



UNIVERSITI SAINS MALAYSIA



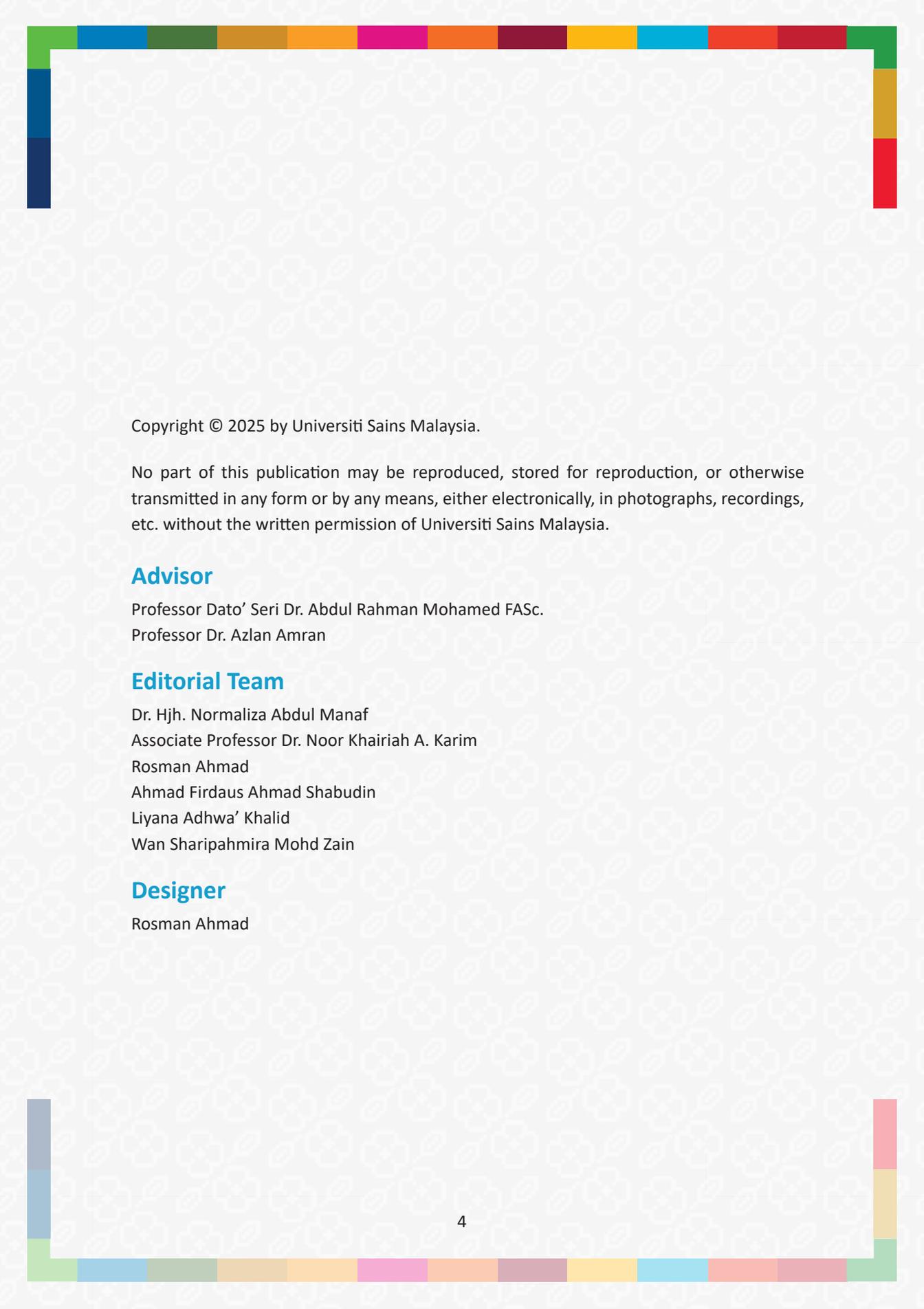
SUSTAINABLE DEVELOPMENT GOALS

2024 REPORT





UNIVERSITI SAINS MALAYSIA
SUSTAINABLE DEVELOPMENT **GOALS**
2024 REPORT



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Foreword



The Sustainable Development Goals (SDGs) represent a universal commitment to building a fairer, more resilient, and truly sustainable future. At Universiti Sains Malaysia (USM), this commitment is firmly embedded in our mission. It guides our priorities and strengthens our resolve as we advance impactful education, cutting-edge research, meaningful innovation, and transformative engagement with the communities we serve.

The USM SDG Report 2024 reflects how we continue to advance this mission through forward-looking initiatives and purposeful collaboration across the university. This progress is evident in the Times Higher Education (THE) Impact Rankings 2025, where USM is placed 14th globally and ranked No. 1 worldwide in three key areas: SDG 1 (No Poverty), SDG 16 (Peace, Justice & Strong Institutions), and SDG 17 (Partnerships for the Goals). These outcomes reinforce USM's standing as a global leader in sustainable development and highlight our ongoing commitment to meaningful, measurable, and responsible impact.

Equally integral to our progress are the grassroots-driven initiatives that continue to shape USM's sustainability culture. The Green Office and Green 'Desa' Programmes exemplify an approach that prioritises shared responsibility and institutional coherence, successfully engaging the wider university community. Notably, 50% of our Responsibility Centres (PTJs) have attained the 5-Leaf recognition, reflecting a high standard of operational sustainability across diverse academic and administrative units. Complementing these efforts, the No Single-Use Plastic Campaign, together with the BYOB (Bring Your Own Bag) and BYOC (Bring Your Own Container) initiatives, has cultivated a shift towards more conscious consumption and strengthened the adoption of circular practices throughout our campuses.

These achievements reflect a shared commitment in which every member of the USM community contributes meaningfully to advancing our sustainability vision. Our progress demonstrates not only the outcomes we pursue but also the values that guide our approach, grounded in collaboration, innovation, and responsibility.

I extend my sincere appreciation to our staff, students, and partners for their continued dedication and leadership in strengthening USM's sustainability efforts. As we look ahead, we remain focused on deepening the knowledge, capacities, and partnerships that will position USM at the forefront of shaping a more sustainable and equitable future.

A handwritten signature in black ink, appearing to read 'A. Rahman', with a long horizontal stroke extending to the right.

Professor Dato' Seri Ir. Dr. Abdul Rahman bin Mohamed, FASc
Vice-Chancellor
Universiti Sains Malaysia

Preface



The USM SDG Report 2024 reflects the spirit of collaboration, innovation, and shared responsibility that defines Universiti Sains Malaysia's sustainability journey. It documents our efforts to integrate the Sustainable Development Goals (SDGs) across teaching, research, operations, and engagement, transforming aspirations into action, and action into impact.

This year, USM's achievements in the Times Higher Education (THE) Impact Rankings 2025 stand as a proud testament to that collective effort. USM has been ranked 14th in the world overall, and achieved No. 1 globally in three SDGs which are SDG 1 (No Poverty), SDG 16 (Peace, Justice & Strong Institutions), and SDG 17 (Partnerships for the Goals). These recognitions underscore our leadership not only in academia, but also in driving societal transformation through partnerships and purpose-driven initiatives.

At the campus level, the Green Office and Green 'Desa' Programmes have continued to expand their influence, empowering staff, students, and surrounding communities to take ownership of sustainable practices. The attainment of 5-Leaf recognition by over half of our PTJs demonstrates that sustainability is no longer a concept but a culture practised within USM. Complementing these achievements, the No Single-Use Plastic Campaign and BYOB/BYOC initiatives exemplify our ongoing commitment to reduce waste, fostering behavioural change, and promote responsible consumption.

As the Deputy Vice-Chancellor overseeing Industry and Community Network, I take great pride in witnessing how partnerships, both internal and external, in amplifying the impact of our sustainability agenda. By connecting knowledge with practice, and university expertise with community needs, we are building an ecosystem that thrives on shared values and collective progress.

I would like to express my sincere appreciation to all contributors and partners who have made this report possible. May it continue to serve as a reflection of our achievements and a roadmap for our journey ahead where USM continues to lead, inspire, and act for a sustainable future.

Professor Dr. Azlan bin Amran

Deputy Vice-Chancellor (Industry and Community Network)
Universiti Sains Malaysia

Introduction

Universiti Sains Malaysia (USM), as Malaysia's APEX University and a national leader in sustainability, continues to strengthen its institutional commitment to the Sustainable Development Goals (SDGs) through an integrated approach encompassing education, research, innovation, governance, and community engagement. USM strives to balance academic excellence with environmental stewardship and social responsibility, ensuring that sustainability remains embedded in the university's policies, operations, and culture.

The year 2024 marks a significant milestone in USM's sustainability journey with the advancement of the Green Office and Green Desa Programme, a flagship initiative that has successfully mainstreamed sustainability practices across the entire university ecosystem. These programmes serve not only as recognition mechanisms but as catalysts for behavioural transformation, mobilising both staff and students to embrace responsible resource management, waste reduction, and green innovation within offices and student residential areas. As of 2024, 50% of USM's Responsibility Centres (PTJs) have achieved the highest 5-Leaf recognition, reflecting the university's strong governance, implementation consistency, and measurable commitment to sustainability excellence.

In the same year, USM launched the No Single-Use Plastic Campaign as part of its strategic move towards strengthening the Campus Circular Economy Framework. Through this campaign, the university actively promotes sustainable consumption and waste reduction practices, complemented by the "Bring Your Own Bag" (BYOB) and "Bring Your Own Container" (BYOC) initiatives. These efforts aim to cultivate a culture of environmental accountability among the campus community while reducing dependency on disposable plastics and minimising waste generation.

The USM SDG Report 2024 consolidates the university's comprehensive achievements and initiatives across academic units, research centres, administrative departments, and community partnerships. It reflects USM's success in operationalising the Whole Institution Approach, ensuring that every member of the university from leadership to students that contributes collectively towards advancing the SDGs and realising a more sustainable future.

Moving forward, USM remains steadfast in its commitment to strengthening sustainable governance, expanding strategic partnerships, and embedding green innovation across all university operations. Guided by collective responsibility and shared values, USM continues to lead the transformation towards a low-carbon, resilient, and sustainable campus, reaffirming its position as a regional reference institution in sustainability-driven higher education.

USM continues to chart its course as a university that transforms knowledge into meaningful impact, leading change, empowering humanity, and sustaining the future.

2024 HIGHLIGHTS—At a Glance

Our Students



Total Students

35,950



Low Income Students

27,777



Students With Disability

188

Our Employees



Total Employees

9,886



Disabled Employees

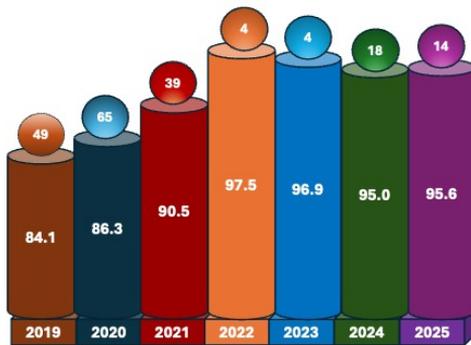
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Times Higher Education Impact Rankings 2025 (THE IR 2025)

RANKING AT A GLANCE

The Times Higher Education (THE) Impact Rankings evaluate universities worldwide based on their performance in research, teaching, stewardship, and outreach, aligned with the United Nations Sustainable Development Goals (SDGs). In 2025, the rankings included 2,526 universities from 130 countries worldwide.

USM continues to shine on the world stage, rising to 14th place globally in the THE Impact Rankings 2025, climbing four positions from 18th in 2024. Being among the Top 20 universities in the world is a remarkable achievement. What makes this milestone even more significant is that USM was ranked World Number One in three SDGs: SDG 1, SDG 16, and SDG 17.



#1 in Malaysia
#14 in the World

#1 SDGs in the WORLD



Universiti Sains Malaysia

SDG 1 | RANKING 1ST

NO POVERTY

Philip Batey
Philip Batey
Chief global affairs officer
Times Higher Education

Universiti Sains Malaysia

SDG 17 | RANKING 1ST

PARTNERSHIPS FOR THE GOALS

Philip Batey
Philip Batey
Chief global affairs officer
Times Higher Education

Universiti Sains Malaysia

SDG 16 | RANKING 1ST

PEACE, JUSTICE, AND STRONG INSTITUTIONS

Philip Batey
Philip Batey
Chief global affairs officer
Times Higher Education

Embedding Sustainability through the GreenOffice and GreenDesa Programmes

USM's flagship sustainability initiatives, GreenOffice and GreenDesa, continue to serve as transformative platforms that embed sustainable practices across campus operations and extend their impact into surrounding communities. Introduced in 2023, the GreenOffice programme integrates sustainability into institutional governance, cultivating a culture of environmental responsibility, efficient resource use, and community-based action.

The programmes contribute meaningfully to at least 14 Sustainable Development Goals (SDGs) through initiatives linked to health and well-being (SDG 3), quality education (SDG 4), clean water and sanitation (SDG 6), clean energy (SDG 7), decent work (SDG 8), reduced inequalities (SDG 10), sustainable cities (SDG 11), responsible consumption (SDG 12), climate action (SDG 13), life below water (SDG 14), life on land (SDG 15), and partnerships (SDG 17). These efforts strengthen USM's commitment to building a greener and more sustainability-driven campus ecosystem.

In 2024, the GreenOffice assessment recorded strong participation, with 51 PTJs achieving the highest 5-leaf rating, 31 PTJs receiving 4 leaves, 11 PTJs receiving 3 leaves, and 2 PTJs earning 1–2 leaves, demonstrating widespread engagement and continuous improvement across the university.



Sustainability Campaigns

In 2024, the university intensified its sustainability campaigns to promote eco-conscious lifestyles across the campus community. Key initiatives focused on eliminating single-use plastics and encouraging the widespread adoption of reusable bags, bottles, and food containers among students, staff, and vendors. These efforts aim to reduce waste generation, minimise environmental impact, and cultivate long-term sustainable habits. Through awareness activities, ground-level engagement, and strengthened policy enforcement, the campaign continues to foster a culture of responsibility and environmental stewardship across all corners of the university.



1 NO
POVERTY



End poverty in all its
forms everywhere

TEACHING AND LEARNING/ CURRICULUM



USM AS STRATEGIC PARTNER IN ANAK KITA PROGRAMME TO ADVANCE INCLUSIVE LEARNING

The *Anak Kita Programme*, a national collaboration between the Ministry of Finance, Ministry of Education, and Yayasan Hasanah, embodies this vision. With USM as a strategic implementation partner, the programme targets literacy and numeracy enhancement for 5,420 low income primary students in Kelantan and aims to improve SPM pass rates among 20,000 students nationwide between 2024 and 2025. Grounded in a *whole-of-nation* approach, the initiative provides remedial classes, teacher training, and digital learning tools to reintegrate marginalized students into mainstream education. USM's involvement reflects its commitment to evidence-based interventions that build human capital, reduce educational inequality, and create pathways out of poverty.



RODA PRIHATIN PROGRAMME TO UPLIFT B40 (LOW INCOME) STUDENTS VIA TVET

USM has launched Roda Prihatin Programme to uplift B40 (low income) students *via* Technical and Vocational Education and Training (TVET) skills. Through hands-on training, mentorship and contextualised curricula, the programme empowers low-income youths to acquire technical and vocational skills that enhance employability. By embedding social equity in pedagogy, USM ensures that education goes beyond theory and delivering relevant skills that meet industry demand and reduce barriers caused by poverty. The programme also fosters peer support, reflective learning, and local community engagement. In combining instruction with social purposes, Roda Prihatin exemplifies how teaching and learning can be a direct force in alleviating poverty, turning classrooms into engines for social mobility.

OPERATION (INSTITUTIONAL ARRANGEMENT)



USM'S ISDEV STRENGTHENS TEACHING AND LEARNING TO UPLIFT THE UNDERPRIVILEGED

ISDEV USM has secured RM232,443 in funding from PNB and ASNB to support programs targeting marginalized communities. Among the funded initiatives are scholarships for underprivileged students, digital literacy interventions for asnaf groups, and capacity-building for “Next-Gen Qariah.” By integrating these programs into teaching and learning frameworks, ISDEV turns education into a poverty-reduction tool: students from low-income backgrounds gain access to resources, mentoring, and tailored curricula that foster success. Scholarship support reduces financial barriers, and digital literacy equips learners with 21st-century skills.



ZAPICON 2024 PROMOTING TRANSPARENT AND IMPACTFUL ZAKAT GOVERNANCE

USM continues to strengthen institutional arrangements that address socio-economic challenges through effective zakat management. The Zakat Penang International Conference (ZAPICON 2024) highlights USM's commitment to promoting transparent and impactful zakat governance. By integrating academic discourse, policy development, and operational best practices, the conference enhances collaboration between universities, zakat institutions, and government agencies. This initiative ensures that zakat distribution is strategically aligned with poverty eradication goals, empowering B40 low income communities through education, entrepreneurship, and social support. USM's proactive role in institutionalizing zakat governance reflects its dedication to operational excellence and sustainable impact.

RESEARCH & INNOVATION

USM INNOVATES TO ALLEVIATE POVERTY THROUGH MUSHROOM INTEGRATION FARMING

USM is deploying research and innovation to uplift small farmers. The integrated Volvariella mushroom system cultivated alongside oil palm, has enabled 30 local participants, including single mothers and rural households, to generate additional monthly income of up to RM 4,000. Using agricultural waste substrates like oil palm bunches, this low-cost method is accessible, scalable, and environmentally friendly. USM researchers provide hands-on training, technical support, and oversight to ensure adoption and sustainability. By transferring knowledge directly into community livelihoods, USM leverages innovation to reduce vulnerability, strengthen rural economies, and promote inclusive growth. This model underlines the university's role as a research institution forging practical, poverty-reduction pathways in Malaysia.



COMMUNITY DEVELOPMENT THROUGH INNOVATION AND TECHNOLOGY PROGRAMME (K.I.T. PROGRAMME)

USM through the Division of Industry & Community Network (DICN), is leading the Community Development through Innovation and Technology Programme (Program K.I.T.), supported by a RM1.89 million grant from Yayasan Petronas. This research-driven initiative focuses on uplifting 1,615 B40 (low income) individuals nationwide through technology-based community solutions. The programme integrates innovation, entrepreneurship, and digital skills training to enhance employability, income generation, and community resilience. USM researchers and practitioners collaborate closely with local communities to co-develop sustainable interventions that address real socio-economic challenges. This initiative underscores USM's commitment to leveraging innovation and knowledge for inclusive growth and strengthening its role as a transformative university advancing the national agenda.



ENGAGEMENT (INDUSTRY & COMMUNITY)

USM AND TERAJU EMPOWER INDIGENOUS COMMUNITIES THROUGH SMART COMMUNITY PROGRAMME

In a strategic partnership to combat poverty and uplift underprivileged communities, Unit Peneraju Agenda Bumiputera (TERAJU) and USM have joined forces through Sustainable Marketing for Community (SMART Community) Programme to bring indigenous Sarawak products to global audiences. Since 2020, the programme, born from the INNO4C DPUB initiative, has recorded RM2.55 million in sales and successfully penetrated six international markets, including the USA, Japan, Saudi Arabia, Australia, Taiwan, and China. Under this model of industry-community engagement, USM and TERAJU assist rural artisans in refining product quality, securing certifications, and global market access. Notably, five primary Sarawak SKUs and fifteen downstream variants have gained FDA clearance and are now sold via eight e-commerce platforms and ten US business outlets. Enescorp International LLC spearheads the U.S. marketing, importing Malaysian honey and holding ads exceeding USD200,000 in value. The programme's success is attributed to strategic partnerships and the commitment to sustainable development and economic growth for underprivileged communities.



USM AND USAINS HAVE LAUNCHED THE HYBRID EDUCATION & INTERNATIONAL EXPERIENCE PROGRAMME (HEIEP) 2024, TARGETING B40 (LOW INCOME) STUDENTS

USM and USAINS Group have introduced the Hybrid Education & International Experience Programme (HEIEP), a transformative initiative that gives B40 (low income) students global learning exposure in Japan. Through partnerships with Setsunan University and Keiko High School, students engage in hybrid teaching and cross-cultural learning, blending classroom knowledge with real-world experience. This opportunity not only strengthens their academic and technical skills, but also builds confidence, communication, and global citizenship which are the key tools to break the cycle of poverty. By integrating teaching, learning, and mobility, HEIEP embodies inclusive education that creating pathways for underprivileged youth to transcend generational poverty and participate fully in a knowledge-based future.



2 ZERO
HUNGER



End hunger, achieve
food security and
improved nutrition and
promote sustainable
agriculture

TEACHING AND LEARNING/ CURRICULUM

INTRODUCTORY WORKSHOP ON SUSTAINABLE AQUACULTURE FOR OYSTERS AND SEA CUCUMBERS

From 27 to 29 May 2024, the Centre for Marine and Coastal Studies (CEMACS) reinforced its commitment to sustainable aquaculture through a free training programme designed to empower local fish farmers and coastal communities. Supported by three Ministry of Higher Education (MOHE) community research grants, the initiative translated academic knowledge into hands-on technical expertise focused on sustainable aquaculture management. Participants from Langkawi, Merbok, Morib, and Muar took part in the Introductory Workshop on Sustainable Aquaculture for Oysters and Sea Cucumbers, gaining practical experience in oyster farm management, depuration system operation, feed formulation, water quality monitoring, and disease control. These modules helped participants develop the capacity to manage aquaculture systems more efficiently while ensuring product safety and ecological balance. By offering the training free of charge, CEMACS provided local farmers and producers with direct access to food security knowledge and sustainable aquaculture practices that improve livelihoods, productivity, and environmental resilience.



USM STRENGTHENS FOOD SECURITY EDUCATION THROUGH URBAN FARMING LEARNING MODULES

USM continues to embed food security principles into its academic ecosystem through hands-on urban farming modules and sustainability-focused coursework delivered across several schools. These learning components introduce students to sustainable agriculture, composting techniques, and small-scale food production as part of experiential learning under the Green Office and Green Desa programmes. Students participate in structured activities such as germination workshops, compost production, and edible-garden maintenance. These modules enhance students' understanding of sustainable resource use, while promoting self-sufficiency and awareness of global food challenges aligned with SDG 2.



STUDENT-LED FOOD SECURITY AWARENESS PROGRAMMES ENHANCE NUTRITION LITERACY ON CAMPUS

USM students across multiple academic programmes have implemented food-security themed awareness campaigns focusing on nutrition, healthy eating, and responsible consumption. Through academic-linked assignments, service-learning components, and co-curricular activities, students design exhibitions, talks, and digital content aimed at educating peers on food waste reduction, balanced diets, and community food resilience. These curriculum-integrated initiatives foster informed behavioural change and complement USM's broader sustainability strategy.



