing logistical and operational assistance to ensure the programme runs smoothly. This collaboration reflects a shared goal of aligning academic outcomes with real-world industry needs.

Meanwhile, the LoI signed with Hainan Tropical Ocean University underscores UMT's commitment to academic internationalisation, particularly in the areas of marine sciences, oceanography, and environmental studies. This partnership will open doors for joint research, student mobility, and academic exchanges between the two institutions. This agreement builds upon earlier engagements dating back to 2019, and now includes strategic involvement from the Institute of Marine Ecology, Hainan Academy of Marine and Fisheries Sciences, and the School of Food Sciences and Technology. UMT encourages participation from key faculties — especially the Faculty of Fisheries and Food Science (FPSM), Faculty of Science and Marine Environment (FSSM), and the Institute of Tropical Aquaculture and Fisheries (AKUATROP) — to actively explore collaborative opportunities under this initiative.

"These partnerships represent more than formal agreements — they are the start of a greater journey grounded in shared



values, trust, and a commitment to impactful collaboration," said the Vice-Chancellor.

The signing ceremony on 25 June was graced by esteemed delegates from HTOU and Irshad HR Consulting, along with key representatives from UMT.

The delegation was warmly welcomed by Prof. Ir. Ts. Dr. Mohd Zamri Ibrahim, the Vice Chancellor of UMT and Prof. Dr. Mohd Izani bin Mohd Zain, Deputy Vice Chancellor (Student Affairs and Alumni), reflecting UMT's strong culture of hospitality and its commitment to fostering meaningful partnerships.

UMT looks forward to nurturing these partnerships and co-creating programmes and research that will benefit not only the institutions involved but also the broader communities they serve.

WOW 2025 Reflects UMT's Unwavering Support for UNESCO's World Oceans Day campaign

By Azida Abdullah, Institute of Oceanography and Environment UMT

Universiti Malaysia Terengganu (UMT) once again hosted its highly anticipated annual event, World Ocean Week 2025 (WOW 2025), in conjunction with the global celebration of World Ocean Day, observed on June 8 each year.

Carrying the theme "Hear the Ocean's Voice: Respect, Protect, Restore", the WOW 2025 celebration reflects UMT's unwavering annual support for UNESCO's World Oceans Day (WOD) campaign, held worldwide on June 8. WOW aims to deliver global awareness at the local level, fostering understanding within communities about the importance of keeping marine resources clean and healthy.

WOW 2025 featured a wide range of activities designed to raise awareness and provide opportunities for the public to join UMT in protecting the environment and nurturing a collective spirit of marine conservation.

Among the programmes held were the WOW 2025 Carnival, the Young Conservationist Poster Video Presentation, Beach Clean Up, Curatorial Volunteer Club (CVC): Citizen Science Ambassador, Sukarelawan Penyu (Sea Turtle Volunteers), the Coastal Geohazard Seminar: Adaptation and Mitigation Against Coastal Erosion and Climate Change, the Sea Level Rise Workshop, and the MSR Guidelines Workshop.

The WOW 2025 Carnival, the event's central programme, was held on 28 June at the UMT campus and its surrounding areas, led by the Institute of Oceanography and Environment (INOS), the main organizer of WOW 2025. The vibrant carnival featured various activities involving people of all ages, including Run With Penyu 5.0, a Children's Colouring Contest, Health and Dental Screenings, Sports Carnival, Young Conservationist Poster Video Presentation, and Sailing Towards a Sustainable Future. Over 3,000 participants joined the Run With Penyu 5.0, contributing to the festive atmosphere of the WOW 2025 Carnival.

As part of the Beach Clean Up (BCU) initiative, a cleanup was carried out at Teluk Ketapang Beach, involving 400 volunteers, including school students, parents, teachers, and local residents. The effort successfully removed over 300kg of waste, consisting mainly of plastic and assorted litter.

Through these initiatives, UMT delivered a strong message to the public about the importance of protecting, conserving,



and valuing marine resources in our daily lives. These efforts also helped to promote UMT's niche area in marine sciences and aquatic resources, reaffirming its role as a leading marine-focused university.

WOW 2025 was part of UMT's social responsibility to foster greater appreciation for the marine environment among local communities and safeguard the ocean's invaluable resources.

Together, let us hear the voice of the ocean.