OPERATION/INSTITUTIONAL ARRANGEMENT

IFTAR@USM: USM COMMUNITY AND LOCAL RESIDENTS BREAK FAST TOGETHER ON CAMPUS DURING RAMADAN

A four-decade-old tradition at USM saw its Islamic Centre (Pusat Islam) provide free daily 'iftar' (breaking of fast) meals throughout the holy month of Ramadan to thousands. This massive feeding program served between 2,000 to 2,500 people daily at the Main Campus's Al Malik Khalid Mosque alone, extending the aid to all three USM campuses and a medical institute. Deputy Director Ustaz Zayd Zahari stated the initiative aims to strengthen community bonds (*ukhuwah*), welcoming students, staff, families, and surrounding residents, including non-Muslims. Over 300 volunteers, including non-Muslim students, worked in a gotong-royong (communal effort) spirit to prepare large quantities of varied meals daily, starting as early as 10:00 am. In a push for sustainability, this year introduced a "Green Ramadan" campaign, encouraging those taking food home to bring their own containers to reduce waste. The entire program is sustained by generous financial contributions from the public, staff, and students.

Communication Foodbank



GREEN RAMADAN INITIATIVE PROMOTES SUSTAINABLE AND RESPONSIBLE FOOD CONSUMPTION

Complementing the long-standing iftar programme, USM introduced the “Green Ramadan” operational campaign to reduce single-use waste and promote conscious food consumption. Participants were encouraged to bring reusable containers to minimize packaging waste, aligning spiritual practice with sustainability principles. The initiative, coordinated through the Islamic Centre and campus volunteers, showcases USM’s commitment to integrating sustainable food practices into institutional culture while supporting thousands of community members daily.

USM UNIVERSITI SAINS MALAYSIA **APEX** **PUSAT ISLAM UNIVERSITI SAINS MALAYSIA** **MASJID AL-MALIKHALLI UNIVERSITI SAINS MALAYSIA** **REPRODUCE & SHARE** **DTMY**

KEMPEN RAMADAN HIJAU @ PUSAT ISLAM USM

SIFAR PLASTIK
Menggalakkan pengurangan penggunaan produk plastik sekali guna, seperti straw dan bekas makanan plastik, dengan menggalakkan penggunaan alternatif yang lebih mesra alam.

KONSEP 3R
Mendorong warga USM dan masyarakat untuk mengurangkan pembaziran, menggunakan semula barang, dan mengitar semula sisa untuk menjaga alam sekitar.

NO TO PLASTIC

BAWA BEKAS SENDIRI
Mendorong individu untuk membawa bekas makanan sendiri untuk berbuka puasa, mengurangkan pembaziran bungkusan makanan serta menyokong pengurangan penggunaan bekas makanan sekali pakai.

BEG KITAR SEMULA
Memupuk amalan menggunakan beg kitar semula yang disediakan di Pusat Islam USM untuk membawa barang-barang keperluan, mengurangkan penggunaan beg plastik sekali pakai, dan memberikan kesedaran kepada masyarakat tentang pentingnya pemuliharaan alam sekitar.



RESEARCH AND INNOVATION

ADVANCING SUSTAINABLE FOOD SYSTEMS THROUGH SCIENCE AND TECHNOLOGY

Food technology research at the university supports SDG 2 by advancing sustainable, safe, and nutritious food systems. Our interdisciplinary work integrates chemistry, microbiology, engineering, biotechnology, and nutrition to address key challenges in food security and quality. Research priorities include food safety enhancement, development of functional foods, innovative processing and preservation methods, and smart or sustainable packaging. Efforts also focus on reducing food waste through circular-economy approaches and resource-efficient technologies. Through strong collaboration with industry partners, government agencies, and regulatory bodies, our research translates into practical solutions that improve public health and strengthen national food resilience. Academic staff contribute across core fields such as food analysis, food chemistry, food engineering, food microbiology, processing, preservation, food safety, and nutrition.

USM RESEARCHERS DEVELOP SUSTAINABLE URBAN AGRICULTURE SOLUTIONS FOR FOOD-INSECURE COMMUNITIES

USM researchers are advancing urban agriculture innovations aimed at alleviating food insecurity in low-income communities. Research projects focus on optimizing small-scale vegetable production, compost-based soil enhancement, and resource-efficient growing systems suitable for urban households. These studies translate scientific knowledge into scalable community models, enabling households to supplement their food supply while promoting climate-resilient practices.

NUTRITION AND FOOD SECURITY RESEARCH ENHANCES UNDERSTANDING OF STUDENT WELL-BEING

USM academic teams continue to undertake research examining nutrition patterns, dietary habits, and food insecurity prevalence among university students. Findings highlight key challenges affecting students' health, such as limited food access and irregular meal patterns, and provide evidence-based insights to support targeted interventions. This research strengthens institutional policy-making and contributes to national discourse on hunger, nutrition education, and youth welfare.

ENGAGEMENT (COMMUNITY/ INDUSTRY)

USM MPP AND FOOD BANK MUTIARA JOIN FORCES TO LAUNCH 'COMMUNICATION FOODBANK' INITIATIVE

Students facing financial hardship at Universiti Sains Malaysia received vital support last week through a joint relief effort. The USM Student Representative Council (MPP) teamed up with Food Bank Mutiara and the USM School of Communication (SoC) for the "Communication Foodbank" initiative. The program, led by MPP representative Daneswaran A/L Muneswaran Thiagu, was aimed at providing essential items to students, particularly those in the B40 (Bottom 40%) income category. On June 6, a total of 100 packs of frozen food and 50 personal care goodie bags containing items like toothpaste and soap were distributed. Organizers emphasized that the collaborative gesture demonstrated a commitment to fostering a caring and supportive campus community for those in need.



USM X RECODA ENGAGEMENT PROGRAMME ON AQUACULTURE, TISSUE CULTURE, AND RICE CULTIVATION

On 12 July 2024, Universiti Sains Malaysia (USM), in partnership with the Regional Corridor Development Authority (RECODA) and the Upper Rajang Development Agency (URDA), hosted a free Engagement Programme on Aquaculture, Tissue Culture, and Rice Cultivation. The initiative was a knowledge exchange and field engagement event designed to connect government agencies, local farmers, and university experts in sustainable food production. Participants visited USM-led community project sites in Penang and Baling, Kedah. They observed practical demonstrations of freshwater fish farming, fig tissue culture, and polybag rice cultivation. These site visits highlighted how science, technology, and local knowledge can improve agricultural productivity, efficiency, and environmental sustainability. The event successfully facilitated direct collaboration and idea exchange, helping to disseminate practical innovations to enhance food security and income generation in Sarawak's rural communities. This engagement reflects USM's strong commitment to knowledge transfer, sustainable agriculture, and empowering farming communities by providing practical access to innovation and expertise.



USM FIG@MAHA 2024: KNOWLEDGE TRANSFER WITH LOCAL FARMERS AND FOOD PRODUCERS

At the Malaysia Agriculture, Horticulture and Agrotourism Show (MAHA 2024), held from 11 to 22 September 2024 at the Malaysia Agro Exposition Park Serdang (MAEPS), Universiti Sains Malaysia (USM) took an active role in promoting sustainable agriculture through free public engagement and knowledge-sharing sessions. A key highlight of the exhibition was a knowledge transfer session on fig tree cultivation delivered by Assoc. Prof. Dr. Chew Bee Lynn from the School of Biological Sciences, USM, on 14 September 2024 at the Kingdom of Agrofood Main Stage. Drawing from her experience at USM's Superfruit Farm, Dr. Chew provided farmers and food producers with practical insights on fig propagation, maintenance, and post-harvest management. Participants also engaged in a live demonstration featuring natural fig fruit jam and fig leaf tea, prepared without preservatives or artificial sweeteners, showcasing value-added applications for small-scale producers. The event served as a free, open-access platform for farmers and agripreneurs to exchange ideas, learn sustainable cultivation methods, and build networks with researchers and entrepreneurs.



3 GOOD HEALTH
AND WELL-BEING



Ensure healthy lives
and promote well-
being for all at all ages

TEACHING AND LEARNING/ CURRICULUM

USM AND PSU HOST 1ST INTERNATIONAL WEBINAR ON NATURAL PRODUCTS & NANOTECHNOLOGY

On 21 May 2024, USM's Biomedicine Programme (School of Health Sciences) and Prince of Songkla University (PSU, Thailand) co-organised the 1st International USM-PSU Webinar Series 2024 on Natural Products and Nanoparticles, held via Cisco Webex. The webinar opened with remarks by Prof. Wan Rosli Wan Ishak (Dean, PPSK USM) and Assoc. Prof. Dr. Pimonsri Mittraparp-Athorn (PSU), setting a collaborative tone for the event. The series featured subject experts from both institutions discussing advances, applications, and challenges of integrating natural product chemistry and nanotechnology in health and industry contexts. Around 130 participants attended, including students, faculty, and industry professionals, engaging actively through Q&A and discussion. Chaired by Assoc. Prof. Dr. Mohd Dasuki Sul'ain, the event was moderated by a committee ensuring smooth flow and participants' interaction. The webinar not only expanded scholarly dialogue but also set the stage for deeper cross-border collaboration in emergent interdisciplinary fields.

The poster is green and white with a leaf pattern. At the top, it features logos for USM, APEX, PSU, and the Faculty of Science. The main title is '1st INTERNATIONAL USM-PSU WEBINAR SERIES 2024' followed by 'NATURAL PRODUCTS & NANOPARTICLES' in large, bold letters. Below the title, the date and time are listed: '21 MAY 2024 (TUESDAY)' and '10.00 AM - 12.00 PM (MYT) / 9.00 AM - 11.00 AM (ICT)'. A note states 'A FREE WEBINAR FOR LECTURERS, EDUCATORS, AND STUDENTS'. A paragraph describes the event as a collaboration between USM and PSU. The poster lists six participants: three speakers and two moderators. At the bottom, it provides the organizing institutions and a QR code to join the webinar.

1ST
INTERNATIONAL USM-PSU WEBINAR SERIES 2024
NATURAL PRODUCTS & NANOPARTICLES

21 MAY 2024 | 10.00 AM - 12.00 PM (MYT)
(TUESDAY) | 9.00 AM - 11.00 AM (ICT)

A FREE WEBINAR FOR LECTURERS, EDUCATORS, AND STUDENTS

1ST INTERNATIONAL WEBINAR SERIES IS AN EVENT COLLABORATION BETWEEN UNIVERSITI SAINS MALAYSIA & PRINCE SONGKHLA UNIVERSITY, THAILAND. THIS WEBINAR WILL SERVE AS A PLATFORM FOR KNOWLEDGE SHARING AND EXCHANGE OF INFORMATION ON RESEARCH INNOVATIONS AMONG DISTINGUISHED EXPERTS FROM BOTH INSTITUTIONS.

SPEAKERS

MODERATOR 1

ASSOC. PROF. DR. NURUL AZMA
ABDULLAH

ASSOC. PROF. DR. HASMAH
ABDULLAH

DR. NUNGKAMAKHA
KH. SANGIT

MODERATOR 2

DR. SUTTHAN
WIRIYO

DR. SARAJINA
LETHIRIGKAM

ASSOC. PROF. DR. SAKILIN
THANASIT

ORGANIZED BY:
BIOMEDICINE PROGRAM, SCHOOL OF HEALTH SCIENCES,
UNIVERSITI SAINS MALAYSIA (USM), MALAYSIA
FACULTY OF SCIENCE, PRINCE OF SONGKHLA UNIVERSITY (PSU), THAILAND

SCAN TO JOIN
OR CODE

USM AND AL-MUSTAQBAL UNIVERSITY (UOMUS) FORGE POSTGRADUATE PARTNERSHIP IN ANATOMY

On 19 August 2024, Universiti Sains Malaysia formalised an Academic Programme Agreement (APA) with Al-Mustaqbal University (UOMUS), Iraq, to enhance bilateral cooperation in the field of anatomy. The signing ceremony took place at USM Health Campus, where USM's Dean of Medical Sciences, Prof. Dr. Abdul Razak Sulaiman, and UOMUS's Academic & International Affairs Advisor, Assoc. Prof. Dr. Hamza Mohammed Ridha Al-Khafaji, exchanged formal commitments. The collaboration will launch a mixed-mode postgraduate programme (MSc Clinical Anatomy) to benefit students in both institutions, particularly UOMUS candidates. This agreement intends to foster joint educational development, knowledge exchange, and shared research capacity. Prof. Abdul Razak emphasised that aligning educational programs with institutional and stakeholder needs strengthens both institutions' excellence. He expressed hope that graduates would be equipped with advanced anatomical knowledge and that ongoing cooperation would enhance research, teaching, and innovation across regions. UOMUS representatives voiced gratitude and optimism for the partnership's long-term impact.



USM PHARMACY CAREER DAY 2024: BRIDGING STUDENTS AND INDUSTRY IN HEALTHCARE

On 21 May 2024, USM's School of Pharmaceutical Sciences held Pharmacy Career Day and Talent Recruitment Drive at Dewan Budaya USM, aiming to connect students with industry expertise and career pathways. The event featured representatives from prominent pharmaceutical and healthcare organisations including Alpro, HTM, Nova, Guardian, Hovid, Duopharma, the Malaysian Community Pharmacy Guild, and the Ministry of Health Malaysia. A highlight was the signing of a Memorandum of Understanding between the School and HeyDOC, establishing formal collaboration. The programme delivered multiple talk sessions led by ten industry professionals covering areas such as patient care, innovation, regulation, and entrepreneurship. Booths showcased company products and services, facilitating interactive engagement. In her remarks, the Dean, Associate Prof. Dr. Nurzalina Abdul Karim Khan, emphasised that pharmacy extends beyond dispensing - it's about enhancing lives and serving communities with empathy, integrity, and excellence. She noted that career guidance and industry exposure are essential complements to academic preparation. This event underscores USM's commitment to aligning teaching with professional practice and empowering students to transition smoothly into the evolving healthcare sector.



OPERATION/INSTITUTIONAL ARRANGEMENT

USM INSTITUTIONAL COMMITMENT TO HEALTH & WELL-BEING: OPERATIONAL ARRANGEMENTS UNDER SUSTAINABILITY FOCUS

USM embeds health and well-being as one of its core institutional focus areas within its sustainability agenda. Under this framework, USM operationalises a series of structural arrangements and initiatives designed to enhance the health status of its campus community and beyond. Key measures include implementing wellness programs, promoting mental health services for students and staff, deploying facilities and infrastructure supportive of healthy lifestyles, and integrating health indicators into performance metrics across departments. The health-wellbeing focus also guides procurement practices to prioritise health-friendly products, supports campus safety and hygiene protocols, and promotes equitable access to health services on campus. By treating health as a foundational institutional responsibility rather than an ancillary program, USM aims to mainstream well-being across its teaching, research, operations, and community engagement domains. This operational anchoring reflects USM's alignment with SDG3 and strengthens the university's vision of sustainable, inclusive development.



USM HOSPITAL REBRANDED AS UNIVERSITI SAINS MALAYSIA SPECIALIST HOSPITAL (HPUSM)

Universiti Sains Malaysia has officially rebranded its teaching hospital, formerly known as Hospital USM, to Hospital Pakar Universiti Sains Malaysia (HPUSM), marking a new chapter in advancing healthcare, education, and research excellence. According to Professor Dr. Shaiful Bahari Ismail, Director of Health Campus, the rebranding aligns with HPUSM's role as a University Teaching Hospital (HPU) that prioritises teaching, learning, research, and specialised patient care. The new name distinguishes it from hospitals under the Ministry of Health while reflecting the wide range of medical expertise offered by its specialists and academic clinicians. Professor Shaiful highlighted that the rebranding strengthens HPUSM's identity as a centre of excellence and the preferred choice for the community seeking specialised care. He reaffirmed HPUSM's commitment to supporting the Malaysia MADANI agenda, which emphasises national well-being, resilience, and productivity through accessible and quality healthcare. The new name was approved during the 158th Meeting of the USM Board of Governors on 21 August 2024. As an institution under the Ministry of Higher Education (MOHE), HPUSM remains dedicated to training future professionals in Medicine, Dentistry, and Health Sciences while continuing to advance multidisciplinary medical research and community health outreach initiatives.



RESEARCH AND INNOVATION

SCIENCE FOR SCHOOL 2024: INSPIRING FUTURE HEALTH SCIENTISTS THROUGH HANDS-ON LEARNING

In 2024, Universiti Sains Malaysia's School of Health Sciences conducted Science for School 2024, a hands-on outreach initiative designed to ignite secondary school students' interest in health sciences. Over 50 Form 2 and 3 students, supported by their teachers from ten schools across Kelantan, participated in immersive educational modules including "Heart for Health", "Stem Cell: The Mother Cell of All Cells", and other laboratory demonstrations. The program was organised jointly by USM's Biomedical Programme and the Malaysian Tissue Engineering & Regenerative Medicine Society (MYTERM), with cooperation from the Kelantan State Education Department. By exposing students to live experiments, interactive sessions, and faculty mentoring, the initiative aims to strengthen health literacy, stimulate curiosity, and build a pipeline of future health professionals. The engagement also fosters linkage between USM's research and the local community, bridging academia and youth education. Science for School 2024 underscores USM's commitment to leveraging teaching and outreach to support Sustainable Development Goal 3: ensuring healthy lives and promoting well-being.



USM AND KEELE UNIVERSITY LAUNCH DUAL-PHD PARTNERSHIP TO STRENGTHEN GLOBAL RESEARCH COLLABORATION

USM has entered into a dual-PhD partnership with Keele University (United Kingdom), enabling students to earn doctoral degrees conferred by both institutions. This collaboration was formalised through a Memorandum of Agreement signed by USM and Keele in 2024, marking a strategic boost in international academic cooperation. The agreement is expected to facilitate joint supervision, shared resources, exchange of doctoral candidates, and collaborative research projects, especially in areas such as health sciences, environmental engineering, and multidisciplinary innovations. By integrating expertise and facilities across both universities, the dual-PhD programme will foster high-quality research output, capacity building, and cross-cultural scholarly exchange. USM leadership emphasizes that the partnership aligns closely with the university's commitment to global engagement and supports its role as a regional research hub. This initiative enhances the institution's competitiveness in producing world-class researchers and strengthens ties between Malaysian and UK academic ecosystems.



ENGAGEMENT (COMMUNITY/ INDUSTRY)

USM STUDENTS EXCEL IN 2024 MEDICAL DEVICES GRAND DESIGN CHALLENGE

In 2024, students from USM's Faculty of Physics participated in the Medical Devices Grand Design Challenge organised by Collaborative Research in Engineering, Science and Technology (CREST) in collaboration with Malaysia Aerospace Industry Association (MAIA) and the Association of Malaysian Medical Industries (AMMI). Eighteen teams across various disciplines developed prototype medical device solutions aimed at addressing real-world healthcare challenges. Notably, a USM team secured third place overall, also winning the Best Presenter award for their clarity in design concept and demonstration. The event provided students hands-on exposure to biomedical engineering innovation, covering technical design, regulatory awareness, usability, and pitching to stakeholders. USM's involvement demonstrates how cross-disciplinary student projects in science and engineering contribute to SDG 3 (Good Health & Well-Being) and SDG 12 by encouraging sustainable, efficient device design. Faculty sponsors, industry mentors, and prototype evaluation panels collaborated to support the event. The success underscores USM's emphasis on cultivating inventive talent capable of translating theory into impactful health technologies.



USM AND SAMTEC ASIA PACIFIC FORGE UNIVERSITY-INDUSTRY CO-OP PROGRAMME VIA MOA

On 23 July 2024, USM formalised a cooperative education partnership with Samtec Asia Pacific (M) Sdn. Bhd. through the signing of a Memorandum of Agreement (MoA). Led by USM's Deputy Vice-Chancellor for Industry & Community Network, Prof. Dr. Azlan Amran, the agreement aims to integrate academic coursework with immersive industry training for undergraduates in electronic interconnect and related engineering fields. Samtec's representatives, including its Plant Manager and HR leaders, expressed that students would gain hands-on experience across processes, maintenance, manufacturing, and control engineering units, complementing theoretical knowledge with real-world skill development. Both institutions also discussed future collaboration strategies to deepen their partnership. The co-op model is part of USM's commitment to produce highly skilled, industry-ready graduates, bridging university learning with industrial innovation and enhancing employability in high-tech sectors.



USM ENGINEERING CAMPUS AND ADVANCED ENERGY LAUNCH STRATEGIC RESEARCH PARTNERSHIP

On 12 August 2024, USM's Engineering Campus signed a strategic partnership with Advanced Energy Sdn. Bhd., a leading precision technology manufacturer. The collaboration, announced at a formal ceremony in Nibong Tebal, aims to strengthen academic excellence, knowledge exchange, and industry–university research integration. Professor Datin Dr. Azlina Harun @ Kamaruddin, Director of USM Engineering Campus, highlighted that the partnership will focus on collaborative research, talent development, and industry-based projects that bridge theory with real-world applications in electrical, electronic, mechanical, and manufacturing engineering. Advanced Energy's General Manager, Mr. Ahmad Abdelnaby, emphasized USM's strong reputation and pledged to invest resources in co-developing power modules and technology solutions. Under the agreement, USM's Schools of Electrical & Electronic Engineering will lead in AI, computer science and robotics research, while the School of Mechanical Engineering will tackle machine inspection, manufacturing processes and mechanical innovations. The partnership underscores USM's commitment to industry-relevant research and elevating student and researcher capacity through real industrial engagements.



4 QUALITY
EDUCATION



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

TEACHING AND LEARNING/ CURRICULUM

FULL ACCREDITATION STATUS APPROVAL FOR THE BACHELOR OF BUILDING ENGINEERING TECHNOLOGY WITH HONOURS

The Bachelor of Building Engineering Technology with Honours program, offered by the School of Housing, Building and Planning (HBP) at Universiti Sains Malaysia, has officially been granted Full Accreditation Status for a period of three years. This approval was conferred by the Engineering Technology Accreditation Council (ETAC) of the Board of Engineers Malaysia (BEM). This significant milestone was achieved following a rigorous, comprehensive evaluation visit conducted by the ETAC panel on May 8–9, 2024. The assessment verified the program’s adherence to ETAC’s stringent professional standards, confirming that the curriculum and resources adequately prepare graduates to function as competent engineering technologists. Notably, this accreditation establishes the program as the first engineering technology program within USM to receive official recognition from ETAC BEM. The endorsement affirms the University’s commitment to delivering high-quality, professionally compliant engineering technology education and enhancing the career readiness of its graduates.



USM SCHOOL OF PHYSICS-AMS OSRAM-SILTERRA COLLABORATE TO BRING INDUSTRY TO THE CLASSROOM 4.0

The Universiti Sains Malaysia School of Physics, in collaboration with industry partners ams OSRAM and SilTerra, successfully launched the fourth iteration of the 'Industry in the Classroom' Programme on 27 November 2024. This strategic initiative is specifically designed to empower postgraduate students in Applied Physics and Engineering Physics. The programme involves the delivery of eight structured technical lectures by engineers from the partnering companies, ensuring that the content—which covers subjects such as Solid State Physics and Thermal Management in Electronics—is directly aligned with the Master of Solid State Physics curriculum. The 'Industry in the Classroom' programme, which has benefited over 100 postgraduates since its inception, aims to strengthen the talent pipeline for the semiconductor sector. By bridging the gap between theoretical knowledge and real-world industrial application, this effort promotes academic excellence and directly supports Malaysia's National Semiconductor Strategy.



USAINS, USM LAUNCH STEM EXPLORANCE 2024: CHANGING PERCEPTIONS OF STEM EDUCATION FOR UNDERPRIVILEGED YOUNG LEARNERS

USAINS Holding Sdn. Bhd., in collaboration with Universiti Sains Malaysia, successfully organized the STEM Explorance 2024 program on 27 November 2024. This fully sponsored, one-day event was strategically designed to engage and inspire underprivileged young learners from the B40 community in Science, Technology, Engineering, and Mathematics (STEM) fields. The initiative addresses educational gaps by providing students in grades one through six with hands-on, dynamic activities that connect academic subjects to real-world applications. Activities included building solar-powered cars, engaging in skincare chemistry, and observing a live barn owl demonstration. The program aligns with USM's commitment to Environmental, Social, and Governance (ESG) principles and key performance indicators related to the Sustainable Development Goals (SDGs), particularly Quality Education (SDG 4) and Reduced Inequalities (SDG 10). By fostering intellectual curiosity and providing equitable access to quality education, STEM Explorance 2024 significantly supports the development of future talent and promotes societal inclusivity.



OPERATION/INSTITUTIONAL ARRANGEMENT

VC: USM EVER READY TO ACCEPT AND ASSIST NEW STUDENTS FROM LOW INCOME FAMILIES IN NEED OF FINANCIAL AID

Universiti Sains Malaysia is fully prepared to support students facing financial hardship, ensuring no aspiring learner is deterred from pursuing higher education due to monetary constraints. This institutional commitment aligns directly with the directive from the Ministry of Higher Education to assist underprivileged students. The Vice-Chancellor, Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed, confirmed USM's active readiness to accept new students without requiring upfront registration payment. This is primarily facilitated through the Siswa SULUNG 3.0 Student Development Programme, which offers first-generation students from B40 households full fee exemption throughout their studies. Furthermore, USM provides holistic support through flexible fee installment plans and various supplementary resources, including the Student Welfare Fund and the USM Zakat Fund. Students in financial distress are strongly urged to contact the Student Welfare Unit within the Student Development Affairs and Alumni Division (BHEPA) for immediate and confidential assistance. This multi-faceted approach underscores USM's dedication to providing inclusive and equitable access to education.



USM RETAINS SELF-ACCREDITED UNIVERSITY STATUS BY MQA



Universiti Sains Malaysia has successfully retained its prestigious Self-Accrediting University status, effective from 25 March 2024 until 2027. This retention follows a rigorous institutional audit conducted by the Malaysian Qualifications Agency (MQA) to ensure compliance with stringent national quality standards. First awarded in 2010, the self-accreditation status grants USM the authority to internally accredit its academic programmes—excluding those requiring validation by specific professional bodies—in accordance with the Malaysian Qualifications Framework (MQF). This recognition signifies that USM’s internal quality assurance mechanisms meet the highest institutional audit standards (COPIA and COPPA). The successful retention of this status is a crucial achievement, affirming USM’s commitment to academic excellence, quality governance, and continuous improvement across all educational and administrative departments. The university extends its deepest appreciation to the USM Self-Accreditation Centre and all stakeholders involved in the comprehensive compliance audit process.

RESEARCH AND INNOVATION

USM TEAM WINS GRAND PRIZE AT HUAWEI ICT COMPETITION (INNOVATION TRACK) 2024

A team from Universiti Sains Malaysia has successfully clinched the Grand Prize in the Innovation Track at the Huawei ICT Competition Malaysia 2024-2025. The winning team, comprising students Lim Miin Ning, Naomi Tham Kah Mun, and Bok Wei Hong from the School of Computer Sciences and led by Dr. Chong Yung Wey, excelled among over 1,200 participants from 40 Malaysian universities. This national-level victory highlights USM's commitment to fostering technological excellence and innovative thinking, directly enhancing graduate employability and industry readiness in the digital sector. As Grand Prize winners, the team will proceed to represent Malaysia at the subsequent regional competition stage in February 2025. This achievement reinforces USM's position as a national leader in nurturing future ICT talent and advancing technological progress, aligning with national digital economy goals.



NI ARC 2024: PIONEERING NEW ENGINEERS AND TECHNOLOGISTS IN ROBOTICS FOR SEARCH AND RESCUE

Universiti Sains Malaysia, in collaboration with NI Malaysia, successfully co-organized the 7th annual NI Autonomous Robotics Competition (NI ARC) 2024 at the USM Engineering Campus. The competition, themed “Robots in Search & Rescue: Blaze Buster,” engaged 13 teams from various institutions in designing and deploying robotic solutions for critical applications, specifically forest fire response, including navigation, victim rescue, and fire extinguishing capabilities. This industry partnership event is a vital platform reinforcing USM’s commitment to expanding student proficiency in Science, Technology, Engineering, and Mathematics (STEM). Highlighting USM’s innovative spirit, the USM F4 team notably secured the brand-new NI Creativity & Innovation Award for their exceptional design approach. Such initiatives ensure USM graduates are well-equipped with the critical thinking and advanced Industry 4.0 technologies necessary for addressing complex real-world challenges.



NEAR EXERGAME FROM ENGINEERING CAMPUS USM SECURES RUNNER-UP POSITION IN NATIONAL JAMES DYSON AWARD 2024



A team from Universiti Sains Malaysia's Engineering Campus achieved the esteemed Runner-Up title in the National James Dyson Award (JDA) 2024 for their project, the "NEAR Exergame." This innovation, an advanced neurorehabilitation tool, utilizes interactive, movement-based gaming and a custom force plate system to provide engaging and effective therapy for stroke patients. It offers personalized, real-time feedback and tracks progress using AI, addressing the limitations of traditional rehabilitation methods. This significant national recognition underscores USM's commitment to translational research and reinforces the capability of our students to develop high-impact, interdisciplinary solutions for critical healthcare challenges.

USM MEDICAL GENETICIST RECEIVES A MENTION IN PRESTIGIOUS NATURE MEDICINE JOURNAL

Professor Dr. Zilfalil Alwi, a Consultant Child Specialist and Medical Geneticist from USM, was recognized as an author in the prestigious journal Nature Medicine for the article, “The WHO Genomics Programme for Equitable Implementation of Human Genomics for Global Health.” Dr. Zilfalil, the sole Malaysian among the 15 appointed members of the World Health Organisation (WHO) Technical Advisory Group on Genomics (TAG-G), contributed to the working paper which underscores the vital role of human genomics in global health. The WHO Genomics Programme aims to ensure equitable access to genomic technologies, which have revolutionized disease diagnosis and treatment since the human genome was first sequenced. The initiative addresses the disparity in access, particularly in low- and middle-income countries, by promoting investments, collaborations, and establishing ethical principles for data use to improve individual and population health worldwide.



ENGAGEMENT (INDUSTRY & COMMUNITY)

USM AND JMA HELD 'STREAM + BAKAU LAB' PROGRAMME FOR HANDS-ON SCIENCE EXPERIENCE



Universiti Sains Malaysia, through its School of Educational Studies (PPIP), successfully partnered with the Japan Malaysia Association (JMA) to launch the STREAM + BAKAU LAB Showcase in Kedah. Officiated by the Consul-General of Japan in Penang, the programme engaged 30 primary school students in innovative, hands-on scientific study focusing on mangrove ecosystems (Bakau). This initiative is strategically designed to integrate Science, Technology, Engineering, Arts, and Mathematics (STREAM) with vital environmental awareness. By facilitating the application of theoretical knowledge in a real-world, ecological context, the project cultivates creative thinking and self-confidence among young learners. The collaboration serves as a robust model for environmental education, positioning USM as a leader in fostering impactful community engagement and establishing a new benchmark for experiential learning across Malaysian schools.

USM RCE PENANG COLLABORATES WITH SMAN 10 FAJAR HARAPAN IN INTERNATIONAL SEMINAR ON SDGS TO EMPOWER YOUTH FOR SUSTAINABLE DEVELOPMENT

Regional Centre of Expertise (USM RCE Penang) recently strengthened its international commitment to sustainability through a significant collaboration with SMAN 10 Fajar Harapan, Indonesia. Together, they successfully hosted an International Seminar on the Sustainable Development Goals (SDGs). This pivotal event focused on empowering high school students to become active proponents of sustainable development within their communities. The seminar, which featured discussions on various SDGs, fostered cross-border knowledge exchange and collaboration among youth from both nations. By promoting the implementation of the SDGs at the grassroots level, USM RCE Penang reinforces its role as a leading academic institution dedicated to achieving global sustainability targets and cultivating the next generation of environmentally and socially responsible leaders in the ASEAN region.



USM EFP STUDENTS LEAD THE WAY IN SUCCESSFUL COMMUNITY ENGAGEMENT PROJECT



Universiti Sains Malaysia School of Languages, Literacies and Translation (SoLLaT) EFP students successfully executed a major two-week community engagement project in collaboration with the Penang State Education Department (JPN). This initiative focused on enhancing critical communication and linguistic skills among secondary school students. The programme engaged 150 participants from thirteen schools in workshops covering storytelling, public speaking, and debate, culminating in a high-stakes competition. Beyond benefiting the secondary students, the project provided invaluable Service-Learning (SULAM) experience for the EFP cohort, who managed all logistical and functional aspects, thereby honing their professional organization, teamwork, and leadership skills. This community-focused effort reinforces USM's commitment to creating real-world impact and developing graduates equipped with career-essential soft skills.

5 GENDER
EQUALITY



Achieve gender
equality and empower
all women and girls

TEACHING AND LEARNING/ CURRICULUM

GENDER AWARENESS COURSE (PROFESSIONAL) LEVEL 1 SERIES 1/2024

The Gender Awareness Course (Professional) Level 1 Series 1/2024 was held from 2–5 July 2024 at Lecture Room 1, Malaysian Social Institute. The workshop was attended by 27 officers from the Management and Professional Group across various ministries and agencies. The facilitators were gender experts from the Women’s Development and Gender Research Centre (KANITA), Universiti Sains Malaysia. This course is expected to enhance participants’ knowledge and understanding of gender development discourse at both national and international levels, while also discussing the importance of action, professional practices, and building skills in examining economic, social, and political issues through gender frameworks and perspectives.



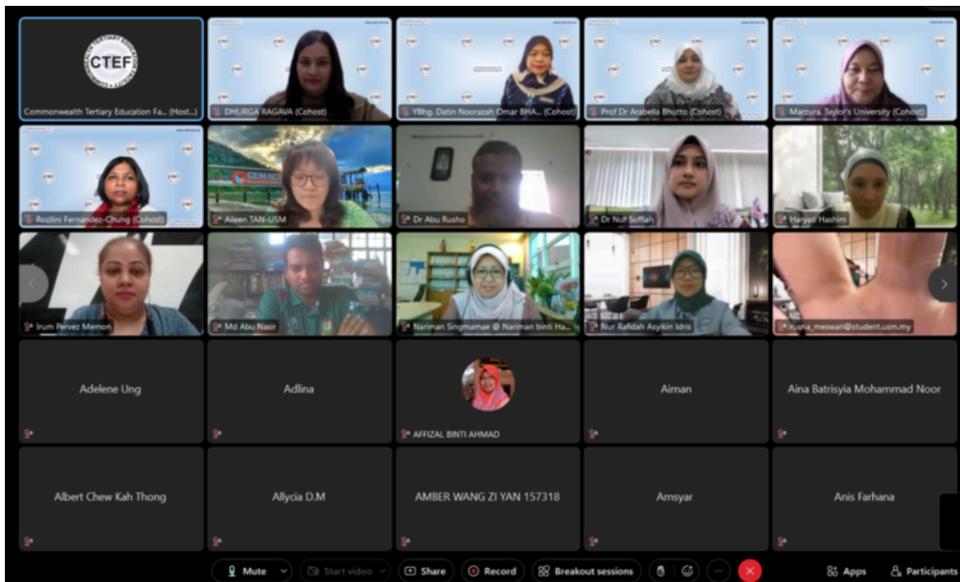
THE ASIA FOUNDATION - USM COLLABORATION IN STEM CONNECTHER PROGRAM: ENCOURAGING WOMEN'S PARTICIPATION IN UNDERREPRESENTED SUBJECTS

The STEM ConnectHer Program 2024 marked a key milestone in USM's efforts to enhance women's participation in underrepresented STEM fields. Led by The Asia Foundation (TAF) in collaboration with the School of Aerospace Engineering, the initiative builds on TAF's earlier partnership with KANITA, which first connected the Foundation with USM. Launched in June 2024, the program empowers female undergraduates through global learning networks, professional mentorship, and industry exposure. Its implementation combines virtual and in-person components. Participants received free access to TAF's online learning hub for training in STEM, leadership, and employability. The program also included on-campus or industry engagement events and a Career Accelerator pathway, in which up to 100 students strengthened both technical competencies and soft skills for STEM careers.



COMMONWEALTH ACADEMIC FORUM 2024: EMPOWERING WOMEN'S LEADERSHIP IN HIGHER EDUCATION

The Commonwealth Academic Forum 2024, held online on 25 March 2024, brought together global experts to discuss the growing importance of women's leadership in higher education. Jointly organised by the Commonwealth Tertiary Education Facility, MOHE, Universiti Sains Malaysia, IPPTN and PenDaPat, the forum centred on the theme "Shattering Expectations: Women Leadership in Higher Education." The session highlighted how women are redefining academic leadership, breaking long-standing barriers, and contributing to transformative institutional change. Discussions also aligned with global efforts to advance gender equality and quality education. In her opening remarks, USM Deputy Vice-Chancellor (Academic and International), Professor Dato' Gs. Dr. Narimah Samat, emphasised the critical role of women leaders in accelerating progress toward Sustainable Development Goal 5 on Gender Equality.



OPERATION (INSTITUTIONAL ARRANGEMENT)

TOWNHALL SESSION ORGANISED BY KANITA, TOWARDS A GENDER EQUALITY POLICY

The Centre for Research on Women and Gender (KANITA), Universiti Sains Malaysia, continues to advance efforts in strengthening gender equality policy by hosting a Gender Equality Policy Townhall Session today at the Engineering Campus. This inaugural programme, organised by USM's Gender Equality Policy Committee (DKG) under the leadership of its Director, Professor Dr. Saidatulakmal Mohd, marks a significant initiative. In her speech, Engineering Campus Director, Professor Datin Dr. Azlina Harun @ Kamaruddin, commended the committee's dedication, noting the session as a platform for better understanding of gender issues. She emphasised inclusivity, stressing that gender equality concerns both women and men.



CO-ORGANISING PENANG STATE-LEVEL INTERNATIONAL WOMEN’S DAY (IWD) 2024

Universiti Sains Malaysia (USM) co-organised the Penang state-level International Women’s Day (IWD) 2024 celebration on 7 March, in partnership with the Penang Women’s Development Corporation (PWDC). This marks USM’s first formal collaboration with the state for IWD, reflecting a shared commitment to advancing gender equality under SDG 5. At the press conference, State EXCO Lim Siew Khim highlighted that USM’s involvement strengthens efforts to empower women in Penang. Representing the Vice-Chancellor, KANITA Director Professor Dr. Saidatulakmal Mohd emphasised USM’s global standing in sustainability rankings and its long-term dedication to SDG 5 through research, teaching, and community engagement. Over 2,000 participants are expected at the launch, followed by the “Forum Bicarawara” and the “Purple Challenge” mini race. Celebrations will continue throughout March via PWDC’s partners. Meanwhile, USM’s Community Network Director, Dr. Ainul Mohsein Abdul Mohsin took the opportunity to encourage participants of the explore race to bring their own containers, in line with the university’s advocacy for zero plastic usage.



NURTURING WOMEN LEADERS THROUGH MARINE SCIENCE AT USM CEMACS

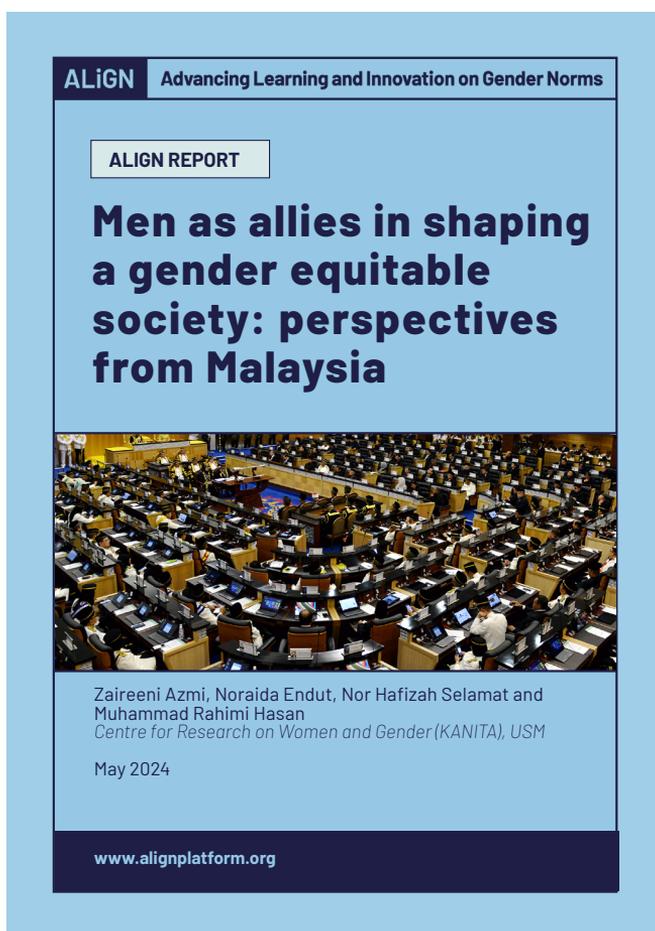
The Universiti Sains Malaysia Centre for Marine and Coastal Studies (CEMACS) hosted 158 delegates from the CUEPACS Women’s Leadership Retreat Workshop, “Leadership 2024.” The retreat aimed to foster leadership skills through diverse experiences, focusing its morning session on marine science and research. Participants gained deeper insights into marine ecosystem conservation and the critical role of coastal management. CEMACS Director, Professor Dato’ Dr. Aileen Tan Shau Hwai, highlighted that the hands-on session connected leadership principles with real-world environmental challenges. This engagement successfully broadened participants’ knowledge, equipping future women leaders with the awareness needed for meaningful decision-making in their respective fields.

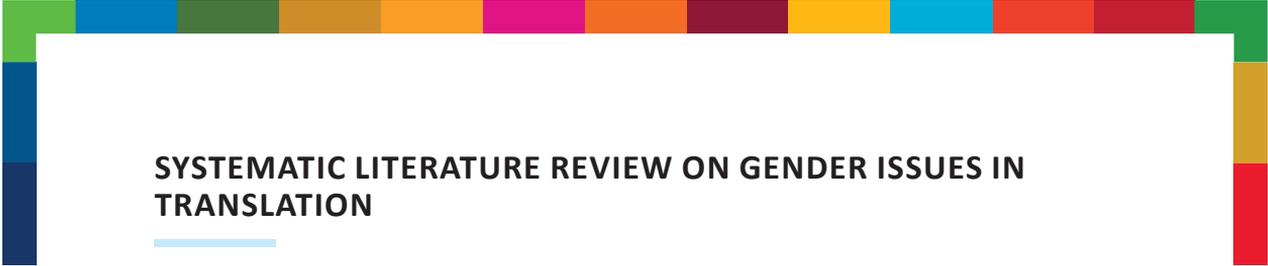


RESEARCH & INNOVATION

MEN AS ALLIES IN SHAPING A GENDER EQUITABLE SOCIETY: PERSPECTIVES FROM MALAYSIA

This research aims to provide valuable insights that can inform strategies and interventions to target inequitable masculinities and foster positive changes in the norms, attitudes, and behaviours of men in positions of political power. This is crucial for the future of Malaysia, given that the active dismantling of masculine norms can pave the way for a more equitable, inclusive and democratic society that values the potential contributions of all citizens, regardless of their gender. At the same time, the failure to address the lack of gender equality and the persistence of masculine norms in politics carries substantial consequences and potential risks, not least the lack of political representation for women, resulting in an incomplete democratic process.





SYSTEMATIC LITERATURE REVIEW ON GENDER ISSUES IN TRANSLATION

USM researchers in the School of Languages conducted a systematic review in 2024 to examine gender representation in translation studies, highlighting how linguistic and cultural practices in translation can perpetuate or subvert gender stereotypes. A study titled “Gender Issues of Language in Translation: A Systematic Literature Review” by Huda Saad Mudheher al-Sammarraie, Mozhgan Ghassemiazghandi, and Salasiah Che Lah (USM, School of Languages) was published in 2024. This research investigates how gender and gender stereotypes are represented in language through translation, from a feminist theoretical lens. It contributes to gender knowledge by uncovering how translation practices can reinforce or challenge gender norms.

GRADUATE GENDER-STUDY PROGRAMMES DRIVING INTERSECTIONAL RESEARCH

KANITA’s postgraduate research programmes, including a PhD in Gender Studies and an MSS in Gender Studies, drive in-depth, interdisciplinary research on issues such as women’s leadership, policy, development, and social justice, supporting long-term institutional capacity for gender equality research. These postgraduate research programmes build strong capacity in gender scholarship; they produce research that directly addresses structural gender inequalities and inform policy and social change.

ENGAGEMENT (INDUSTRY & COMMUNITY)

2ND GCC INTERNATIONAL CONFERENCE FORGES INCLUSIVITY TO TACKLE PRESSING CHALLENGES IN EDUCATION

Universiti Sains Malaysia, through the School of Educational Studies (PIIP) in collaboration with GCC-USM and the Asia-Pacific Centre of Education for International Understanding (APCEIU), hosted the 2nd GCC International Conference on Global Citizenship Education (GCED) from 6–8 August at the USM Main Campus. Centred on the theme “Building Inclusive Communities Through Global Citizenship Education,” the event featured 90 presenters and participants from Malaysia, Japan, Ghana, Indonesia, Thailand, and the Philippines. Keynotes by Dr. Hyun Mook Lim and Prof. Dato’ Dr. Sivamurugan Pandian highlighted the importance of GCED in bridging policy-practice gaps, fostering cultural respect, and empowering youth as active global citizens.



HARPSWELL HOSTS SIXTH ANNUAL ASEAN WOMEN'S LEADERSHIP SUMMIT IN PARTNERSHIP WITH THE UNIVERSITI SAINS MALAYSIA

Harpswell, in partnership with Universiti Sains Malaysia, will launch its sixth ASEAN Women's Leadership Summit in Penang. The two-week programme brings together 22 women leaders from ASEAN countries and Nepal, representing sectors such as education, health, government, and community impact. Organized with the Centre for Research on Women and Gender (KANITA), the summit offers leadership development and networking with international experts. Sessions will feature Dr. Chheang Vannarith on ASEAN's future, Dr. Dato' Noraida Endut on gender opportunities, WAKE International on AI and leadership, Dr. Alan Lightman on critical thinking, and Penny Burt on workplace leadership.



6 CLEAN WATER
AND SANITATION



Ensure availability
and sustainable
management of water
and sanitation for all

TEACHING AND LEARNING/ CURRICULUM

ENGINEERING WORKSHOP: INTRODUCTION TO RAINWATER HARVESTING: HARVESTING, TREATMENT & SAFETY

Universiti Sains Malaysia's River Engineering and Urban Drainage Research Centre (REDAC), in collaboration with Universiti Kebangsaan Malaysia (UKM), hosted an engineering workshop titled "Introduction to Rainwater Harvesting System: Harvesting, Treatment, Safety" at Bangi Resort Hotel, Selangor. This educational initiative formed part of the **Engineering X Project: Elevating the Safety of Rainwater Harvesting Systems**, aimed at developing a structured **rainwater harvesting curriculum** for students and professionals. The workshop emphasized the scientific principles, treatment processes, and safety protocols necessary for integrating rainwater systems into sustainable water management practices. Participants were introduced to methods of collecting, storing, and treating rainwater for domestic and non-potable use while addressing health and safety concerns such as microbial contamination and chemical pollutants.