AKUATROP, Four Aquaculture Companies to Collaborate on High-impact Projects

By Rohisyamuddin Othman, Solihah Ahmad, Prof. Dr. Muhammad Ikhwannuddin Abdullah

The Institute of Tropical Aquaculture and Fisheries (AKUATROP), Universiti Malaysia Terengganu (UMT), has further strengthened strategic ties between the academic and industrial sectors when it and four aquaculture companies exchanged research agreement documents recently in a symbolic ceremony.

The event witnessed the exchange taking place between AKUATROP and Balavat Bayu Sdn. Bhd., Entomal Biotech Sdn. Bhd., Deepblue Aquaculture Sdn. Bhd., and Serandu Aquaponic System Sdn. Bhd. All research projects involved will be funded under the Industry Matching Grant Scheme (IMaP), managed by the Ministry of Higher Education (MoHE) in collaboration with industry partners, with the aim of enhancing bilateral collaboration in high-impact research.

The ceremony was officiated by Prof. Ir. Ts. Dr. Mohd Zamri Ibrahim, Vice-Chancellor of Universiti Malaysia Terengganu, who also witnessed the exchange of documents alongside representatives of the participating companies. Also present were the principal researchers of the four IMaP projects, senior UMT officials, and AKUATROP staff.

In his speech, Prof. Zamri emphasised that this collaboration is a testament to the commitment of AKUATROP and UMT in advancing research, particularly in the fields of aquaculture and fisheries. "Through collaboration between the university and industry, the university not only drives research and development (R&D) progress but also fosters sustainable innovations that are relevant to market and national needs," he said.

The joint research will focus on mud crab farming technology, the development of alternative protein products using insects, catfish breeding using biofloc technology, and soft-shell crab production technology. These projects are expected to significantly enhance the productivity and competitiveness of the national aquaculture sector, while also facilitating technology transfer to industry stakeholders and local communities.

The IMaP research grant is a strategic initiative by MoHE to promote university-industry research collaboration through co-funding mechanisms. Each project involves both cash and in-kind contributions from industry partners, in line with the national aspiration to strengthen university research capabilities in delivering practical solutions that add value to the economy.



The document exchange ceremony not only marks the official commencement of the project collaborations but also reflects UMT's aspiration to continue leading the fisheries and aquaculture sector in the region. With ongoing support from the industry, AKUATROP is confident in producing high-quality research that will benefit the community, the nation, and the wider region.

UMT Placed Higher in Latest QS World University Rankings, Affirming Its Excellence in Marine Science and Environmental Sustainability

By Norhayana Jusoh, Office of Transformation, Strategic Planning and Risk & Rozita Alias@Abdul Latiff, Corporate Communications Office

Universiti Malaysia Terengganu (UMT) has made history by being listed for the first time among the world's top 801–850 universities in the QS World University Rankings (QS WUR) 2026.

This proud achievement strengthens UMT's position as a global leader in marine science and environmental sustainability and reflects the unwavering dedication and commitment of the entire UMT community to academic excellence and high-impact research.

UMT Vice-Chancellor, Professor Ir. Ts. Dr. Mohd Zamri Ibrahim, described the accomplishment as the result of robust strategic planning and strong collaboration across the university ecosystem.

"This ranking is more than just numbers, but it is also a manifestation of UMT's consistent growth in core areas such as marine science, environmental sustainability, and research," he said. "I extend my heartfelt appreciation to all lecturers, researchers, students, alumni, and staff for their invaluable contributions."

Previously ranked in the 1001–1200 band for five consecutive years, UMT's leap into the 801–850 tier marks a significant improvement, demonstrating that its UMT Strategic Plan 2023–2027 (PSUMT5) is beginning to yield results.

According to the QS WUR 2026 report, UMT performed exceptionally well in several key indicators. Notably, citations per faculty rose to 596th in the world, an improvement of 89 places from the previous ranking.

UMT also recorded a remarkable advancement in the Sustainability indicator, ranking 543rd globally, thanks to its ongoing green campus initiatives.

A significant increase was also seen in the International Students indicator, where UMT now ranks 588th, rising by 88 places. Today, international students at UMT represent more than 44 countries, further cementing its reputation as a preferred higher education destination in the region.



Professor Zamri said the success aligns with UMT's theme, Ocean of Discovery, for Global Sustainability, and fully supports the Malaysia MADANI aspirations and the strategic direction of the Ministry of Higher Education.