USM OFF-CAMPUS WATER CONSERVATION SUPPORT INITIATIVES

Universiti Sains Malaysia actively extends its sustainability initiatives beyond the campus through off-campus water conservation support programmes that promote responsible water use, enhance community capacity, and share practical solutions for sustainable water management. These efforts reflecting USM's leadership in water stewardship and environmental education. In conjunction with the Penang State-Level World Water Day 2024 Celebration held at Bukit Dumbar Recreational Park on 25 May 2024, USM played a major role in promoting community-based water conservation awareness. The event, themed "Save Water for Penang 2030," was jointly organised by Water Watch Penang (WWP) and the Penang Water Supply Corporation (PBAPP).



OPERATION (INSTITUTIONAL ARRANGEMENT)

USM STRENGTHENS INSTITUTIONAL RESPONSE TO WATER CRISIS

Facing the Penang water crisis, USM has activated robust institutional arrangements to safeguard campus operations and community well-being. A Water Crisis Management Committee was established, with an Operations Room at the USM Nerve Centre serving as coordination hub since 30 December 2023. Staff were instructed to work from home (except frontliners), while teaching and learning shifted online, and students were encouraged to return home to reduce on-campus demand. As part of relief efforts, USM distributed 200 buckets, 800 cartons of mineral water, and deployed eight 500-gallon tanks plus a mobile tank at critical campus locations. Non-urgent campus services such as library, museum, routine health checks, and extracurricular activities, were postponed or limited to conserve water. At the Engineering Campus, additional tanks and barrels were placed in student residence blocks, and medical services were limited to emergencies. USM's decisive institutional response demonstrates that universities play a pivotal operational role in crisis resilience. USM helps ensure access to safe water and maintains essential functions even under duress.



USM ACCELERATES WATER SUPPLY PROJECT TO SECURE CAMPUS OPERATIONS

Originally slated for completion in August 2024, a RM 6.15 million initiative to install a giant water tank and auxiliary facilities on the Engineering Campus will now be ready by July 2024, ahead of schedule. This project includes a 30-metre tall tank with 1.597 million litres capacity, a 795,000-litre suction tank, a pump house, and associated mechanical and electrical systems. It addresses persistently low water pressure (below 14 psi) that has affected approximately 3,900 campus residents across a 147-hectare area for over a decade. By proactively upgrading its water infrastructure through a well-coordinated institutional plan, USM ensures reliable access to clean water, enhances campus resilience, and demonstrates how operational arrangements in higher education can meaningfully contribute to sustainable water security and sanitation goals.



RESEARCH & INNOVATION

BIOECODS AT ENGINEERING CAMPUS RECOGNISED AS UNESCO ECOHYDROLOGY DEMONSTRATION SITE

Universiti Sains Malaysia (USM) announced that its Bio-Ecological Drainage System (BIOECODS) at the Engineering Campus was officially recognised as a UNESCO Ecohydrology Demonstration Site on 1 October 2024. The recognition, endorsed during the UNESCO Ecohydrology Scientific Advisory Committee meeting in Portugal, highlights USM's leadership in sustainable stormwater and water-resource management. Led by Associate Professor Dr. Mohd Remy Rozainy, the proposal showcases innovative ecohydrology techniques pioneered by Professor Dato' Dr. Nor Azazi Zakaria. BIOECODS serves as a Nature-Based Solution supporting SDGs 6, 11 and 13, strengthening USM's global standing and contributing to UNESCO-IHP initiatives under IHP IX.



USM ENGAGES IN RESEARCH & INNOVATION TO ADDRESS WATER CRISIS AMONG PERLIS PADDY FARMERS

Padi farmers in Perlis are facing severe hardship as a prolonged dry spell triggered a water crisis and income has dropped by as much as 50% due to failed irrigation. The Timah Tasoh Dam's water level fell drastically, impacting fields across Beseri, Tebing Tinggi, and Wang Kelian. Farmers reported that without water, fertiliser application is impractical, and crops are dying before maturation. In response to this environmental and agricultural challenge, USM is mobilising its research and innovation capacity to contribute solutions. The university's hydrology, water management, and agricultural engineering experts are primed to develop sustainable irrigation strategies, water retention systems, and climate-resilient cropping models for affected regions. By combining field data from Perlis with modelling techniques and nature-based solutions, USM aims to design interventions that optimise water usage, reduce crop losses, and restore farmer livelihoods. Through this research engagement, USM exemplifies how universities can turn scientific expertise into real-world impact.



ENGAGEMENT (INDUSTRY & COMMUNITY)

USM REDAC PROMOTES SUSTAINABLE WATER MANAGEMENT THROUGH “LEVERAGING WATER FOR SUSTAINABILITY” PROGRAMME

USM’s River Engineering and Urban Drainage Research Centre (REDAC) hosted the “Leveraging Water for Sustainability” programme to promote sustainable water management among communities and students. Held on 14 September 2024, the event was funded by a 2024 UNESCO Malaysia National Commission Grant and welcomed 30 participants from USM, the University of Miyazaki (Japan), ADTEC Taiping diploma students, and high school students from Penang and Kedah. The programme featured two expert talks, “Sustainability Water Resource Management” and “Sustainable Water Quality”, delivered by REDAC leaders Associate Professor Dr. Mohd Remy Rozainy Mohd Arif Zainol and Dr. Nurul Hana Mokhtar Kamal. Participants also visited key campus water management structures: retention ponds, wetlands, swales, and natural-soil wetponds, gaining hands-on exposure to sustainable infrastructure in operation.



USM COOPERATION WITH GOVERNMENTS ON WATER SECURITY

Universiti Sains Malaysia demonstrates strong leadership in advancing water security through strategic cooperation with governmental bodies and agencies at local, regional, national, and global levels. These partnerships ensure coordinated action in water resource management, stormwater control, and sustainable infrastructure development. USM collaborates with state and municipal authorities in Penang, as well as local environmental agencies, to promote sustainable water management. Through partnerships involving the Department of Irrigation and Drainage (JPS) Penang, Penang Water Supply Corporation (PBAPP), and Water Watch Penang (WWP), USM supports initiatives that strengthen local water resilience. These collaborations focus on stormwater management, public education, and climate adaptation, with USM experts providing scientific and technical input to improve water-related infrastructure and community awareness.



7 AFFORDABLE AND
CLEAN ENERGY



Ensure access to
affordable, reliable,
sustainable and
modern energy for all

TEACHING AND LEARNING/ CURRICULUM

USM AND JINKO SOLAR SIGN MOU, TO DEVELOP TALENTS IN RENEWABLE ENERGY SECTOR



Universiti Sains Malaysia formalized a Memorandum of Understanding (MoU) with Jinko Solar Technology Sdn. Bhd. to strategically cultivate talent within the rapidly growing renewable energy sector. This partnership utilizes the Industry-Infused Programme (IIP) mechanism, offering USM students, particularly those in Electrical and Electronic Engineering, invaluable advantages such as practical industry training, financial support for Final-Year Projects (FYP), and a realistic industry perspective. This collaboration is critical for empowering the next generation of highly-skilled professionals to meet national workforce demands. Crucially, the initiative aligns with USM's institutional focus as a sustainability-led university and contributes directly to Malaysia's national decarbonization goals under the New Industrial Master Plan (NIMP 2030), supporting the drive towards net-zero carbon emissions by 2050.

STEMEC FIESTA & ENERGY-EFFICIENT SCHOOLS 2024

In 2024, CETREE at USM continued to lead education and outreach programmes to cultivate renewable energy awareness and skills. They organised school-level “STEMEC Fiesta and Energy Efficient Schools 2024”, which involved students and teachers in renewable energy learning, solar demonstrations, and innovation competitions. This initiative integrates renewable energy concepts into school curricula/education outreach, helping to build capacity and awareness among younger learners.



OPERATION/INSTITUTIONAL ARRANGEMENT

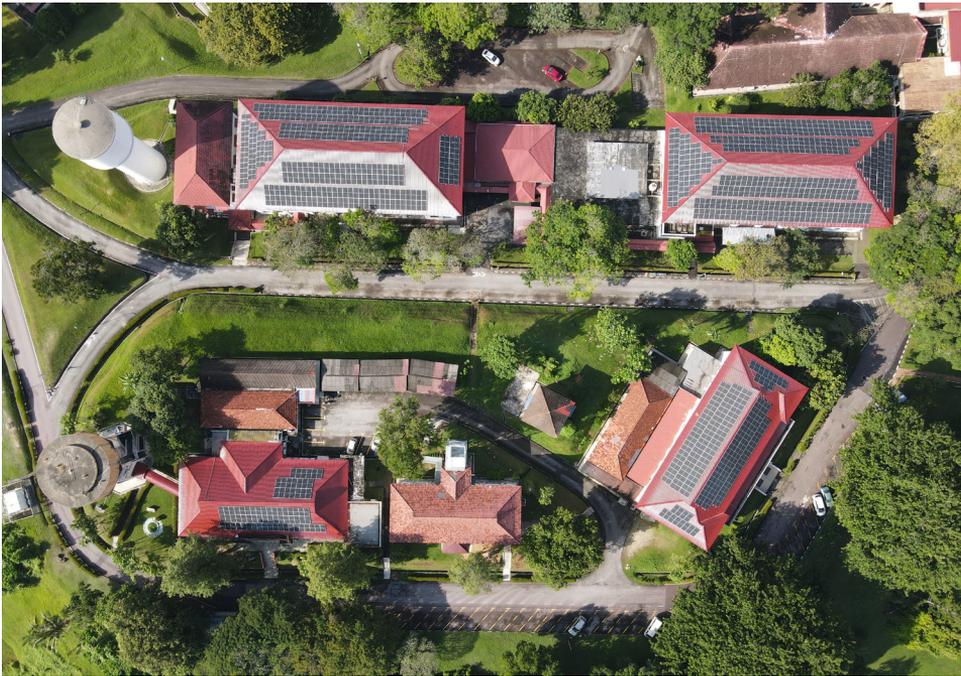
USM SPEARHEADS ELECTRIC MOBILITY INITIATIVE IN MALAYSIA WITH 50 E-BIKES



Universiti Sains Malaysia, specifically through its School of Mechanical Engineering, has forged a strategic research collaboration and donation agreement with Ni Hsin EV Tech, Focus Applied Technologies Sdn. Bhd., and Dongguan Tailing EV to actively promote electric mobility in Malaysia. This initiative aligns directly with national low-carbon goals and the global efforts of the United Nations Environment Programme (UNEP) Electric Mobility Study (2023–2024). The core of the project involves the deployment and rigorous testing of 50 donated EBixon Bold electric motorcycles. These vehicles have been assigned to selected end-users for a one-year period, during which USM researchers will conduct continuous vehicle testing, tracking, and data logging. The primary objective is to scientifically demonstrate the viability and applicability of electric two-wheelers for performing significant and useful work within the diverse Malaysian transport environment. This 12-month research commitment positions USM as a critical strategic partner in driving transformative change towards sustainable solutions. By providing empirical data, the university is setting a precedent for the advancement of electric mobility policies and technologies, aiding the Malaysian government's commitment to achieving net-zero carbon emissions.

SOLAR@USM

USM has implemented a renewable energy initiative through the installation of Photovoltaic Solar Systems (PV) at the Main Campus, USM, Penang. A total of 22,374 Solar PV panels were installed using three methods: on 64 building roofs, 8 carport locations, and 2 ground-mounted sites. The project, costing RM30 million through the Request for Proposal (RFP) method, commenced on September 15, 2021, and was fully completed by the end of December 2022. In 2023, USM manage to save RM3,763,874 with 30% of power cost saving and this is reduced 217,705 tonnes of CO₂ emission.



RESEARCH AND INNOVATION

PACD 2023 AWARDS: EIGHT USM RESEARCH ON RENEWABLE ENERGY AWARDED PETRONAS FUNDING



Universiti Sains Malaysia has been recognized as a main institutional recipient of research grants under the highly competitive PETRONAS-Academia Collaboration Dialogue (PACD) 2023 Awards. Eight research proposals originating from USM were successfully awarded funding, showcasing the university's substantial contribution to technological advancement in the critical national energy sector. The successful proposals, selected from a competitive pool of 588 applicants nationwide, span essential future-focused areas, including advancements in renewable energy, low-carbon solutions, and efficiency enhancement via data analytics and artificial intelligence (AI). This success underscores USM's capacity to deliver groundbreaking, industry-relevant research that aligns with both global sustainability objectives and Malaysia's commitment to a low-carbon future. The PACD funding is a pivotal moment that reinforces the strategic necessity of academic-industry partnership. This alliance with PETRONAS will facilitate the translation of USM's academic innovation into tangible field trials and industrial applications, thus positioning the university as a key driver of human capital development and technological breakthrough in the nation's evolving energy landscape.

MOU BETWEEN USM WITH SHANDONG UNIVERSITY AND QINGDAO DANENG REPRESENTS A SIGNIFICANT ADVANCEMENT IN THE FIELD OF SUSTAINABLE ENERGY



Universiti Sains Malaysia has formalized a significant international partnership by signing a Memorandum of Understanding (MOU) with China's Shandong University and Qingdao Daneng Science and Technology Co., Ltd. This strategic tripartite agreement is engineered to accelerate collaborative research and development in sustainable energy, marking a pivotal advancement in the field. The core focus of the collaboration centers on sharing academic expertise, research facilities, and technological resources to drive innovation, particularly in the development of advanced energy materials and next-generation energy systems. By integrating the rigorous academic strengths of both USM and Shandong University with Qingdao Daneng's crucial industrial technological capacity, the partnership establishes a robust platform for translating high-potential laboratory research into viable commercial applications. This MOU is a critical component of USM's ongoing globalization agenda. It significantly enhances the university's international research footprint and reinforces its commitment to tackling global energy challenges, ultimately positioning USM as a prominent leader in sustainable technology innovation within the Asia-Pacific region.

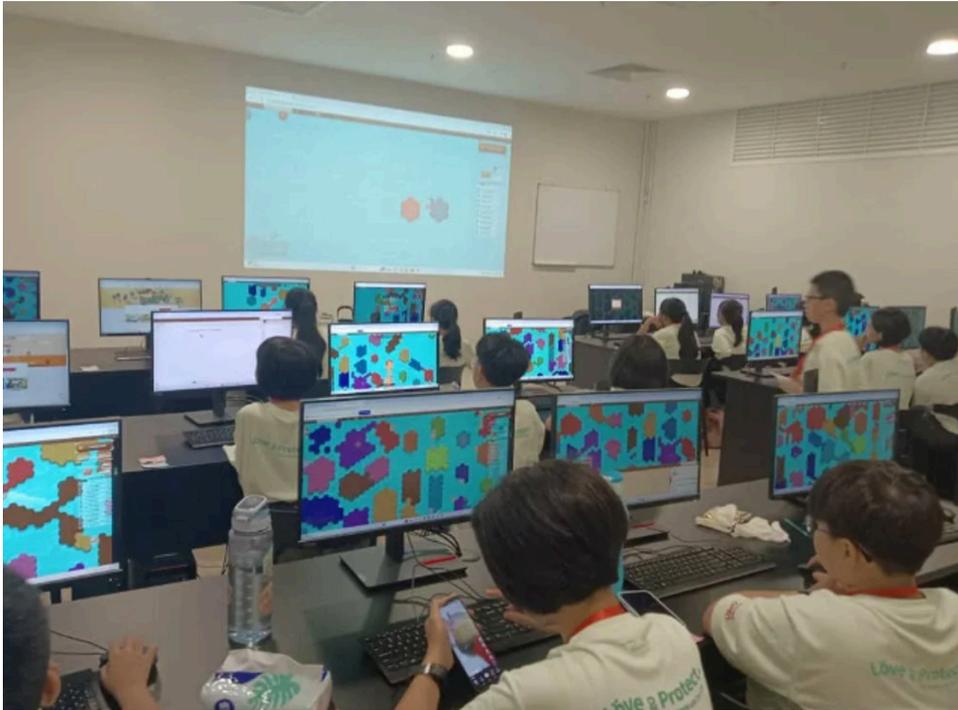
ENGAGEMENT (INDUSTRY & COMMUNITY)

LOCAL COMMUNITY OUTREACH FOR ENERGY EFFICIENCY AND CLEAN ENERGY



USM, through CETREE under CGSS, continues to strengthen public understanding of energy efficiency, clean energy and sustainable living. A key initiative in 2024 was the Kedah State Level Sustainable Energy and STEM Carnival held on 14–15 August at Sekolah Menengah Sains Sultan Mohamad Jiwa. Organised with KPM, PETRA, JPN Kedah, and Yayasan Hijau Malaysia, the event engaged students, teachers, parents, and the community through 12 energy-themed competitions, exhibitions and interactive sessions. Activities such as solar car races, innovation design challenges and RE–EE demonstrations promoted energy literacy and encouraged practical sustainable behaviours.

PENANG GREEN LIFESTYLE PROGRAMME 2024



Held in collaboration with the Malaysia Green Foundation and the Penang State Education Department, this programme extended renewable energy education to the wider community. Through interactive talks, exhibitions, and practical activities, participants learned how energy efficiency and reduced consumption can help achieve national renewable energy goals. By connecting personal habits to the broader transition, the programme encouraged public alignment with the pledge for 100 percent renewable energy.

USM WELCOMES VISIT FROM PENANG SEMICONDUCTOR TOUR DELEGATES



A high-level delegation from the semiconductor sector toured Universiti Sains Malaysia last week to explore research partnerships, underscoring the university's crucial role in the national technology supply chain. The 29-member group, visiting as part of the three-day Semiconductor Study Tour Penang/Kulim 2024 led by Penang Institute Executive Director Dato' Dr. Ooi Kee Beng, met with USM leaders on May 8. USM Deputy Vice-Chancellor of Research and Innovation, Professor Dr. Habibah A Wahab, emphasized that semiconductors are a niche area for USM, noting the university's close collaboration with industry across the entire Electrical & Electronics (E&E) value chain, from IC design to advanced packaging. The delegates visited research laboratories at the Institute of Nano Optoelectronics Research and Technology (INOR) and the Centre of Excellence for Microelectronics Design Collaboration (CEDEC). USM expressed hope that the tour would solidify research and collaboration pathways to help shape Malaysia's technological future.

8 DECENT WORK AND
ECONOMIC GROWTH



Promote sustained,
inclusive and
sustainable
economic growth,
full and productive
employment and
decent work for all

TEACHING AND LEARNING/ CURRICULUM

USM ENGINEERING CAMPUS CAREER FAIR 2024, A BEACON OF PROMISE FOR FUTURE CAREERS

Universiti Sains Malaysia Engineering Campus hosted its annual Career Fair 2024 on April 24, drawing over 63 participating companies, including Platinum Sponsor Huawei Technologies (M) Sdn. Bhd. Representing the Vice-Chancellor, Deputy Vice-Chancellor of Industry and Community Network, Professor Dr. Azlan Amran, emphasized the fair's role as a vital stepping stone for students to launch fulfilling careers. Professor Amran stressed that in today's rapidly changing job market, USM graduates must embrace versatility, adaptability, and resourcefulness, qualities instilled through the university's 'HEBAT' vision—which stands for Holistic, Entrepreneurial, Balanced, Articulate, and Thinking. Huawei Human Resources Manager, Yong Sze Miin, reinforced this message, describing the fair as a “catalyst for change” where “aspirations meet opportunities,” and affirmed the company's commitment to investing in diverse talent to drive excellence, innovation, and inclusiveness.



“PROTECT YOUR MONEY, SECURE YOUR FUTURE”: MFPC-SOM HOSTED WORKSHOP TO PROMOTE FINANCIAL LITERACY

The Malaysia Financial Planning Council (MFPC), in collaboration with the School of Management (SOM) at Universiti Sains Malaysia, hosted its annual financial literacy event, ‘My Money & Me 2024’, on April 27. The program, themed ‘Protect Your Money, Secure Your Future’, aimed to enhance financial awareness among youths with the support of a wide network of financial and regulatory bodies, including Bank Negara’s Financial Education Network (FEN) and the Securities Commission Malaysia. The opening ceremony, held at Dewan Budaya USM, was officiated by Malaysia’s Deputy Finance Minister, YB Lim Hui Ying, who emphasized the critical need for young adults to acquire financial literacy early to ensure smart money management and avoid financial distress. USM’s Director of the Student Development Centre, Professor Dr. Azizah Omar, reaffirmed the university’s commitment to promoting financial education. The one-day event featured workshops led by industry leaders on crucial topics like tax benefits, insurance coverage, and avoiding money fraud, providing participants with essential skills in line with FEN’s goals.



USM-KLE MEDICAL PROGRAMME GRADUATES CELEBRATE SUCCESS AT 62ND CONVOCATION CEREMONY

Five graduates from India who completed the five-year USM-KLE International Medical Programme (IMP) in Belgaum, India, were celebrated at the Fifth Session of the Universiti Sains Malaysia 62nd Convocation Ceremony on November 21, 2024, at the USM Main Campus. This group, many visiting Malaysia for the first time, were among the 55 students graduating from the program this year, which was established in 2010 in partnership with the Karnataka-Lingayat Education consortium. Speaking after the session, presided over by USM Pro-Chancellor Tan Sri Dato' Dr. Jegathesan Manikavasagam, graduates like Vijayalakshmi Gulappa Hosamani praised USM's comfortable and conducive education system, with some expressing intentions to pursue further studies at the university. Other graduates, such as Sahana S. Keshetti and Daneshwari Hanji, highlighted the convenience of the IMP location and praised the smooth and well-organized convocation ceremony.



USM CELEBRATING 62ND CONVOCATION CEREMONY, TO COMMENCE 19-26 NOVEMBER 2024

USM PENANG, MALAYSIA – Universiti Sains Malaysia is set to celebrate the graduation of 8,971 students from its 34 academic schools and research centres at its 62nd Convocation Ceremony 2024, running from November 19 to 26. The ceremony will feature 15 separate sessions, beginning with the First Session where HRH the Chancellor, Tuanku Syed Sirajuddin Ibni Almarhum Tuanku Syed Putra Jamalullail, will confer two honorary doctoral degrees to TYT Tun Dato’ Seri Utama Ahmad Fuzi Haji Abdul Razak (International Relations) and Tan Sri Dato’ Sri Jamaludin Ibrahim (Management). HRH the Chancellor will also present the Emeritus Professor award to Dato’ Dr. Chan Ngai Weng and Dr. Abu Hassan Ahmad, along with the Chancellor’s Gold Medal. The subsequent sessions will be presided over by the three Pro-Chancellors. Notably, this year marks the first time USM will confer Master’s and undergraduate degrees for the same fields of study in the same session, with most sessions featuring both an Arts and a Science school.



GSB USM, BINUS UNIVERSITY STRENGTHEN COLLABORATION IN BUSINESS STUDIES AT IBSS 2024

The Graduate School of Business (GSB) at Universiti Sains Malaysia successfully partnered with BINUS University, Indonesia, to host the inaugural International Business Scholars Symposium 2024 (1st IBSS, 2024) at the USM Main Campus on October 26–27. The symposium was organized to advance academic excellence and foster innovation between the two institutions, providing a dynamic platform for discussions centered on the theme: “Building and Sustaining Organisational Resilience: Sustainable Value Creation and Steward Leadership into the Future.” The event, chaired by Associate Professor Dr. Yuvaraj Ganesan, featured esteemed panelists and a 5-Minute Dissertation Pitching Competition for PhD students from BINUS University, along with research presentations from 48 participants across both USM and BINUS. According to Dr. Yuvaraj, the symposium achieved its goal of fostering meaningful academic exchanges and strengthening collaboration, thereby increasing the visibility and elevated profiles of both partner universities.



USM PPKA STUDENT SELECTED FOR SKY GLOBAL APPRENTICESHIP PROGRAMME AT TURKISH AEROSPACE

A third-year student from the Universiti Sains Malaysia School of Aerospace Engineering (PPKA), Sean Manuel Pillay, has been selected to join the prestigious Sky Global Apprenticeship Programme at Turkish Aerospace in Ankara, Turkey, scheduled for September 2-27, 2024. The program is a high-impact initiative under a collaboration—signed on April 7, 2023—involving the Consortium of Malaysian Universities (CMU), MIGHT (Malaysian Industry-Government Group for High Technology), and TUSAS Malaysia, designed to bolster talent for Malaysia’s aerospace design, development, and manufacturing industries under the Aerospace Industry Blueprint 2030. The Offer Letter Presentation Ceremony was officiated by the Minister of Higher Education, Dato’ Seri Diraja Dr. Zambray Abd Kadir, who emphasized that the program will enhance Malaysian engineering students’ skills through international work experience. USM Deputy Vice-Chancellor Professor Dato’ Gs. Dr. Narimah Samat added that Sean’s selection aligns with USM’s mission to produce HEBAT (Holistic, Entrepreneurial, Balanced, Articulate, and Thinking) graduates who are competitive and equipped with skills relevant to the rapidly growing aerospace sector.



USM TEAM WINS GRAND PRIZE AT HUAWEI ICT COMPETITION (INNOVATION TRACK) 2024

Universiti Sains Malaysia clinched the Grand Prize for the Innovation Track at the Huawei ICT Competition Malaysia 2024-2025 awards ceremony held in Putrajaya on December 12, 2024. The winning team, led by instructor Dr. Chong Yung Wey from the School of Computer Sciences and comprising students Lim Miin Ning, Naomi Tham Kah Mun, and Bok Wei Hong, were among the 16 grand prize winners chosen across the Cloud, Network, Computing, and Innovation tracks. USM Vice-Chancellor, Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed, celebrated the victory as a demonstration of the university's "continued excellence in nurturing innovative minds," which enhances graduate employability and reinforces USM's position in technological advancement. Co-organized by the Ministry of Higher Education (MOHE), Universiti Malaysia Sabah (UMS), and Huawei Malaysia, this year's competition attracted over 1,200 participants from 40 universities, with all national grand prize winners set to represent Malaysia at the regional stage in February 2025.



EMPOWERING WORKFORCE EXCELLENCE: GSB USM CONTRIBUTES TO BMI WORKFORCE TALENT DEVELOPMENT

The Universiti Sains Malaysia Graduate School of Business (GSB), through its Centre for Executive Education and Development (CEED), hosted the Professional Programme Graduation Ceremony 2024 for B. Braun Medical Industries Sdn. Bhd. (BMI), celebrating the achievement of 50 BMI employees. These employees successfully completed the Professional Certificates in Applied Operations and Management and Professional Advanced Certificates in Applied Operations and Management. GSB USM Dean, Associate Professor Dr. Fathyah Hashim, congratulated the graduates, emphasizing the programme's role in equipping them with the creative thinking and decision-making skills necessary for the dynamic fields of production and management. BMI Senior Vice-President Operations, Christian Kapischke, underscored the company's commitment to talent growth and development, highlighting the value of the partnership with USM in providing quality education and building a skilled workforce. The collaboration, which USM GSB pledged to continue through various professional development offerings, aligns with both organizations' goals of sustainability and lifelong learning.



USM-FORTINET FORGE STRATEGIC PARTNERSHIP TO ADVANCE CYBER SECURITY EDUCATION AND WORKFORCE DEVELOPMENT

Universiti Sains Malaysia, through its National Advanced IPv6 Centre (NAv6), officially signed a Memorandum of Agreement (MoA) with Fortinet Malaysia on January 29, 2024, ushering in a new era for cybersecurity education. The strategic partnership aims to cultivate a diverse, equitable, and inclusive cyber workforce by bridging the gap between education and industry demands. Signed by USM's Chief Digital Officer, Professor Dato' Ir. Dr. Faisal Rafiq Mahamd Adikan, and Fortinet Malaysia Country Manager, Dickson Woo, the collaboration encompasses seven crucial areas including technology transfer, certification, innovation, and enhanced industry relevance. Both parties expressed commitment to empowering students to shape the future cybersecurity landscape and addressing critical skills gaps within the rapidly evolving Industrial Revolution 4.0 labor market.



OPERATION/INSTITUTIONAL ARRANGEMENT

USM-INFINEON TECHNOLOGIES INITIATE ON-CAMPUS INTERNSHIP HIRING

Universiti Sains Malaysia and Infineon Technologies (Kulim) Sdn. Bhd. have deepened their partnership with a highly successful on-site recruitment drive for student internships, reinforcing industry-academia ties in the semiconductor sector. Held on February 8 at the USM School of Physics, the event targeted 15 Year 4 Physics students for their upcoming 6-month internship stints beginning in March 2024 at Infineon Kulim. The program, which included a seminar on the company's profile and the semiconductor industry, achieved a remarkable hiring success rate: 11 out of the 15 students interviewed were successfully hired for internships. Infineon Technologies Production Senior Director, Mohd Jeffery Abdull Manaf, praised the students' commendable communication skills. The Dean of the School, Professor Dr. Abdul Razak Ibrahim, expressed gratitude and committed to fostering further collaborations with industry partners in academic and research work. Future plans are focused on the 3U1i programme, aligning with Infineon's Work-Based Learning initiative. This follows a broader University Collaboration Workshop at Infineon Kulim with several Malaysian universities, including USM.



USM RETAINS SELF-ACCREDITED UNIVERSITY STATUS BY MQA

Universiti Sains Malaysia has successfully retained its prestigious self-accreditation status from the Malaysian Qualifications Agency (MQA), securing the recognition until 2027. The confirmation was conveyed by the MQA Chief Executive Officer to USM Vice-Chancellor, Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed. This accolade allows USM to accredit most of its academic programmes internally, aligning with the Malaysian Qualifications Framework (MQF), a right the university has held since April 29, 2010. The retention of this status followed an extensive audit process, conducted by MQA to evaluate USM's strengths and compliance with self-accreditation criteria. The audit, which included reviews based on the Code of Practice for Institutional Audit (COPIA), concluded successfully, with the renewed status made official on March 25, 2024. The MQA expressed hope that the audit results would assist the university in its future planning endeavors. The university acknowledged the USM Self-Accreditation Centre and all departments for their collective effort in the process.



USAINS FURTHER STRENGTHENS COMMITMENT AS UNIVERSITY-BASED COMPANY TO POSITION QUALITY PRODUCTS AND SERVICES

USAINS Holding Sdn. Bhd., the business arm of Universiti Sains Malaysia, successfully hosted an Open Day on July 4, showcasing its diverse range of commercial services to the campus community. Held at the Eureka Complex, the event was designed to allow USM staff and students to engage directly with USAINS representatives regarding its products, which span consultancy, contract research, education, lab testing, and specialized training. A key highlight was the TOEIC (Test of English for International Communication) Awareness Programme aimed at 100 Chinese students enrolled at USM. The session focused on helping the students enhance their English language skills through the official TOEIC Certification Programme. This initiative follows a successful roll-out for employees at Boston Scientific and reflects USAINS's commitment to expanding such English proficiency training to the broader campus community in the future. USAINS affirmed that the Open Day is a crucial platform to communicate its role effectively, hoping to boost the value of its offerings and sustain its pursuit of excellence as a leading university-based company in Asia.



PITCH@USM 2024 IGNITES ENTREPRENEURIAL AND INNOVATIVE SPIRIT AT USM

Universiti Sains Malaysia hosted its annual PITCH@USM 2024 entrepreneurship programme, a key initiative aligned with its APEX agenda to foster sustainable, performance-based education and transform students into job creators. The competition, designed to cultivate innovation among students and staff, began with 32 teams in the semi-finals on July 3, culminating in the finals with the top 12 teams on July 4. Deputy Vice-Chancellor of Research and Innovation, Professor Dr. Habibah A Wahab, presided over the closing, thanking sponsors like Digital Penang and applauding the participants' creativity. The programme aims to provide aspiring entrepreneurs with crucial capacity-building and financial support to launch their ventures. The top prize of RM3,000 went to Ts. Naresh Ravi (ProFeather) from the Graduate School of Business. Other main winners included Alexander Tan Wai Teng (NEAR) and Muhammad Talhah bin Sarudin (Ecoenzyme@USM). Special staff and student prizes were also awarded, highlighting USM's commitment to building a vibrant entrepreneurial ecosystem across the university.



USM AND PENSONIC SIGN MOU TO STRENGTHEN RESEARCH AND BOOST GRADUATE EMPLOYABILITY

Universiti Sains Malaysia and electrical home appliance giant PENSONIC have formalized a strategic alliance via a Memorandum of Understanding (MoU) to jointly enhance the national talent pool, particularly in engineering. The partnership, signed by USM Vice-Chancellor Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed and PENSONIC Group CEO Dixon Chew Chuon Jin, focuses on joint research, product development activities, and providing crucial internship opportunities to undergraduates for hands-on industry experience. The Vice-Chancellor emphasized that the collaboration reinforces a commitment to academic and industrial excellence, aiming to position Malaysia as a hub for academic and industrial innovation by nurturing a holistic and professional future workforce. The MoU ceremony, witnessed by the Yang di-Pertua Negeri (TYT) of Penang, Tun Dato' Seri Utama Ahmad Fuzi bin Haji Abdul Razak, was held as part of PENSONIC's event to unveil two innovative products at their Global Headquarters.



USM HBP BEsT PROGRAMME WELCOMES ACCREDITATION VISIT FROM ETAC BEM

The Universiti Sains Malaysia School of Housing, Building, and Planning (HBP) recently underwent a full accreditation evaluation by the Engineering Technology Accreditation Council of the Board of Engineers Malaysia (ETAC BEM) for its revamped Bachelor of Building Engineering Technology with Honours (BEsT) programme. The two-day assessment, led by Ts. Dr. Sabrina Karim, aimed to ensure the programme meets rigorous national standards, thereby affirming that its graduates are well-prepared to serve as engineering technologists. Formerly accredited by the MQA as the Bachelor of Science (HBP) (Building Technology), the programme was upgraded and rebranded to align with ETAC criteria. USM Vice-Chancellor Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed emphasized the university's commitment to excellence, while Deputy Vice-Chancellor Professor Dr. Habibah A Wahab noted that the accreditation process validates the dedication of the university community. The ETAC team engaged with management, staff, students, alumni, and the Industry/Community Advisory Panel (ICAP), reviewing documents and inspecting facilities to confirm adequate professional and educational support.



USM AND SAMTEC ASIA PACIFIC SIGNS MOA TO LAUNCH A COLLABORATIVE COOPERATIVE (COOP) UNIVERSITY-INDUSTRY PROGRAMME

Universiti Sains Malaysia officially launched a new university-industry cooperative (co-op) education programme with leading electronic interconnect service provider, Samtec Asia Pacific (M) Sdn. Bhd., through the signing of a Memorandum of Agreement (MoA) on July 23, 2024. The collaboration is designed to integrate academic learning with practical experience in electronic and mechanical engineering, ensuring USM delivers highly skilled graduates equipped for the industry. The MoA was signed by USM Deputy Vice-Chancellor Industry and Community Network, Professor Dr. Azlan Amran, and Samtec Human Resource Manager, Ms. Ang Poh Ling. Samtec Penang Plant Manager, Mr. Jorge Chaves, highlighted that the co-op aims to provide undergraduates with training in cutting-edge technology and hands-on exposure to areas such as process, maintenance, manufacturing, and control engineering, emphasizing that this blend of “education plus experience is the stepping stone” for successful career paths.



USM, GLOBALFOUNDRIES SIGN MOU TO COLLABORATE IN THE FIELDS OF SEMICONDUCTOR AND ELECTRONICS

Universiti Sains Malaysia officially entered its first partnership with GlobalFoundries Malaysia Sdn. Bhd., a major player in the semiconductor and electronics industry, by signing a Memorandum of Understanding (MoU) on June 27, 2024. The collaboration, signed by USM Deputy Vice-Chancellor of Industry & Community Network Professor Dr. Azlan Amran and GlobalFoundries Vice-President Jitendra Chaddah, is aimed at fostering academic and industrial cooperation to enhance talent development in the high-tech sector. The agreed-upon activities include the exchange of students/staff, joint academic/R&D programmes, workshops, and providing internship opportunities to produce “industry-ready talents.” Both parties expressed excitement about leveraging each other’s expertise to drive progress in semiconductors and electronics and achieve mutual benefits.



USM ENGINEERING CAMPUS AND ADVANCED ENERGY FORGE STRATEGIC PARTNERSHIP FOR ACADEMIC AND RESEARCH EXCELLENCE

The Engineering Campus of Universiti Sains Malaysia has established a crucial strategic partnership with Advanced Energy Sdn. Bhd. to promote academic excellence, knowledge sharing, and advanced research, particularly in high-demand engineering fields. Announced on August 12, 2024, the collaboration focuses on integrating academic knowledge with practical industry application, with the School of Electrical and Electronic Engineering leading research in artificial intelligence, computer science, and robotics, while the School of Mechanical Engineering concentrates on mechanical engineering, machine inspection, and manufacturing processes. USM Engineering Campus Director, Professor Datin Dr. Azlina Harun @ Kamaruddin, and Advanced Energy General Manager, Ahmad Abdelnaby, both emphasized that this necessity-driven partnership will allow Advanced Energy to leverage USM's global competitiveness to enhance its power module knowledge and lead to new joint research initiatives that create significant mutual value.



USAINS HOLDING GROUP MD RECEIVES CEO CHAMPION AWARD AT LAWA 2024, EMBRACING DEI AND SUSTAINABILITY AT WORKPLACE

Farid Wajidi Mat Yusoff, the Group Managing Director of USAINS Holding (the corporate arm of USM), was honoured with the prestigious CEO Champion Award in the Public Sector Category at the Life at Work Awards (LAWA 2024), presented by Talent Corporation Malaysia Bhd. (TalentCorp) on November 20, 2024, in Kuala Lumpur. The award recognizes Mr. Farid's exemplary leadership in deeply embedding Diversity, Equity, and Inclusion (DEI) principles into the organization's core values, fostering a workplace where every individual is valued and empowered. His visionary guidance has cultivated a culture of collaboration, innovation, and mutual respect, positioning USAINS Holding as a leader in creating transformative and inclusive practices for a sustainable work, workplace, and workforce. The ceremony, themed 'Recognising DEI Excellence for Sustainable Work, Workplace and Workforce,' was attended by Human Resources Minister Steven Sim Chee Keong and over 750 guests, celebrating 38 award recipients across 14 categories. Watch the LAWA 2024 full journey to see more on the event where the CEO Champion Award was presented.



USM SELECTED AS EMPLOYERS' CHOICE OF UNIVERSITY

Universiti Sains Malaysia was honoured as the “2024 Employers’ Choice of University” by Talentbank at an award ceremony held on May 2, 2024, in Kuala Lumpur. This prestigious recognition, based on surveys of leading graduate employers, confirms USM’s standing as a top Malaysian institution for consistently producing highly employable graduates who are in high demand, particularly excelling in the fields of Interior Design and Science. USM Vice-Chancellor, Professor Dato’ Seri Ir. Dr. Abdul Rahman Mohamed, stated that the accolade not only enhances graduate employability but also transforms the university’s relationship with employers by fostering collaboration across academia, industry, government, and the community to ensure students are equipped with industry-relevant skills and networks. The award ceremony, which also celebrated 45 other high-performing universities, coincided with Talentbank’s Raya Open House.



RESEARCH AND INNOVATION

USM SHINES AT CREST MEDICAL DEVICE CHALLENGE 2024 INNOVATION COMPETITION

Universiti Sains Malaysia students achieved outstanding success at the CREST Medical Device Challenge 2024, held on December 12 at the Kuala Lumpur Convention Centre. A total of 18 students from the Medical Physics Programme, mentored by Dr. Nursakinah Suardi and Dr. Nik Noor Ashikin Nik Ab Razak, competed in five teams, all of which advanced to the semifinals. The USM team comprising Shaline Lavinia Justin, Safia Heidi, and Atiqah Syafiah reached the finals, securing Third Prize for their project, “TiO₂/Cu/TiO₂ Multilayer Thermoluminescence Dosimeter for Medical Diagnostic Applications,” with Shaline Lavinia Justin also winning the Best Presenter Award. The other teams presented innovative devices, including a portable photobiomodulation device and a 3D-printed Doppler phantom. This impressive showing reinforces USM’s position as a hub for academic and technological innovation in the medical and engineering sciences.



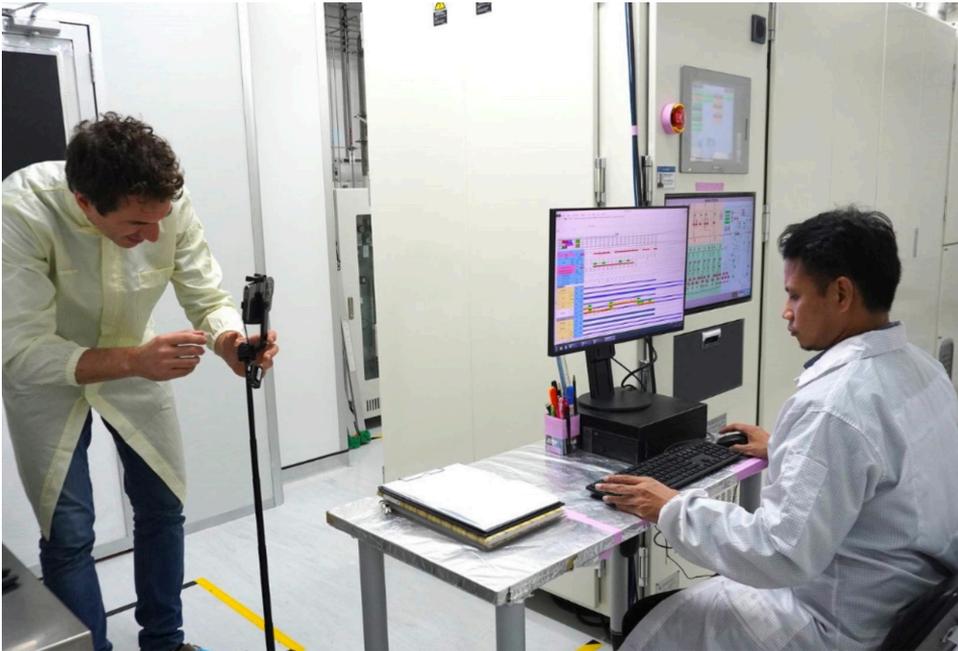
TWO USM PHD STUDENTS SHINE AT MALAYSIA 3MT COMPETITION

Two PhD students from Universiti Sains Malaysia won top honors at the recent Malaysia Three Minute Thesis (3MT) Competition held at Universiti Kebangsaan Malaysia (UKM). Hamidah Mohd Zain from USM's Advanced Medical and Dentistry Institute clinched First Place in the Science, Engineering, and Technology category with her presentation, "Nano-Propolis From Kelulut: Extinguishing the Flame of Inflammation." Her victory qualifies her to represent Malaysia at the Asia-Pacific 3MT Competition in Australia in October 2024. Simultaneously, Arathai Din Eak from the USM School of Distance Education secured Third Place in the Social Science category for her talk on "ScreenCast Video Feedback: A Revolution in Open and Distance Learning." The competition, organized by the Council of Malaysian Postgraduate Deans, featured 66 contestants from 22 universities, underscoring the importance of cultivating research communication skills among postgraduate students.



USM'S INOR DIRECTOR DISCUSSES MALAYSIA'S SEMICONDUCTOR INDUSTRY BOOM WITH DEUTSCHE WELLE

Associate Professor Ts. Dr. Mohd Zamir Pakhuruddin, Director of USM's Institute of Nano Optoelectronics Research and Technology (INOR), was recently interviewed by Deutsche Welle (DW), Germany's international news broadcaster. The interview, conducted by DW's Asia Pacific Bureau Chief Georg Matthes, focused on the recent boom in Malaysia's semiconductor industry from an academic viewpoint. Dr. Mohd Zamir highlighted USM's research emphasis on semiconductors and INOR's specialization in III-Nitrides Epitaxy. He discussed the government's New Industrial Master Plan 2030 (NIMP 2030) and the challenges Malaysia faces in moving up the semiconductor value chain—from back-end manufacturing to integrated circuit design, epitaxy, and wafer fabrication. He also elaborated on strategies for attracting high-value foreign direct investment (FDI) and ensuring a sustainable talent pipeline for technologies like silicon carbide (SiC) and gallium nitride (GaN). The findings, which include interviews with Infineon and AT&S representatives, will be published by DW soon.



ENGAGEMENT (COMMUNITY/ INDUSTRY)

HBP VIVAZ FIESTA 2.0 UNITES USM COMMUNITY AND INDUSTRY PARTNERS FOR CAREER GROWTH AND CULTURAL EXCHANGE

The Universiti Sains Malaysia School of Housing, Building and Planning (HBP) recently held the HBP Vivaz Fiesta 2.0, a major event designed to connect students with industry leaders. Held on July 9, the celebration was a collaboration with Talent Corporation Malaysia Berhad (TalentCorp) and featured a vibrant Career Fair, providing a crucial platform for students to network and gain career insights from esteemed companies. HBP Dean, Associate Professor Ts. Dr. Mohd Rodzi Ismail, emphasized that such initiatives are key to “strengthen[ing] the ties between academia and the industry.” TalentCorp’s support included sessions on career roadmaps and internship insights for students across HBP’s seven programs, including Architecture and Quantity Surveying. They also facilitated a hybrid session on corporate collaboration, presenting programs like MySIP and LiKES to 20 industry partners from across Malaysia to foster stronger university-industry links. The day concluded with community engagement, including mini-games, a movie night, and a grand fireworks display.



USM SCHOOL OF COMMUNICATION CSR PROJECT AIM TO CREATE STRONG BUSINESS ENVIRONMENT FOR SMES

The Universiti Sains Malaysia School of Communication organized the 'Digitalization of Penang Entrepreneurs (D.O.P.E)' program, a corporate social responsibility initiative held on June 12 at the MBPP Makerspace in Balik Pulau. The program's goal is to "up-skill" local entrepreneurs by providing knowledge on digital adaptation. Dato' Seri Syed Mohamad Syed Murtaza, Chairman of the Bumiputera Foundation, emphasized the necessity of mastering advanced technologies like Artificial Intelligence (AI) for business competitiveness and economic growth during the launch. The event featured sharing sessions by industry experts from Digital Penang and practical workshops led by USM students on online brand positioning. Students helped entrepreneurs from several small and medium enterprises (SMEs) refine their brand identities and develop content for their target audiences, fostering a stronger, digitally-savvy business environment in Penang.