"We are on the right track to becoming Malaysia's premier marine-focused university and earning international recognition," he said. "This is not the end, but a new beginning to further enhance teaching, research, internationalisation, and sustainability efforts in line with PSUMT5."

The QS World University Rankings is one of the world's most prestigious university ranking systems, evaluating thousands of institutions based on six key indicators: Academic Reputation, Employer Reputation, Faculty-Student Ratio, Research Citations, International Students, and International Faculty.

"This success proves that even as a medium-sized university, with clear focus and collective spirit, we can compete on the global stage," he said. "We also extend our gratitude to industry partners, alumni, and the wider community for their unwavering support of UMT's transformation efforts."

UMT at the Forefront of Regional Action Against Sea Level Rise

By Dr. Wan Mohd Rauhan Wan Hussin, Deputy Director, National Antarctic Research Centre, UMT

Universiti Malaysia Terengganu (UMT) played a central role as co-organiser of the recently held ASEAN Workshop on Sea Level Rise, alongside the Ministry of Natural Resources and Environmental Sustainability (NRES), Yayasan Penyelidikan Antartika Sultan Mizan (YPASM), the Ministry of Energy Transition and Water Transformation through NAHRIM, and the National Antarctic Research Centre (NARC).

The effort was also supported by the ASEAN-EU-German Climate Action Programme (through German Agency for International Cooperation - GIZ) and the ASEAN Secretariat.

The workshop aimed to advance practical regional policy and deepen understanding of the science underlying sea level rise.

Southeast Asia, with its extensive coastlines and dense coastal populations, is particularly vulnerable to the effects of climate change, with sea level rise among the most pressing threats. This phenomenon accelerates coastal erosion, saltwater intrusion, endangering infrastructure, livelihoods, and ecosystems throughout the region. The Asian Development Bank estimates that by 2070 - 2100, the damages from coastal flooding might amount to an astounding USD 26.8 billion, equivalent to 0.1% of the region's GDP.

Acknowledging the urgent need for coordinated actions, Malaysia showed great leadership by organising the workshop on 11 - 12 June, as part of its ASEAN Chairmanship for 2025. Held at Raia Hotel & Convention Centre in Kuala Terengganu, the workshop gathered over 100 participants, including ASEAN policymakers, environmental experts, scientists, and climate practitioners.

Datuk Nor Yahati Binti Awang, Deputy Secretary General (Environmental Sustainability) of NRES, in her keynote speech emphasised the urgency of acting together as a region through shared information and cooperative planning.

As a leading coastal and marine science institution, UMT brought its academic strength and research experience to the table, especially in understanding the dynamics of sea level changes and their impact on coastal ecosystems. The participation of UMT demonstrates not only institutional



dedication but also Malaysia's overarching goal to support environmental solutions on a regional and worldwide scale.

As the workshop concluded, it became abundantly evident that sea level rise is a problem that cannot be solved by any single country, but rather requires coordinated efforts. With UMT's strategic role, Malaysia is setting an example of how academic institutions can help guide ASEAN toward climate resilience.

Dato' Seri Ir. Dr. Ahmad Samsuri Mokhtar, Menteri Besar of Terengganu, commended UMT for its excellent contribution in organising this workshop and said the state government is willing to engage with other agencies to address the issue of sea level rise. As a gesture of goodwill, the state also hosted dinner for delegates at Duyong Marina & Resort.



Dr. Maizah's primary research interest lies in understanding the dynamics of marine ecosystems, particularly the habitat use and species interactions of charismatic marine fauna such as sea turtles, marine mammals, sharks, and rays. Using advanced tools such as stable isotope analysis, fatty acid profiling, and field ecology, her research sheds light on the ecological processes that underpin marine ecosystem function. "In a time of climate change, pollution, and habitat degradation, it's critical to understand not just visible impacts, but also the complex trophic relationships that can trigger cascading effects across ecosystems," she explains.