USM-USAINS CELEBRATE SUCCESS OF INAUGURAL TOEIC TRAINING FOR NORTHERN REGION INDUSTRY

A collaborative effort between Universiti Sains Malaysia and USAINS Holding Sdn. Bhd. has resulted in a major success in enhancing workplace English proficiency for the northern Malaysian industry. Twenty-four employees from Boston Scientific Penang recently completed the first-ever Test of English for International Communication (TOEIC) training program for the region, achieving exceptional results. The cohort, which underwent 30 total hours of instruction, recorded an impressive average score of 750 points, significantly surpassing Malaysia's national average of 647. Remarkably, half of the participants scored over 800 points, a level comparable to high European standards. USM Vice-Chancellor, Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed, hailed the event as an "excellent testimony" to the strategic University-Industry collaboration, applauding USAINS for pioneering the initiative. The program, which utilizes USM's status as the northern region's first authorized public university test center for ETS products since 2022, aims to boost employees' generic soft skills for greater productivity.



SEE YOU AT THE USM ALUMNI AND INDUSTRY GRAND DINNER 2024

Universiti Sains Malaysia hosted its inaugural Alumni and Industry Grand Dinner 2024 on December 14 at the World Trade Centre, celebrating 55 years of growth and honoring key contributors. The grand event, attended by some 400 guests, including the Yang di-Pertua Negeri of Melaka, Tun Seri Setia Dr. Haji Mohd Ali Mohd Rustam, was a joint effort to strengthen ties between the university, its estimated 200,000 alumni, and strategic partners. USM Vice-Chancellor, Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed, praised the alumni for embodying the motto 'Kami Memimpin' (We Lead), noting many have become "job creators." He announced that Mohd Ali, an alumnus, was conferred an Honorary Doctorate in Development Economics for his significant national and international contributions. The university also presented its Alumni Icon Awards. The Alumni Perdana Award went to Toh Indera Jaya Dato' Ishak Haji Mohamed, Executive Vice-President of MRCB, while the Alumni Muda Harapan award was given to RTM TV host Khairul Hafez Yunus @Hamid. The gathering also celebrated USM's recent recognition as the Graduates' Choice University by Talentbank.



USM-MOHE HOSTS DIALOGUE SESSION WITH E&E INDUSTRY PARTNERS TO ENHANCE TALENT DEVELOPMENT

The Malaysian Ministry of Higher Education (MoHE) and Universiti Sains Malaysia hosted a high-level dialogue session today to bridge the talent gap in the nation's critical Electrical and Electronic (E&E) sector, focusing heavily on semiconductor technology. The session featured the Minister of Higher Education, Dato' Seri Diraja Dr. Zambry Abdul Kadir, and key E&E industry partners, aiming to gather feedback to enhance the industry's competitiveness and sustainability. Minister Zambry highlighted MoHE's commitment to preparing future talent with advanced skills through several key initiatives. These include the MOHE Research Industry Innovation Incubation (MRI3), the Structured Industry Apprenticeship Programme (SIAP) for integrated circuit design, and the MOHE Intel Elite Internship Programme. He stressed the platform's importance in allowing MoHE to strategically support future academic programs and R&D activities. USM Vice-Chancellor, Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed, underscored the crucial role of collaboration, noting USM leads the Consortium of E&E and the MRI3. He reported that over 900 students are currently registered on the MRI3 portal, with more than 500 job slots offered by 30 industries. The event concluded with industry partners symbolically handing over mock cheques to USM and two other northern universities, cementing the strategic partnership for talent development.



USM, PENANG STEM SDN. BHD. AND TECH DOME PENANG JOIN FORCES TO PROPEL STEM EDUCATION IN PENANG

PENANG, MALAYSIA – Universiti Sains Malaysia has cemented its role in driving STEM (Science, Technology, Engineering, and Mathematics) education across Penang by signing a pivotal Memorandum of Understanding (MoU) with Penang STEM Sdn. Bhd. and Tech Dome Penang. The signing was the highlight of the 2024 STEM Showcase and coincided with the launch of the state-level National Science Week, officiated by the Minister of Science, Technology, and Innovation (MOSTI), YB Chang Lih Kang. USM Vice-Chancellor, Professor Dato’ Seri Ir. Dr. Abdul Rahman Mohamed, stated the MoU is a “crucial milestone” designed to pave the way for numerous joint initiatives, including student/staff exchanges and collaborative research. He stressed the partnership is vital for nurturing future STEM leaders and driving innovation and economic growth in Penang. Minister Chang emphasized MOSTI’s push to cultivate Science, Technology, and Innovation (STI) culture through non-formal learning, focusing on creative capacity to prepare the nation for the Fourth Industrial Revolution. The two-day event, which showcased 42 industry partners and featured 4,160 workshop slots, attracted over 15,000 participants, solidifying Penang’s status as a regional technology hub.



ICBSI 2024: A SUCCESSFUL CONVERGENCE OF GLOBAL EXPERTS ON BUSINESS SUSTAINABILITY AND INNOVATION

The integration of smart technologies with sustainable practices took center stage at the 4th International Conference on Business Sustainability and Innovation (ICBSI 2024), hosted by Universiti Sains Malaysia Graduate School of Business (GSB). Held on October 3–4, 2024, the conference’s theme was “Smart Sustainability: Navigating the Future with Innovation and Resilience,” focusing on how technology can address critical environmental challenges like climate change and resource depletion. Officiating the event, USM Deputy Vice-Chancellor Professor Dr. Azlan Amran emphasized that smart solutions are “indispensable” for industries to optimize resource utilization, reduce carbon footprints, and enhance resilience in the face of global uncertainties. The international conference attracted over 130 participants from Malaysia and abroad, with approximately 80 researchers presenting on cutting-edge topics. Collaborators included Multimedia University (MMU) and institutions from Pakistan and Thailand. Keynote insights were provided by Professor Azlan himself and Datuk Dr. Ahmad Parveez Ghulam Kadir, Director General of the Malaysian Palm Oil Board (MPOB). Accepted papers are set for publication in MyCite, with selected papers considered for Scopus/ERA indexed journals.



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



Build resilient
infrastructure,
promote inclusive
and sustainable
industrialization and
foster innovation

TEACHING AND LEARNING/ CURRICULUM

USM, SC COLLABORATE TO CULTIVATE NEXT GENERATION OF FINTECH TALENTS

The Universiti Sains Malaysia Computer Science Society, in collaboration with the Securities Commission Malaysia (SC), successfully hosted the inaugural Varsity Hackathon (V HACK) 2024 on April 20, 2024, to cultivate the next generation of Islamic fintech talents. V HACK 2024 is the first event under the SC's enhanced three-year capacity-building initiative, FIKRA ACE – Excel, which aims to develop skillsets and talent for the Islamic capital market ecosystem by partnering with higher learning institutions. SC Chairman Dato' Seri Dr. Awang Adek Hussin (who is also the USM Board of Governors Chairman) highlighted that the hackathon showcases the innovative spirit of undergraduates and is a call to action for stakeholders to propel Malaysia towards becoming a global leader in Islamic fintech. The programme, which focused on solving curated Sustainable Development Goals (SDGs)-related issues, received over 900 applications from 90 higher learning institutions worldwide. Ten finalist teams from both public and private universities were crowned winners, sharing a total of RM37,500 in cash prizes.



USM AND AMS OSRAM CONTINUE EFFORTS IN EMPOWERING POSTGRADUATE SCHOLARS; IMPLEMENT INNOVATIVE 'INDUSTRY IN CLASSROOM' INITIATIVE

Universiti Sains Malaysia and ams OSRAM successfully launched the “3rd School of Physics & ams OSRAM Industry in Classroom” program on May 8, 2024, at the USM School of Physics. The initiative aims to equip approximately 30 postgraduate students in applied and engineering physics with specialized knowledge in semiconductor epitaxy techniques and device development. The program features a structured guest lecture series delivered by ams OSRAM doctorate engineers, covering topics like MOCVD growth of III Nitrides, LED design, and efficiency optimization. ams OSRAM Director of R&D, Dr. David Lacey, expressed enthusiasm for the long-term engagement, stating the goal is to strengthen the ecosystem of scientists and engineers in Malaysia and encourage more students to pursue careers in semiconductor technology. This collaboration is designed to provide students with added value and serve as a talent pipeline for the front-end semiconductor industry.



OPERATION (INSTITUTIONAL ARRANGEMENT)

USM AND ARENA-PAC REVOLUTIONIZE MALAYSIA'S RESEARCH NETWORK WITH 100GBPS HIGH SPEED INFRASTRUCTURE

Universiti Sains Malaysia has partnered with the Arterial Research and Education Network Asia-Pacific (ARENA-PAC) to establish Malaysia's first 100Gbps research and education network, strengthening USM's role in academic innovation. A Memorandum of Agreement was signed by USM Vice-Chancellor Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed and ARENA-PAC Co-Director Professor Dr. Jun Murai of Keio University, Japan. The initiative will boost Malaysia's research capacity, enable high-speed global collaboration, and support advanced applications in AI, climate modelling, and genomics. It also positions Penang as a hub for internet engineering and strengthens cross-border academic cooperation.



ASSISTANCE TO START-UPS AND SMES IN LOW-CARBON INNOVATION

In 2024, Universiti Sains Malaysia provided direct assistance to local small and medium enterprises (SMEs) and start-ups to foster low-carbon innovation through a research-driven initiative led by Associate Professor Dr. Ng Theam Foo under the Renewable Energy and Green Technology Transdisciplinary Research (RUTRANS IV) programme. This initiative focuses on assisting local industries in transitioning toward sustainable practices by integrating energy conservation, efficiency enhancement, renewable energy monitoring, ESG digital reporting, and carbon prediction technologies. It is designed to help SMEs that face challenges in adopting real-time energy data analysis and carbon tracking systems, thereby strengthening their role in Malaysia's low-carbon economy.



The poster for the RUTRANS 2024 program features a white background with a large, stylized 'RUTRANS' logo on the right side, composed of colorful geometric shapes. At the top left, there are logos for U.S.M., APEX, and RUTRANS. The text on the poster includes the program title, the amount of funding, and the names and titles of the program and sub-project leaders. The background is decorated with golden confetti.

Logos: U.S.M., APEX, RUTRANS, SKIM GERAN PENYELIDIKAN UNIVERSITI TRANSDISIPLINARI (RUTRANS) 2024

Tajuk Program :
Integrating Energy Conservation, Efficiency, Renewable Energy/Monitoring, ESG Digital Reporting, and Carbon Predicting Approach for Local SME Sustainability

Jumlah: RM 360,000.00

Ketua Program
Professor Madya Dr. Ng Theam Foo
(Faculty of Engineering, U.S.M.)

Ketua Sub Projek
Professor Madya Dr. Mohd Tohir Ismail
(Faculty of Engineering, U.S.M.)

Ketua Sub Projek
Dr. Ng Wei Chien
(Faculty of Engineering, U.S.M.)

RESEARCH & INNOVATION

USM 'INNOZILLA 2024' BRINGS TOGETHER INNOVATORS AIMING FOR SUSTAINABLE DEVELOPMENT

Universiti Sains Malaysia hosted INNOZILLA 2024, an innovation exhibition and competition highlighting technologies and solutions aligned with the United Nations Sustainable Development Goals (SDGs). Co-organised with the Northern Corridor Economic Region (NCER) and supported by Cradle Fund, TusStar, JCI, and the Centre for Global Sustainability Studies (CGSS), the event featured 188 inventions (143 physical, 45 virtual) from institutions and startups across Malaysia, alongside entries from Indonesia and Singapore. With the theme “Bridging Innovation Between Academia, Young Innovator, Government, Industry, and Community for Sustainable Development,” participants competed in two categories: Vanguard and Trailblazer.



USM SOC STUDENT CROWNED ASTRO'S BIG STAGE TAMIL S2 CHAMPION

KUALA LUMPUR, MALAYSIA – Universiti Sains Malaysia School of Communication (SOC) second-year student, Ruhan Ravindran, was crowned the champion of Astro's Big Stage Tamil Season 2 on May 14, 2024. The 22-year-old, who majors in Creative Screen and Journalism and has been singing since age four, secured the victory that marks a significant milestone in his musical journey as he now aspires to create independent albums and collaborate with other artists. Ruhan expressed immense joy and gratitude for the opportunity to showcase his talent on a national stage, acknowledging the endless support from his family, friends (including his musically-inclined grandfather and uncle), and USM SOC Deputy Dean, Dr. Saifuddin Saleh. The USM community and SOC Dean, Associate Professor Dr. Bahiyah Omar, have congratulated Ruhan, recognizing his vocal prowess, captivating stage presence, and commitment to musical excellence that emphasizes versatility, passion, and audience interaction.



USM SHINES AT MTE2024, WINS 6 GOLD, 3 SILVER, 1 BRONZE FROM 10 ENTRIES

Universiti Sains Malaysia solidified its reputation for innovation by winning a medal for every entry at the Malaysia Technology Expo (MTE2024), held from February 22-24 at the World Trade Centre, Kuala Lumpur. USM secured a total of 10 medals—including 6 Gold, 3 Silver, and 1 Bronze—showcasing the creativity of its researchers. Gold-winning innovations spanned health, food, and technology, featuring products like SALTZERO (sodium-free noodles), StriataCare (a 3-in-1 topical cream), and CytoQuick Gel Kit (a cellular processing kit). The success, celebrated by USM Centre for Innovation and Consultation Director Professor Ir. Dr. Srimala Sreekantan, not only highlights USM’s leadership in technological advancement but also reinforces Malaysia’s global standing in innovation. MTE2024, the 23rd edition of the hybrid event, featured 368 innovations from 12 countries.



ENGAGEMENT (INDUSTRY & COMMUNITY)

USM-TELEPERFORMANCE INKED MOU BRIDGING ACADEMIA-INDUSTRY GAP

Universiti Sains Malaysia has officially partnered with global digital business services giant Teleperformance to boost student employability and bridge the academic-industry gap. The collaboration was formalized through a Memorandum of Understanding (MoU) signed on June 28, 2024, between USM's School of Languages, Literacies and Translation (SoLLaT) and the company. SoLLaT Acting Dean, Azril Ali, who signed on behalf of USM, emphasized that the partnership reflects the university's commitment to excellent teaching and student growth alongside industry leaders like Teleperformance. Teleperformance Malaysia and Thailand CEO, Andy Rangel, reciprocated, stating the company's dedication to developing stakeholders by collaborating with leading universities. The event included talks by Teleperformance executives on career growth and cultural fit, while USM academics offered perspectives on technological fluency and experiential learning. This partnership is set to pave the way for future initiatives, strengthening networking and providing students with invaluable opportunities.



USM-MRANTI SUPERCHARGER PENANG 2024: EMBRACING INNOVATION TO DRIVE FUTURE IMPACT

PENANG, MALAYSIA – A high-profile partnership is urging academics to prioritize market-ready innovation over traditional publishing to drive national economic impact. Universiti Sains Malaysia, through its Centre for Innovation and Consultation (CIC), co-organized the three-day USM-MRANTI Supercharger Penang 2024 with the Malaysian Research Accelerator for Technology and Innovation (MRANTI). The event brought together researchers, start-ups, and industry leaders from the Northern Region. CIC Director, Professor Ir. Dr. Srimala Sreekantan, delivering the welcoming address, challenged the academic norm: “We often hear the phrase ‘Publish or Perish,’ but we need to shift that mindset to ‘Innovate or Perish.’” The program, held at SAINS@USM starting September 3, included a Road-to-Commercialisation (R2C) Bootcamp. This intensive session provided researchers with essential strategies to define market value, handle intellectual property, and develop launch plans for their innovations, aiming to move ideas from proof-of-concept to real-world commercialization. A “Fireside Chat” forum also featured industry and academic experts sharing insights on the future of technology.



10 REDUCED
INEQUALITIES



Reduce inequality
within and among
countries

TEACHING & LEARNING/CURRICULUM

UTP, USM COLLABORATE TO PROMOTE INCLUSIVE EDUCATION

Universiti Teknologi Petronas (UTP) and Universiti Sains Malaysia have signed an agreement to enhance educational access and promote lifelong learning. The collaboration will utilize USM's Accreditation of Prior Experiential Learning (APEL) Centre to allow individuals with relevant work experience and skills to enroll in postgraduate coursework at UTP, even if they lack traditional academic qualifications. This partnership aligns with UTP's dedication to education for sustainable development and the UN's Sustainable Development Goal of quality education. UTP emphasizes providing accessible, flexible education through platforms like its Microcredential, ULearnPlus, Open and Distance Learning (ODL), and courses via the Centre for Advanced and Professional Education (CAPE). Both universities aim to enrich the educational environment, recognize diverse experiences, and ensure quality learning is universally accessible, offering new pathways for career advancement and lifelong learning.



USAINS, USM LAUNCH STEM EXPLORANCE 2024: CHANGING PERCEPTIONS OF STEM EDUCATION FOR UNDERPRIVILEGED YOUNG LEARNERS

USAINS Holding Sdn. Bhd. and USM jointly organized STEM Explorance 2024, a fully sponsored, one-day event during the school holidays aimed at empowering underprivileged children from the B40 community. The program, which featured hands-on activities like solar-powered car building and a live barn owl demonstration, focused on bridging educational gaps and igniting interest in STEM fields. According to USAINS, the initiative fosters social inclusivity, aligning with SDG 4 (Quality Education) and SDG 10 (Reduced Inequalities), and supports the organization's ESG principles by providing equal access to quality education.



OPERATION (INSTITUTIONAL ARRANGEMENT)

DISABILITIES FACILITIES

Universiti Sains Malaysia (USM) is committed to fostering an inclusive learning and living environment through barrier-free campus design and accessible infrastructure for Persons with Disabilities (OKU). In 2024, USM enhanced accessibility across its campuses to ensure equitable participation in academic, social, and residential activities. These facilities include wheelchair ramps, accessible toilets, tactile walkways, reserved parking spaces, lifts, and adapted teaching and learning environments located strategically across academic buildings, hostels, and service centres. USM's accessibility initiatives are implemented in alignment with the Ministry of Higher Education's Guidelines for the Implementation of the Inclusive Policy for Persons with Disabilities (OKU) in Higher Education Institutions. As of 2024, USM recorded a total of 147 accessible facilities, including 48 disabled toilets, 64 wheelchair lanes, and 15 lifts — demonstrating the university's ongoing investment in universal design and inclusivity.



USM OPENS DOORS FOR UNDERPRIVILEGED STUDENTS WITH FLEXIBLE FEE PLANS

Universiti Sains Malaysia is prioritizing access to higher education for underprivileged students by implementing flexible fee plans. This initiative, supported by the Higher Education Minister's directive to admit those in need and defer payments, aims to realize the dreams of students facing financial challenges. USM's support includes the SULUNG 3.0 Student Development Programme, which allows new students to register without any upfront payment. Additionally, students can opt for flexible instalment plans to settle fees based on their ability. USM also provides aid through the Student Welfare Fund and the Zakat Fund, urging students in distress to contact the Student Welfare Unit for early assistance. The goal is simple: no student should miss out due to financial constraints.





RESEARCH & INNOVATION

PHD THESIS: “POPULATION AGEING AND INCOME INEQUALITY IN CHINA

A 2024 doctoral thesis by a USM researcher examined population ageing and income inequality in China, using decomposition methods to assess how demographic shifts exacerbate income disparities. This work contributes to understanding inequality trends in high-population countries and reflects USM’s strength in social policy research. This research deals with income inequality in a major economy, which is relevant to global discussions on inequality and demographic change. It demonstrates USM’s research capacity on inequality.

CENTRE FOR POLICY RESEARCH (CPR) – POSTGRADUATE PROGRAMMES

USM’s Centre for Policy Research (CPR) runs MA and PhD programmes in Anthropology & Sociology focusing on inequality-relevant themes—such as micro-credit, development sociology, and social stratification—enabling research that directly supports policies for reducing inequality. These programmes build research capacity to address inequality, poverty, and social inclusion

ENGAGEMENT (INDUSTRY & COMMUNITY)

OKU OUTREACH PROGRAM (KESUMA) SHARES LATEST INFORMATION ON THE WELL-BEING AND DEVELOPMENT OF STUDENTS WITH DISABILITIES

The OKU Outreach Program under the National Council for Persons with Disabilities (MKBOKU), organised by the Ministry of Human Resources (KESUMA) in collaboration with Universiti Sains Malaysia and with the participation of Universiti Utara Malaysia (UUM), was held at the Dewan Pembangunan Siswa 1, Kompleks Cahaya Siswa, USM. The programme aimed to share the latest information on services offered for the development and well-being of persons with disabilities (OKU), ensuring more effective implementation. This initiative aligns with Sustainable Development Goal (SDG) 10: Reducing Inequalities, particularly its target of ensuring equal opportunities and reducing discrimination.



USM CELEBRATES 400 SPECIAL CHILDREN OF PENANG, STRENGTHENING SOCIAL INTEGRATION OF PERSONS WITH DISABILITIES (PWDS) WITH THE CAMPUS COMMUNITY

Universiti Sains Malaysia celebrated 400 special children from around Penang through the organisation of the Fun Run & Walk programme, in support of efforts to strengthen social integration between Persons with Disabilities (PWDs) and the campus community. Carrying the theme “All Together With Someone Special (Nothing About Us Without Us),” the programme successfully brought together PWD children, their parents, and USM, in line with the university’s aspiration to ensure that this community is given the rights, space, and opportunities to actively participate in every programme organised.



HEALTH OUTREACH PROGRAMMES: REACHING LOCAL COMMUNITIES, DISADVANTAGED POPULATIONS AND REFUGEES

Universiti Sains Malaysia plays a vital role in boosting local community well-being through health outreach. The Baktisiswa Penaga 2023 initiative, organized by the Persatuan Sains Farmasi, showcased this commitment. The annual event included health screenings, educational talks, games, and essential goods donations, fostering strong university-community ties. USM also targets disadvantaged populations, focusing on those in remote areas with limited healthcare access. A key programme, led by the Emergency Medicine Department, trains Orang Asli volunteers in first aid, including CPR and wound care. This empowers the community in Pos Balar, Gua Musang, to manage emergencies while reducing reliance on distant medical facilities due to geographical isolation.



11 SUSTAINABLE CITIES
AND COMMUNITIES



Make cities and human
settlements inclusive,
safe, resilient and
sustainable

TEACHING AND LEARNING/ CURRICULUM

REBORN: FROM TRASH TO TREASURE - USM CAMPUS RECYCLING DRIVE

Universiti Sains Malaysia recently launched its “Reborn: From Trash to Treasure” sustainability initiative, encouraging the campus community to embrace circular-economy behavior by allowing students and staff to exchange recyclables for eco-friendly rewards. Held on December 20, 2024, the event featured collection points, on-site sorting demonstrations, and interactive booths showcasing how waste materials can be re-purposed into practical “treasures” . Organized under the banner of #FromTrashToTreasure, the campaign reflects USM’s commitment to institutional sustainability, waste minimization, and fostering a culture where individual recycling actions contribute to a meaningful environmental impact and resource preservation.