Dr. Maizah's research is not confined to the lab or field, it extends into society. She collaborates with stakeholders from corporate partners like RHB Bank to run public education and conservation programmes under the Ocean Hope initiative, aligned with Sustainable Development Goal 14: Life Below Water. At the national level, she works closely with the Department of Fisheries Malaysia (DOF) and SEAFDEC to support the management of marine protected areas and advise on marine resource conservation strategies. On the international stage, Dr. Maizah is a founding member and Vice President of the Asian Shark and Rays Alliance (ASRA), a platform to elevate Malaysia's role in shark and ray conservation and align national efforts with broader regional strategies. "This role allows us to strengthen regional cooperation and contribute meaningfully to global marine conservation discourse," she says.

One of Dr. Maizah's most impactful projects, launched in 2019, used stable isotope analysis to investigate predator-prey relationships specifically between blacktip reef sharks and sea turtle hatchlings. This pioneering work not only advanced local scientific capacity but positioned stable isotope analysis as a vital tool for ecological research across Malaysia. "Introducing new technology came with challenges, but I saw those as opportunities," she said. "It allowed us to train researchers and foster national collaboration in marine science."

Looking ahead, Dr. Maizah aims to deepen interdisciplinary research and adopt innovative technologies to tackle complex ecological questions. Her approach bridges the gap between research, policy, and conservation, reinforcing her commitment to safeguarding marine biodiversity for future generations.

Dr. Maizah continues to inspire the next generation of marine scientists while playing a pivotal role in advancing Malaysia's contribution to regional and global marine conservation.



Assoc. Prof. Dr. Maizah Mohd Abdullah's academic journey began at Universiti Malaysia Terengganu (UMT), where she pursued a Bachelor's degree in Marine Biology and graduated in 2007. Her deepening interest in ecological science led her to a Master of Science (Research) in marine ecology. Dr. Maizah later completed her Ph.D. at Griffith University, Australia, specialising in the same field, before returning to UMT to serve as a lecturer and researcher.





Assoc. Prof. ChM Dr Mohd Zul Helmi Rozaini, a proud alumnus of Universiti Malaysia Terengganu (UMT), began his academic journey with a Bachelor of Science in Chemistry from the Faculty of Science and Technology in 2003. He went on to pursue a Ph.D. in Physical Chemistry at the University of East Anglia (UEA), Norwich, United Kingdom, graduating in 2007. In 2017, he earned a second Ph.D. in Biotechnology from UMT, under the supervision of Prof. Ts Dr Dr Mohd Effendy Abd Wahid, who is currently the Dean of the Faculty of Fisheries and Food Science.

One of his most meaningful personal achievements is being the first KUSTEM/UMT alumnus to complete a Ph.D. at UEA. This milestone challenged common misconceptions that local graduates were less capable than those from more established institutions. Through determination and faith, Dr Zul Helmi overcame doubts and stigma. He holds firmly to this principle: A gem, even if tossed into mud, will still shine.

Professionally, he has received numerous accolades, including UMT's Best Paper Writing Award (2009), Best Journal Article

Research Award (2010), and the Malim Ilmu Award for Teaching and Learning (2012). That same year, he was selected as a finalist for the National Young Scientist Award and appointed as an associate member of the Young Scientists Network – Academy of Sciences Malaysia. In recent years, he received the Vice Chancellor's Special Award (2020), the UMT Technology Transfer Award (2021), and most recently, the UMT Alumni Academia Icon Award (2023).

Actively involved in research, Dr Zul Helmi focuses on biomaterials and technology transfer. He has secured international research grants from Qatar University and the International Centre for Genetic Engineering and Biotechnology (ICGEB), Italy, as well as a private grant from Bioeconomy. His efforts have significantly contributed to UMT's performance in the Malaysian Research Assessment Instrument (MyRA).

His passion for teaching began during his undergraduate years through UMT's Heritage Club, where he taught underperforming students every Saturday. That experience ignited a lasting commitment to education and community engagement.

Today, as an academician, he finds fulfillment in shaping minds and transferring knowledge. He encourages young alumni never to feel inferior to graduates of other universities, reminding them that UMT alumni have succeeded at the highest levels. His advice for those aspiring to follow in his footsteps is simple yet powerful: Perseverance, not intelligence, is what brings you to the finish line.