USM'S RCE PENANG FOSTERS YOUTH-LED SDG COLLABORATION WITH UNIVERSITAS ISLAM NEGERI AR-RANIRY

Universiti Sains Malaysia, represented by RCE Penang, participated in the international workshop “An Intellectual Discourse on Environmental Issues” hosted by Universitas Islam Negeri Ar-Raniry (UIN Ar-Raniry), focusing on strengthening youth engagement and cross-border collaboration for the Sustainable Development Goals (SDGs). Led by Dr. Rohaya Abdullah and a research officer, six USM students presented impactful, youth-led initiatives addressing SDG 4 (Quality Education), SDG 6 (Clean Water and Sanitation), and SDG 11 (Sustainable Cities and Communities). The workshop, which included 40 UIN students and faculty, fostered dialogue on environmental awareness and resilience among ASEAN youth. Dr. Rohaya emphasized that the collaboration empowers students with the necessary knowledge and leadership skills to implement sustainable practices, reflecting USM’s commitment to youth-driven sustainability and regional partnerships for global impact.



OPERATION (INSTITUTIONAL ARRANGEMENT)

USM'S RCE PENANG WINS TWO GLOBAL RCE AWARDS FOR SUSTAINABILITY EDUCATION 2024

The Regional Centre of Expertise Penang (RCE Penang), hosted by Universiti Sains Malaysia's (USM) Centre for Global Sustainability Studies (CGSS), has been honored with two prestigious awards by the Regional Centre of Expertise (RCE) Global Network for its exemplary initiatives in Education for Sustainable Development (ESD). The 2024 awards recognize RCE Penang's success in pioneering transformative local-to-global projects that significantly advance community engagement, research, capacity-building, and the Sustainable Development Goals (SDGs). Established in 2008, RCE Penang's win enhances USM's reputation as an APEX institution committed to innovation in sustainability education, strengthens its regional and international networks, and underscores the institution's leadership role in global sustainability initiatives.

RCE AWARDS 2024

This certificate is presented to

RCE Penang

Erasmus+ ICT-Enabled In-Service Training of Teachers to Address Education for Sustainability

Outstanding Flagship Project



Certified by:

A handwritten signature in blue ink.

Jonghwi Park
Head of Innovation and Education Programme
United Nations University
Institute for the Advanced Study of Sustainability
1 December 2024

USM LEADS GLOBAL COLLABORATION IN MANGROVE CONSERVATION AT MERBOK

Universiti Sains Malaysia, spearheaded a significant mangrove-planting initiative on January 26, 2024, at the biodiverse Sungai Merbok Mangrove Forest, Kedah, marking a commitment to environmental restoration and international cooperation. The event saw USM's Regional Centre of Expertise Penang (RCE Penang), RCE Tongyeong (South Korea), and youth volunteers successfully plant 300 mangrove seedlings. This collaborative effort involved students from South Korean high schools under the "Bridge to the World" programme, fostering cross-cultural learning and environmental stewardship. Facilitated by the Japan-Malaysian Association (JMA) and the Kedah Forestry Department, the initiative not only enhanced coastal resilience but also reinforced USM's mission to integrate research, community outreach, and sustainable development through youth empowerment and operational ties between academia and local governance.



RESEARCH & INNOVATION

USM ARCHAEOLOGISTS DISCOVER COMPLETE HUMAN-SHAPED BUDDHA STATUE AT BUKIT CHORAS HERITAGE SITE

A collaborative research team from Universiti Sains Malaysia's Global Archaeological Research Centre (PPAG) and the Department of National Heritage (JWN) recently uncovered a complete, human-shaped Buddha statue at the Bukit Choras Archaeological Heritage Site. The life-sized statue, made of stucco and found intact with detailed iconographic features, was discovered during the third phase of excavation led by Dr. Nasha Rodziadi Khaw between April 21 and May 21, 2024. This phase also revealed additional significant artifacts, including temple structures, Sanskrit inscriptions, and pottery fragments. MOTAC Secretary-General Dato' Roslan Abdul Rahman stated that these findings could reshape the understanding of Kedah Tua's strategic role in ancient Southeast Asian maritime trade. USM Vice-Chancellor Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed affirmed the university's commitment to advancing archaeological research and heritage preservation through scientific and sustainable initiatives.



ENGAGEMENT (INDUSTRY & COMMUNITY)

USM CONVEX'24: FROM CAMPUS TO COMMUNITY - EMPOWERING STUDENTS THROUGH THE STUDENTS FOR SOCIETY (S4S) INITIATIVE

Universiti Sains Malaysia launched its Convocation Expo 2024 (ConvEx'24) in conjunction with the 62nd Convocation Ceremony at the USM Main Campus. The event was officially integrated into the national Students for Society (S4S) initiative, a programme championed by the Ministry of Higher Education (MOHE) and the Malaysian University Volunteer Council (MASKUM). USM Vice-Chancellor Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed announced the move, highlighting that ConvEx now aligns with the six core S4S pillars—including social service, environmental sustainability, and quality education—all aimed at strengthening student empowerment and community engagement in line with the United Nations Sustainable Development Goals (SDGs). The expo was officiated by Pro-Chancellor Tan Sri Datuk Dr. Zulkefli A. Hassan, who commended the dedicated work and volunteerism of the student and coordinator teams, underscoring USM's vision to cultivate socially responsible and proactive student leaders.



USM CELEBRATES PENANG’S CULTURAL HERITAGE THROUGH “PESTA PULAU MUTIARA 2024”

Universiti Sains Malaysia, through the Gabungan Anak Pulau Pinang (GAPP) student group, proudly organized Pesta Pulau Mutiara 2024 at Dewan Tuanku Syed Putra to celebrate and preserve the rich cultural heritage of Penang. The event was officiated by Professor Dr. Azizah Omar, Director of the Student Development Centre representing the USM Vice-Chancellor, who emphasized the importance for Penang-born students to take pride in and safeguard their ancestral heritage. The festival showcased Penang’s diverse artistic expressions through vibrant cultural performances, including Boria Pulau Pinang, Wayang Potehi, Silat Cerita, and Ghazal Parti . Project Director Nurul Aida Maznim stated the event is envisioned to become an annual celebration, reinforcing USM’s commitment to cultural sustainability and community engagement.



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



Ensure sustainable
consumption and
production patterns

TEACHING AND LEARNING/ CURRICULUM

SAINSeD EARNS ISO 9001 CERTIFICATION FOR EXCELLENCE IN SUSTAINABLE PROFESSIONAL TRAINING MANAGEMENT

The Sustainability Training Unit (SAINSeD), under the Universiti Sains Malaysia's (USM) Division of Industry and Community Network (BJIM), has officially been awarded the ISO 9001:2015 Quality Management System (QMS) certification. This accreditation recognizes SAINSeD's quality management in providing short courses in management and applied sciences, aligning with USM's commitment to lifelong learning and the Sustainable Development Goals (SDGs). The ISO certificate was presented by Human Resources Minister YB Steven Sim Chee Keong at an official ceremony. USM Deputy Vice-Chancellor Professor Dr. Azlan Amran highlighted that this milestone reflects SAINSeD's dedication to maintaining high standards in professional training, ensuring continuous improvement, and reinforcing USM's leadership in sustainability education and advancing ESG-related industrial training nationwide.



STRENGTHENING SDG CAPACITY THROUGH AIRLANGGA UNIVERSITY'S SDGS 101 TRAINING OF TRAINERS

Airlangga University in Surabaya in collaboration with the Centre for Global Sustainability Studies (CGSS) hosted a five-day workshop, “Training of Trainers – Basic Knowledge about SDGs (SDGs 101)”, from 14–18 May 2024 to strengthen SDG literacy among faculty members and education staff. The programme equipped participants with foundational knowledge of the Sustainable Development Goals and strategies for integrating them into academic and institutional practices. Through interactive sessions, expert presentations, and hands-on exercises, attendees explored best practices, innovation-driven solutions, and ways to cultivate a sustainability-oriented work culture. The workshop also emphasised environmental stewardship and encouraged participants to lead SDG initiatives within the university and wider community.



OPERATION (INSTITUTIONAL ARRANGEMENT)

USM ISLAMIC CENTRE LAUNCHES “GREEN RAMADAN” CAMPAIGN TO PROMOTE SUSTAINABLE PRACTICES

In support of sustainable practices and the Sustainable Development Goals (SDGs), the Islamic Centre of USM launched the “Green Ramadan Campaign” to drastically reduce waste through the principles of Reduce, Reuse, and Recycle (3R). The initiative aims to eliminate single-use plastics, particularly during the daily iftar meals which serve approximately 3,000 people. According to Ustaz Zayd Zhari, Deputy Director of the USM Islamic Centre, the campaign urges the community to bring their own reusable food containers and eco-bags, and traditional Bubur Lambuk is now distributed without plastic packaging. Inspired by USM’s Green Office initiative, the campaign also sells reusable food containers for RM2, with proceeds channeled into the Ramadan Fund to further support sustainability efforts.



USM LAUNCHES SUSTAINABILITY WEEK 2024 TO PROMOTE ENVIRONMENTAL AWARENESS AND GREEN CAMPUS CULTURE

Universiti Sains Malaysia launched Sustainability Week 2024, running from June 4-8 at the DK Foyer (dubbed “Sustainability Street”), to reaffirm its commitment to promoting environmental awareness and sustainable practices across campus. The initiative, organized by Kampus Sejahtera in collaboration with the USM Student Representative Council (MPPUSM) and BHEPA, coincides with World Environment Day and aims to encourage campus-wide participation aligned with the United Nations Sustainable Development Goals (SDGs). Officiated by Deputy Vice-Chancellor Professor Dr. Azlan Amran, the week features diverse programs, including E-Waste and Used Cooking Oil Collection Competitions, Speaker’s Corner, and Sustainability Exhibitions . The highlight event, Sustainable Future Initiatives Exhibition (SUFIE) 2.0, held on June 8, showcased sustainability talks, e-waste collection, and innovation displays promoting eco-conscious living.

PERTANDINGAN KITAR SEMULA
Antara Jabatan Sempena Minggu Kelestarian Universiti Sains Malaysia

6 JUN 2024 (KHAMIS)
Masa: 10.00 Pagi - 12.00 Tengahari

Foyer DK U, Bangunan G27
Universiti Sains Malaysia

Jom Kitar Semula

Barangan Kitar Semula Yang Boleh Dihantar

	PET	HDPE	PP	PLASTIK CAMPUR
KERTAS HITAM PUTIH	KERTAS CAMPUR	SURAT KHABAR	KOTAK (KCC)	MINYAK MASAK TERBUKAI

SELAMAT

#FikirDuluSebelumBuang

Think It Through, Recycle First, Recharge

USM GREEN OFFICE RATING CEREMONY STRENGTHENS CAMPUS SUSTAINABILITY COMMITMENT

Universiti Sains Malaysia reaffirmed its commitment to environmental sustainability by hosting its first-ever USM Green Office/Desasiswa Rating Ceremony 2024 at Dewan Budaya. The event, organized by the Industry and Community Network Division (BJIM) and Kampus Sejahtera, celebrated campus-wide green initiatives and recognized departments striving for the top 5-Leaf Sustainability Rating. USM Vice-Chancellor Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed emphasized the program's role in embedding sustainability into the university's institutional culture. The ceremony also featured the launch of the USM GreenPulse App by Deputy Vice-Chancellor Professor Dr. Azlan Amran to monitor and coordinate green practices across campus. Furthermore, a Memorandum of Understanding (MoU) was signed with ADA Biotech Sdn. Bhd. to promote waste management and eco-technologies, including rice-based biodegradable straws. The top-performing units in the Green Office Awards were Pusat Sejahtera (1st), School of Management (2nd), and School of Distance Education (3rd).



RESEARCH & INNOVATION

USM STRENGTHENS COMMITMENT TO SDG AND STIE THROUGH RUTRANS GRANTS FOR THREE HIGH-IMPACT RESEARCH PROGRAMS

Universiti Sains Malaysia, through its Research Creativity and Management Office (RCMO), hosted an award ceremony to celebrate the 2024 recipients of the Research University Transdisciplinary Grant Scheme (RUTrans). The event, officiated by Deputy Vice-Chancellor of Research and Innovation, Professor Dr. Habibah A. Wahab, recognized three high-impact programmes—comprising 10 subprojects—that received a total allocation of RM1.19 million. These transdisciplinary projects are specifically focused on addressing Sustainable Development Goals (SDGs) and promoting advancements in Science, Technology, Innovation, and Economy (STIE). The funded initiatives include: AI-driven breast cancer radiotherapy, microplastic pollution in the Muda River Basin, and renewable energy/ESG digital reporting for SMEs. The ceremony also marked the launch of the R&I Net Platform, a new digital hub co-developed by RCMO and PPKT to enhance research collaboration and data sharing, thereby supporting USM's Strategic Plan 2025 and strengthening Malaysia's national research ecosystem.



USM HOSTS 9TH INTERNATIONAL CONFERENCE FOR YOUNG CHEMISTS (ICYC 2024): GREEN INNOVATION FOR A SUSTAINABLE FUTURE

The 9th International Conference for Young Chemists (ICYC 2024) successfully convened at Universiti Sains Malaysia from October 9-11, bringing together approximately 200 emerging researchers and international experts under the theme “Green Innovation in Chemistry: Catalyzing Sustainable Solutions for a Greener Tomorrow.” Organized biennially by the School of Chemical Sciences, the event featured six plenary and keynote speakers from over 15 countries and included thematic sessions spanning organic, inorganic, analytical, physical, industrial, and bio-organic chemistry. ICYC 2024 served as a platform to spotlight sustainable chemistry innovations addressing global challenges such as water treatment, microplastic pollution, and circular materials. The conference reinforced USM’s commitment to building research capacity, promoting international networking, and positioning the university as a regional hub for green science and innovation.

9TH INTERNATIONAL CONFERENCE FOR YOUNG CHEMISTS
GREEN INNOVATION IN CHEMISTRY: CATALYZING SUSTAINABLE SOLUTIONS FOR A GREENER TOMORROW

Join us at ICYC2024 an exciting gathering where groundbreaking research meets passionate minds. Secure your spot now to explore cutting-edge science, connect with fellow chemists, and shape the future of chemistry!

CONFIRMED SPEAKERS:

<p>Plenary Speaker  Prof. Ts. Dr. Mohd Hafiz Dzarfan Othman Universiti Teknologi Malaysia, Malaysia</p>	<p>Keynote Speaker  Assoc. Prof. Dr. Falz Bukhari Mohd Suh Universiti Sains Malaysia, Malaysia</p>
<p>Plenary Speaker  Prof. Dr. Nicolas Brosse Université De Lorraine, France</p>	<p>Keynote Speaker  Prof. Dr. Mohamad Rafiq IIG University, Indonesia</p>
<p>Keynote Speaker  Prof. Fitri Khoenunissa Indonesia University of Education Bandung, Indonesia</p>	<p>Keynote Speaker  Prof. Dr. Aik Wei Shen Hong Kong Baptist University, Hong Kong</p>
<p>Keynote Speaker  Prof. Dr. Nobuto Yamahiri Osaka University, Japan</p>	<p>Keynote Speaker  Prof. Dr. Jalet Labidi University of The Basque Country (UPV/EHU), Spain</p>

CONTACT US: icyc@usm.my icyc.usm.my

9-11 OCTOBER 2024
 Bayview Hotel George Town, Penang, Malaysia

Abstract submission >>> **31 July 2024**

IMPORTANT DEADLINE

Early bird registration	30 June 2024
Registration	31 August 2024
Full paper submission	25 October 2024

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48 HOURS EXCURSION PRICE

Local	RM 30
International	S\$15

REGISTER NOW

The 9th International Conference for Young Chemists 2024

ENGAGEMENT (INDUSTRY & COMMUNITY)

USM AND ADRC LAUNCH ESG STANDARDS AND AWARDS TO STRENGTHEN INDUSTRY SUSTAINABILITY PRACTICES

Universiti Sains Malaysia, through a collaboration between its Centre for Global Sustainability Studies (CGSS) and the Advanced Dispute Resolution Centre (ADRC), officially launched the ESG Award 2024. The award is designed to strengthen sustainability practices and recognize industry leaders committed to high Environmental, Social, and Governance (ESG) standards across the nation. The initiative, which aligns with the United Nations Sustainable Development Goals (SDGs), aims to enhance USM's institutional performance indicators in key areas like teaching, research, and innovation. Officiating the event, ADRC Senior Honorary Advisor Tan Sri Dato' Seri (Dr.) Haji Mohd Yusoff Latiff noted USM's high ranking in the Times Higher Education Impact Rankings (THE-IR) 2024 in Malaysia and Asia. Deputy Vice-Chancellor Professor Dr. Azlan Amran emphasized that the new ESG standards will serve to guide industries in sustainable compliance, supported by the appointment of five steering committee members and 27 industry experts to strengthen nationwide ESG benchmarking and implementation.



USM HONOURED WITH TOP HIGHER EDUCATION AWARD FOR “ONE MILLION TREES IN A DAY” PROGRAMME IN PENANG

Universiti Sains Malaysia received the Top Higher Education Category Award for its outstanding contribution to the “One Million Trees in a Day” initiative, organized by the Yayasan Amal TYT Pulau Pinang. The award was presented by Penang Governor, Tun Dato’ Seri Utama Ahmad Fuzi Haji Abdul Razak, and accepted by USM Deputy Vice-Chancellor Professor Dr. Azlan Amran . The program, held on April 22, 2024, saw 1,000 USM staff and student volunteers successfully plant 8,500 trees across its Main Campus, Engineering Campus, and IPPT Bertam. Professor Azlan credited the success to the university’s leadership and the strong collective effort of the USM community, while the Deputy Coordinator of Kampus Sejahtera, Ahmad Wafi Sahedan, highlighted the strong collaboration among sustainability officers and volunteers as key to this achievement.



13 CLIMATE
ACTION



Take urgent action
to combat climate
change and its
impacts

TEACHING AND LEARNING/ CURRICULUM

USM-YAYASAN TUN SARDON SUSTAINABILITY TALKS: ADDRESSING ON SUSTAINABILITY AND ESG



The Universiti Sains Malaysia Centre for Global Sustainability Studies (CGSS), in partnership with Yayasan Tun Sardon, hosted a critical public lecture titled ‘Sustainability Talks, ESG: The New Black in Industries and Businesses.’ The event featured Professor Emeritus Tan Sri Dr. Zakri Abdul Hamid, emphasizing the world’s need to address pressing material issues, particularly those related to climate change. In direct support of Sustainable Development Goal 13 (Climate Action), the talk highlighted that environmental issues—including climate change, pollution, and biodiversity loss—are interconnected and urgently require mitigation. The speaker underscored that integrating Environmental, Social, and Governance (ESG) frameworks is essential for corporations and institutions to reduce their negative ecological footprint. This intellectual collaboration reinforces USM’s commitment to scientific advocacy, promoting sustainable practices, and driving real-world change necessary for a healthier, more liveable future.

OPERATION (INSTITUTIONAL ARRANGEMENT)

EPEHUB@CGSS CONGRATULATES GREEN AMBASSADORS IN EMBRACING ENVIRONMENTAL PROTECTION AND SUSTAINABLE LIFESTYLES



Universiti Sains Malaysia's (USM) Environmental Protection and Education Hub (EPEHub@CGSS) held its third Green Ambassadors' Appreciation Night. This event formally recognizes the dedication and commitment of the Green Ambassadors (GA) volunteer team in promoting environmental awareness across the campus and the Penang community. The GA program is central to USM's commitment to cultivating environmental leadership and advancing sustainability initiatives aligned with the Sustainable Development Goals (SDGs). By empowering student volunteers, EPEHub@CGSS facilitates tangible outreach programmes focused on sustainable lifestyle practices and waste management education. The ceremony underscores the critical role of volunteerism and strategic partnerships, like with the Tzu-Chi Society, in driving lasting environmental impact.

USM NAV6 HOSTS DIALOGUE SESSION REGARDING ENVIRONMENTAL SUSTAINABILITY



Universiti Sains Malaysia, through its National Advanced IPv6 Centre (NAV6), hosted a significant dialogue session focused on “Leveraging Artificial Intelligence (AI) and Data Transformation for a Sustainable Net-Zero Future.” Supported by the Royal Academy of Engineering, the event brought together 60 participants from government, industry, NGOs, and academia. The session directly supported the Penang state government’s agenda by emphasizing the critical importance of high-quality data and advanced technologies like AI in measuring, monitoring, and achieving Sustainable Development Goals (SDGs). The dialogue underscored USM’s commitment to facilitating cross-sectoral collaboration to formulate data-driven strategies, enhance climate resilience, and translate scientific advancements into impactful, real-world environmental sustainability initiatives.

RESEARCH & INNOVATION

USM COLLABORATES WITH CIMA AND MBPP TO TEST AND DEVELOP GREEN CEMENT TECHNOLOGY FOR MARINE USE



Universiti Sains Malaysia has launched a significant inter-sectoral collaboration with Cement Industries of Malaysia Berhad (CIMA) and the Penang City Council (MBPP) to pioneer Malaysia's first Eco-Marine Concrete initiative. This strategic partnership is dedicated to the comprehensive research, testing, and development of a new generation of green cement technology tailored for harsh marine environments. This joint effort is critical for advancing Sustainable Development Goal 9 (Industry, Innovation, and Infrastructure) by seeking to replace conventional concrete with a novel, environmentally friendly material. The primary goal is to drastically mitigate the ecological damage associated with traditional cement production and application in coastal and port developments. This success demonstrates a robust triple-helix model, effectively translating academic expertise into practical, sustainable infrastructure solutions that actively safeguard marine ecosystems, directly supporting SDG 13 (Climate Action) and SDG 14 (Life Below Water), and reinforces USM's commitment to driving impactful environmental innovation.

USM CHAMPIONS BIOPOLYMER REVOLUTION WITH ISBP 2024 GLOBAL EXPERTS MEET



Universiti Sains Malaysia hosted the 19th International Symposium on Biopolymers (ISBP 2024), bringing together global experts from 33 countries under the theme, “Towards Safe and Sustainable Biopolymers for Our Future.” This international conference highlights USM’s strategic leadership in tackling the climate crisis, aligning directly with Sustainable Development Goal 13 (Climate Action). The symposium focused on cutting-edge research in biobased and biodegradable plastics, which are crucial for reducing global reliance on fossil fuel-derived polymers. By championing biopolymer technology, USM facilitates innovative solutions for plastic pollution and waste management, ultimately reducing greenhouse gas emissions associated with petrochemical production and disposal. This initiative solidifies USM’s role in translating advanced biotechnology research into practical, circular economy solutions that urgently address environmental sustainability and climate mitigation.