FUSE 2.0

FOOD SUSTAINABILITY & SECURITY: AN INTERNATIONAL CONFERENCE

“Blue and Green Frontiers: Transforming Challenges
into Global Solutions”

22nd - 24th September 2025

Universiti Malaysia Terengganu (UMT), Terengganu, Malaysia

REGISTRATION FUSE 2025

PRESENTER PARTICIPANT		PRESENTER PARTICIPANT (STUDENT)	
Early Bird RM800 (Local) USD250 (international)	Normal RM1000 (Local) USD300 (International)	Early Bird RM350 (Local) USD100 (Online International)	Normal RM450 (Local) USD150 (Online International)
PARTICIPANT ONLY			
Early Bird RM400 (Local) USD100 (International)		Normal RM500 (Local) USD150 (International)	

IMPORTANT DATES

Early bird abstract due 31 st May 2025	Early bird registration 30 th June 2025	Notice of acceptance 14 th August 2025
	Notice of acceptance 14 th June 2025	Normal abstract due 31 st July 2025
		Full paper submission and registration due 31 st August 2025

FURTHER INFORMATION

For Registration
**VISIT OUR
WEBSITE**



Contact Us

SECRETARIAT FUSE 2025
UNIVERSITI MALAYSIA TERENGGANU
21030 KUALA NERUS, TERENGGANU MALAYSIA
E-mail :fuse@umat.edu.my
Webpage: https://fuse.umat.edu.my/

ORGANIZED BY



<https://fuse.umat.edu.my>



ICOET

The International Conference on Ocean Engineering Technology **2025**

Blue Economy: Advancing Engineering and Technology

CALL FOR ABSTRACTS

TOPICS OF INTEREST

- ✓ Maritime Technology and Naval Architectures
- ✓ Electrical and Electronic Technology
- ✓ Computer Applications in Ocean Engineering Technology
- ✓ Environmental and Renewable Energy Technology
- ✓ Others

REGISTRATION FEES

LOCAL PARTICIPANTS

Presenter	RM500
Listener/Non-Presenter	RM400

INTERNATIONAL PARTICIPANTS

Physical Presenter	RM650
Listener/Non-Presenter	RM400

***Fees included excursion and meal*

IMPORTANT DATE

ABSTRACT SUBMISSION

- 1st MAY, 2025

NOTICE OF ABSTRACT ACCEPTANCE

- 7th JUNE, 2025

PAYMENT DEADLINE

- 1st JULY, 2025

CONFERENCE DATE

- 5 - 7 AUGUST, 2025

FULLPAPER SUBMISSION DEADLINE

- 31st October, 2025

LOCATION OF CONFERENCE



UMTCC, Universiti
Malaysia Terengganu

More Information



<https://icoet.umat.edu.my/>

icoet@umat.edu.my





Unlock Your Potential with UMT The Ocean's Gateway!

Dive into Knowledge, Dive into the Future!
Be part of groundbreaking research and education focused on the oceans and marine sciences. At UMT, we are your partner for

Explore Our Dynamic Programmes:

- Master the Ocean, Shape the Future
- Explore the Deep with world-class Marine Science and Aquaculture programs.
- Innovation at Sea: Study Environmental Forensics, Coastal Management, and Marine Informatics.

UMT: Where Discovery Meets Impact
Collaborate with academicians, fellows, and professionals from around the world to create impactful solutions for the ocean.

Gain Expertise, Make Waves in Your Career

Join UMT to unlock vast research potential in Nautical Science, Marine Science, Coastal Development, and more.

Scan the QR code to begin your ocean exploration journey with UMT!



Universiti Malaysia Terengganu (UMT)
21030 Kuala Nerus, Terengganu Darul Iman, Malaysia
Website : www.umt.edu.my
Email : pro@umt.edu.my
Facebook : Universiti Malaysia Terengganu Official

International Centre
Tel : +09-6685183
Fax : +09-6684325

Centre for Academic and Quality
Tel : +09-6684335
Fax : +09-6684143



**Times
Higher
Education**

**THE WORLD UNIVERSITY
RANKINGS (ASIA) 2024**

301-350



**World University
Rankings
Young**

**THE YOUNG UNIVERSITY
RANKINGS 2024**

251-300



ASIA

**WORLD
UNIVERSITY
RANKINGS**

**QS ASIA UNIVERSITY
RANKINGS 2025**

195



**WORLD
UNIVERSITY
RANKINGS**

**QS WORLD UNIVERSITY
RANKINGS 2024:
SUSTAINABILITY**

561



**THE WORLD UNIVERSITY
RANKINGS 2024 BY
SUBJECT: LIFE SCIENCES**

801-1,000