ENGAGEMENT (INDUSTRY & COMMUNITY)

USM-PENANG HILL CORPORATION EXPLORE RESEARCH PARTNERSHIPS; FORGING COLLABORATIVE FRONTIERS



Universiti Sains Malaysia has cemented a strategic research partnership with the Penang Hill Corporation (PHC) to establish a collaborative front for sustainability and conservation within the critical Penang Hill ecosystem. This institutional cooperation is a testament to USM's commitment to Sustainable Development Goals 17 (Partnerships) and 13 (Climate Action). The collaboration is designed to synergize USM's scientific expertise with PHC's environmental management responsibilities. Key research initiatives will target climate change impact studies, biodiversity conservation, and the development of sustainable ecosystem management protocols for the hill. By generating high-fidelity environmental data and jointly implementing evidence-based solutions, this partnership aims to bolster the hill's natural resilience. This effort demonstrates how academic-corporate alliances can effectively translate research findings into tangible climate mitigation and adaptation strategies, setting a high standard for regional environmental stewardship.

USM AND SABAH PARKS FORGE ALLIANCE TO PROMOTE SUSTAINABLE DEVELOPMENT EFFORTS



A pivotal strategic alliance has been established between Universiti Sains Malaysia and Sabah Parks, signaling a joint commitment to advance research and sustainable development practices across Sabah's protected areas. This formal cooperation directly supports Sustainable Development Goals 13 (Climate Action), 15 (Life on Land), and 17 (Partnerships). The partnership aims to leverage USM's scientific expertise to support Sabah Parks in critical areas, including biodiversity conservation, climate change impact studies, and the implementation of sustainable ecotourism models. Key initiatives will focus on joint research projects to monitor ecosystem health and bolster the natural resilience of critical carbon sink areas. By combining academic rigor with on-the-ground management, this alliance translates scientific knowledge into effective, real-world conservation and adaptation strategies, setting a precedent for environmental stewardship in Malaysia.

USM VC LEADS AWARD-WINNING RESEARCH TEAM WITH INNOVATIVE PROJECT AT ITEX'24

Universiti Sains Malaysia and PETRONAS Research Sdn. Bhd. (PRSB) secured two major accolades at the 35th International Invention, Innovation, Technology Competition & Exhibition (ITEX'24), held in Kuala Lumpur on May 16-17, 2024. The joint innovation, titled “Catalytic CO₂ Gasification of wastes for low-carbon syngas production (CO₂ SYN),” was led by USM Vice-Chancellor Professor Dato’ Seri Ir. Dr. Abdul Rahman Mohamed. The project won the ‘ITEX 2024 Gold Medal’ and the prestigious ‘Tun Lim Keng Yaik Award for Best invention in Technology Reversing Climate Change.’ The groundbreaking technology offers an alternative, low-carbon method for producing syngas (a mixture of CO and H₂) by utilizing CO₂ gasification of wastes, significantly reducing the carbon footprint of traditional production methods. This patented innovation directly supports SDG 13 (Climate Action) and highlights the powerful collaboration between academia and industry.



14 LIFE
BELOW WATER



Conserve and
sustainably use the
oceans, seas and
marine resources
for sustainable
development

TEACHING AND LEARNING/ CURRICULUM

USM MARINE SCIENTIST CONTRIBUTES TO GLOBAL DIALOGUE ON OCEAN HEALTH AND SUSTAINABLE AQUACULTURE

Prof. Dato' Dr. Aileen Tan Shau Hwai from Universiti Sains Malaysia's Centre for Marine and Coastal Studies (CEMACS) recently shared her expertise at the NANO-DOAP webinar. Her presentation focused on the alarming effects of ocean acidification on shellfish, specifically noting the threat to oyster growth and survival. This critical research contributes vital data toward global adaptation and mitigation strategies for sustainable aquaculture. By integrating this real-world knowledge, USM enriches the CEMACS marine science curriculum. This approach is key to nurturing environmentally literate graduates equipped to address emerging challenges to marine biodiversity and ocean-based livelihoods..



USM SUCCESSFULLY HOSTS SUSTAINABLE AQUACULTURE SUMMIT 2024

On 15 October 2024, Universiti Sains Malaysia, through its Centre for Innovation and Consultation (CIC) in partnership with CEMACS and Leave A Nest, successfully organised the **Sustainable Aquaculture Summit (SAS 2024)**. The event attracted about 200 participants from academia, government, and industry sectors, and convened voices from some 30 agencies committed to advancing aquaculture sustainability. SAS 2024 featured dynamic sessions on AI-driven innovations, sustainable feed alternatives, and improved water quality systems. These sessions bridged the gap between cutting-edge research and practical aquaculture applications, facilitating knowledge transfer that can directly influence teaching curricula. The summit offers valuable content and partnerships that can be integrated into marine science and aquaculture education. Students can now access real-world case studies, industry contacts, and evolving technologies within their coursework. Embedding summit insights into syllabi ensures that future marine scientists are trained in state-of-the-art, sustainability-oriented methods.



Sustainable Aquaculture Summit
15th October 2024
9.00 AM - 6.00 PM
Sains@USM, Bukit Jambul,
Penang, Malaysia

Strategizing Collaborative Efforts for a Sustainable Aquaculture Industry in Malaysia and Beyond

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CEMACS
Centre for Marine & Coastal Studies USM

USM AND CEMACS HOST PRESTIGIOUS IIFET 2024, ADVANCING BLUE ECONOMY EDUCATION

Universiti Sains Malaysia, through its Centre for Marine and Coastal Studies (CEMACS), successfully hosted the 21st International Institute of Fisheries Economics and Trade (IIFET) Conference from 15–19 July 2024 in Penang, marking the conference’s return to Asia after 16 years. With the theme “Aquatic Food Systems in the Blue Economy,” IIFET 2024 brought together global experts, researchers, policymakers, and students to explore the dynamic intersections of fisheries, aquaculture economics, and trade in addressing urgent global challenges. The conference provided a vital platform for teaching and learning, aligning with SDG 14: Life Below Water, by promoting academic dialogue on sustainable aquatic food systems. Participants engaged in discussions on governance, technology, and market innovations that can shape resilient and inclusive blue economies for healthy people, a thriving planet, and shared prosperity. Innovative sub-themes included gender analysis, policy impacts, and the role of science-based management in ensuring long-term ocean health. Through this event, USM and CEMACS reinforced their educational mission to integrate sustainability into the curriculum and research ecosystem, nurturing future leaders equipped to safeguard marine biodiversity and strengthen the global commitment to sustainable aquatic resource management.



OPERATION (INSTITUTIONAL ARRANGEMENT)

GREEN MARINE INFRASTRUCTURE THROUGH ECO-CONCRETE INNOVATION

Universiti Sains Malaysia's (USM) Centre for Marine and Coastal Studies (CEMACS), Cement Industries of Malaysia Berhad (CIMA), and Majlis Bandaraya Pulau Pinang (MBPP) have formed a strategic partnership to develop and test eco-friendly marine concrete. The collaboration, formalized via an MoU, establishes a Research Laboratory for Marine Green Concrete. It will combine CIMA's expertise in green cement production with CEMACS's deep understanding of marine ecosystems. According to CEMACS Director Prof. Dato' Dr. Aileen Tan, the goal is to accelerate green solutions in Malaysia, innovate marine construction towards carbon neutrality, and boost the Penang Green Agenda 2030. This makes Penang a leader in sustainable development. A key focus will be the Middle Bank Marine Sanctuary, a critical biodiversity hotspot and a vital natural defense against rising sea levels and extreme weather, which famously mitigated the 2004 tsunami impact.



USM EDUCATIONAL OUTREACH ON SUSTAINABLE FISHERIES AND OCEAN STEWARDSHIP

Universiti Sains Malaysia through the Centre for Marine and Coastal Studies (CEMACS), plays a vital role in offering free educational outreach activities for local and national communities to raise awareness about overfishing, illegal, unreported and unregulated (IUU) fishing, and destructive fishing practices. These outreach efforts are designed to enhance public understanding of the importance of sustainable marine resource management and ocean health. In 2024, Prof. Dato' Dr. Aileen Tan Shau Hwai, Director of CEMACS, contributed to the global scientific dialogue on sustainable aquaculture through the 22nd NANO-DOAP Webinar on "Effects of Ocean Acidification on Oyster Aquaculture." Her session highlighted how ocean acidification and destructive fishing threaten shellfish growth, reproduction, and survival, critical issues that endanger biodiversity, food security, and livelihoods in coastal communities. By translating complex research into accessible knowledge, USM empowers communities to understand the long-term consequences of unsustainable and illegal fishing practices, and the importance of sustainable aquaculture as an alternative livelihood.



RESEARCH & INNOVATION

USM AND KEELE UNIVERSITY STRENGTHEN RESEARCH PARTNERSHIP FOR OCEAN SUSTAINABILITY

Universiti Sains Malaysia and the University of Keele (UK) have officially renewed their partnership, signing three new Memorandums of Understanding (MoUs) on May 6, 2024. The agreements cover a Strategic Partnership, Research Collaboration, and the Royal Society International Exchange Grant, aiming to advance education and research with societal impact. The signing, presided over by USM Vice-Chancellor Prof Dato' Seri Ir. Dr Abdul Rahman Mohamed and Keele's Prof Trevor McMillan, revives ties that had lapsed in 2020. Crucially, this strengthened partnership, involving USM's Centre for Marine and Coastal Studies (CEMACS), offers fertile ground for Research and Innovation aligned with SDG 14 (Life Below Water). Joint projects may focus on marine science, ocean sustainability, coral reef health, and aquaculture, generating scalable solutions and advancing Malaysia's contribution to global ocean science.



USM STUDENTS JOIN XIAMEN UNIVERSITY'S RESEARCH VOYAGE, STRENGTHENING MARINE SCIENCE COLLABORATION

USM students from the School of Biological Sciences joined Xiamen University's "Xiamen University at Sea" training aboard the advanced Tan Kah Kee Research Vessel, strengthening marine science collaboration and advancing SDG 14: Life Below Water. The programme's "Open Ship Day," officiated by YB Chang Lih Kang (MOST), also celebrated 50 years of Malaysia–China ties. This hands-on, multidisciplinary training, facilitated by a 2024 MoU, underscores USM's dedication to international scientific exchange and sustainable ocean research.



ENGAGEMENT (INDUSTRY & COMMUNITY)

USM MARINE FIELD COURSE DEEPENS LEARNING ON BIODIVERSITY AND CONSERVATION AT CEMACS

The Centre for Marine and Coastal Studies (CEMACS), USM hosted a four-day Marine Field Course: Biodiversity & Conservation for 35 students from Kolej Yayasan UEM (KYUEM), Selangor, offering hands-on exposure to marine ecosystems, conservation, and sustainable ocean practices. Throughout the four-day programme, students were immersed in a variety of marine ecological studies. They learned ecological sampling techniques, microscopy skills, and the fundamentals of aquaculture, all while understanding the interconnectedness of marine ecosystems. A highlight of the course was the field visit to Pulau Gazumbo, where students explored the seagrass ecosystem, observing biodiversity firsthand and using transect lines and quadrats to monitor marine life. Another significant visit was to Tiram Sungai Merbok, a sustainable aquaculture site demonstrating environmentally responsible oyster farming. Students learned how well-managed aquaculture can enhance food security, livelihoods, and ecosystem resilience without compromising marine resources.



CEMACS MOBILISES REGIONAL ACTION FOR INTERNATIONAL COASTAL CLEANUP 2024

Centre for Marine and Coastal Studies (CEMACS), Universiti Sains Malaysia successfully led the **International Coastal Cleanup (ICC) 2024** campaign, strengthening community and regional collaboration in protecting marine ecosystems. Held from 21 September to 20 October 2024, the initiative encouraged individuals, families, and organisations to conduct self-organised beach or river cleanups, while contributing as citizen scientists by submitting marine debris data through CEMACS' online form or printable data sheets. The campaign kicked off with a cleanup at Pantai Seagate, Penang, on 21 September 2024, where 218 participants from CEMACS staff, USM students, and the public collected 425 kilograms of trash in just one hour. Expanding its impact regionally, CEMACS' international partner, the School of Public Health, Walailak University, together with the Khanom Power Plant (EGCO Group), gathered 63 students and staff to clean up Khanom Beach, Nakhon Si Thammarat, Thailand, on 26 September 2024. In total, 1,301 participants from Malaysia, Thailand, and Singapore took part in this year's campaign, collectively removing 38,336 pieces of trash from coastal and riverine areas. This collaborative effort highlights CEMACS' leadership in community engagement, fostering regional cooperation and shared responsibility toward sustainable oceans and cleaner coastlines.



15 LIFE
ON LAND



Protect, restore and promote sustainable use of terrestrial ecosystem, sustainability manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

TEACHING AND LEARNING/ CURRICULUM

USM CHAMPIONS BIOPOLYMER REVOLUTION WITH ISBP 2024 GLOBAL EXPERTS MEET

Universiti Sains Malaysia hosted the **19th International Symposium on Biopolymers (ISBP 2024)** under the theme “Towards Safe and Sustainable Biopolymers for Our Future,” attracting 300 participants from 33 countries. The event spotlighted how biopolymers derived from renewable biological resources and offer eco-friendly alternatives to conventional plastics, reducing carbon footprints and promoting circular economy goals. A key highlight was a mini workshop on marine biodegradation of polymers, where expert researchers discussed cutting-edge biodegradable plastics tailored for marine settings. USM used the symposium to strengthen ties among academia, industry, and policymakers, emphasizing the translation of research into sustainable practice.



USM AND JMA LAUNCH ‘STREAM + BAKAU LAB’

The Universiti Sains Malaysia (USM) School of Educational Studies (PPIP), in collaboration with the Japan Malaysia Association (JMA), hosted the STREAM + BAKAU LAB Showcase at SK Haji Omar Tahir primary school in Kedah. The programme, officiated by the Consul-General of Japan in Penang, engaged 30 students in an innovative, hands-on science experience. Activities focused on mangrove ecosystems to promote learning across Science, Technology, Engineering, Arts, and Mathematics (STREAM). The initiative aimed to introduce scientific skills, encourage creative thinking, and allow students to apply theoretical knowledge practically. The programme is positioned as a model for environmental education and STREAM integration, hoping to inspire similar initiatives nationwide.



GSB POST GRADUATES AND STAFF UNITES TO PLANT 100 MANGROOV TREE SAPLING AT SUNGAI ACEH NIBONG TEBAL

A coastal mangrove planting event in Sungai Aceh, Nibong Tebal, organized by the Postgraduate Students of the Graduate School of Business, Universiti Sains Malaysia, successfully attracted 32 participants who planted 100 mangrove saplings. The program ran smoothly and achieved its objectives of raising awareness about the importance of mangrove conservation, understanding the positive impacts of mangroves on the environment and coastal communities, and sharing current knowledge with the local fishing community. The enthusiasm and dedication of the participants, including students and staff from GSB, made the event a significant success, reinforcing our collective commitment to preserving and restoring the environment for a greener and more sustainable future.



OPERATION (INSTITUTIONAL ARRANGEMENT)

TRASH FREE HILL 2024

Demonstrating USM's commitment to protecting ecosystems under threat, the university participated in the "Trash Free Hill 2024" programme on 29 September 2024 at Penang Hill, a vital highland ecosystem. The event gathered more than 800 participants, including staff from Pusat Sejahtera and 40 volunteers from Kampus Sejahtera USM, who successfully collected and separated over 200 kilograms of waste into recyclable categories such as paper, metal, glass, and plastic. This collaborative clean-up effort helped restore the natural environment of Penang Hill, reduce pollution, and preserve its rich biodiversity. Through these initiatives, USM demonstrates its ongoing commitment to directly maintaining and extending ecosystems and their biodiversity. By combining research-based monitoring, citizen participation, and active conservation work, the university continues to safeguard both campus and regional ecosystems for future generations.



RESEARCH & INNOVATION

USM, WONDFO BIOTECH JOIN FORCES TO ADVANCE BIOTECHNOLOGY RESEARCH

USM signed a Memorandum of Understanding (MoU) with **Guangzhou Wondfo Biotech Co., Ltd.** to expand joint biotechnology research and training efforts. This institutional partnership, formalised in July 2024, aims to bridge academia and industry, facilitating collaborative projects, knowledge exchange, and capacity building in advanced biotechnological fields. Through this alliance, USM hopes to accelerate translational research, enabling graduates to move seamlessly into professional roles armed with cutting-edge skills, while fostering innovative solutions that align with ecosystem health and sustainable development objectives. The MoU is emblematic of USM's commitment to integrating strategies into its institutional framework strengthening its ability to contribute to terrestrial ecosystem resilience through biotechnology advances that support biodiversity, habitat stewardship, and sustainable resource management.



MALAYSIA AND JAPAN TRIAL RECYCLING DEAD OIL PALM TREES INTO BIOFUEL

Malaysia and Japan have launched a pioneering joint effort to convert felled palm trunks into renewable biofuel, in a project led by Akihiko Kosugi of the Japan International Research Center for Agricultural Sciences (JIRCAS). Japanese universities and businesses, including engineering firm IHI, collaborate alongside Malaysia's government and Universiti Sains Malaysia, to develop methods for pulping trunk biomass into fibers, washing, drying, and compressing them into fuel pellets, while recycling the sap into fertilizers or sustainable aviation fuel. This initiative unites academic researchers, industry players, and government bodies to tackle land-based biomass waste and promote sustainable land use. Through this cooperation, the project not only diverts decaying palm trees that often left to decompose and emit greenhouse gases but also engages communities and industries in more sustainable agricultural practices. Moreover, the collaborative model enables technology transfer, local capacity building, and community awareness of ecological impacts tied to palm oil production. In leveraging multi-sector engagement to transform waste biomass into value-added, low-emission resources, this Malaysia–Japan partnership embodies how research and innovation coupled with strong industry–community linkages can drive sustainable land management, biodiversity protection, and ecological resilience.



ENGAGEMENT (INDUSTRY & COMMUNITY)

STRENGTHENING MALAYSIA–INDONESIA BIOLOGY COLLABORATION VIA INTER-UNIVERSITY BIO-LINK 7.0

In May 2024, the Inter-University Bio-Link 7.0 academic visit saw 33 students and faculty from Universiti Sains Malaysia's Biosociety and Pusat Pengajian Sains Kajihayat undertake a mobility program in Bogor, Indonesia, in partnership with SEAMEO BIOTROP and Institut Pertanian Bogor (IPB). The initiative aimed to promote industry & community engagement under SDG 15 (Life on Land) by fostering cross-border collaboration in biology, enabling participant exchanges, joint research exposure, and cultural exchange. Through seminars, field projects, and institutional dialogues, the program deepened scientific networks and built capacity among students for engaging with environmental and terrestrial biodiversity challenges. A Memorandum of Understanding (MoU) is slated to formalize future staff and student exchanges among the three institutions, institutionalizing shared research, training, and outreach initiatives. This model of engagement with industry, academia, and community ensures that knowledge and practice in biological sciences are not isolated but connected to regional ecosystems, biodiversity conservation, and sustainable land use.



USM STUDENTS AND ACADEMICS TRIUMPH AT SUSTAINABLE ANTARCTICA COMPETITION 2024



Universiti Sains Malaysia demonstrated its commitment to global environmental stewardship as its students and academics excelled at the Sustainable Antarctica Competition 2024. Held in conjunction with the 10th Malaysian International Seminar on Antarctica, which centered on “Polar Research for Sustainability & Planetary Health,” the competition directly addressed the critical mandates of Sustainable Development Goal 13 (Climate Action). Competing against 150 participants in the TikTok Creative Video segment, USM students secured multiple top awards, including the Grand Prize. Their winning submissions highlighted the vital connection between the Antarctic region and global climate stability, focusing on issues like global warming and the urgent need for biodiversity conservation. This achievement underscores USM’s success in cultivating future leaders who not only possess deep scientific understanding but also leverage creative communication to raise public awareness and drive meaningful, youth-led actions against climate change.

16 PEACE, JUSTICE
AND STRONG
INSTITUTIONS



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

TEACHING AND LEARNING/ CURRICULUM

USM CEMACS HOSTS CUEPACS DELEGATES FOR WOMEN LEADERSHIP PROGRAMME; NURTURING WELL-INFORMED FUTURE LEADERS

The Universiti Sains Malaysia Centre for Marine and Coastal Studies (CEMACS) recently hosted 158 public and civil service delegates from CUEPACS for the “Leadership 2024” Women’s Leadership Retreat. The session, led by CEMACS Director Professor Dato’ Dr. Aileen Tan Shau Hwai, integrated marine science and research into leadership development. Participants engaged in hands-on activities to appreciate the critical role of conservation and sustainable management of marine ecosystems. The initiative successfully broadened the leaders’ understanding of environmental issues, showcasing the importance of integrating diverse knowledge areas to equip future leaders for meaningful decision-making in a global context.



USM PARTNERS WITH KEELE FOR PHD DUAL DEGREE PROGRAMME

Universiti Sains Malaysia has solidified its commitment to international academic collaboration by signing a Memorandum of Agreement (MoA) with Keele University (Keele), UK, to establish a PhD dual degree programme at the Ministry of Higher Education Malaysia. The agreement was signed by USM Deputy Vice-Chancellor for Research and Innovation, Professor Dr. Habibah A Wahab, and Keele Vice-Chancellor, Professor Dr. Trevor McMillan. This dual degree will allow doctoral students to earn qualifications from both institutions through joint research supervision utilizing facilities at USM's Institute for Research in Molecular Medicine (INFORMM) and School of Biological Sciences, and Keele's Faculty of Natural Sciences. The collaboration is strategically focused on advancing scientific knowledge in molecular medicine and biology and tackling complex global health issues such as infectious diseases and cancer. Students will gain diverse research exposure by dividing their time between USM's expertise in tropical diseases in Penang and Keele's interdisciplinary biomedical research in the UK. Applications for the first intake are scheduled to open next year for the 2025/2026 academic year.



ADVISOR TO KOREAN MINISTRY OF ENVIRONMENT SHARES 'LEARN-ACT-BEING' MODEL TO DEVELOP ENVIRONMENTALLY-CONSCIOUS CITIZENS

A representative from the Korean Ministry of Environment, Dr. Park Su Yeon, delivered a talk on 'Education for Sustainable Development' (ESD) at the Universiti Sains Malaysia School of Educational Studies. The talk, titled "Sustainability Academic Discourse – Embracing Formation Process of Environment Citizen through Environmental Learning Experience: Application of Learn-Act-Being Cyclic Model," was jointly organized with RCE Penang@USM. Dr. Park, an expert advisor to the Korean government, discussed the importance of environmental learning in developing environmentally-conscious citizens who practice pro-environmental behaviors. She highlighted Korea's mandatory School Environmental Education plan and proposed the 'Learn-Act-Being' cyclic framework for educating 'environmental citizens.' Dr. Park emphasized that for sustainability efforts to succeed, environmental awareness must be internalized by individuals, leading to informed decision-making and action. Both RCE Penang@USM and RCE Tongyeong, which Dr. Park previously led, are part of the global RCE network facilitated by the United Nations University-Institute for the Advanced Study of Sustainability (UNU-IAS).



USM-UOMUS INKED MOA TO OFFER MSC ESDE THIS

Universiti Sains Malaysia and Al-Mustaqbal University (UOMUS), Iraq, strengthened their strategic partnership by signing a Memorandum of Agreement (MoA) to offer USM's Mixed Mode Master of Science in Electronic Systems Design Engineering (MSc. ESDE) program offshore at the UOMUS campus. This marks the first time the program will be delivered outside of Malaysia, commencing in the 2024/2025 academic year in Babylon, Iraq. Signed by USM Vice-Chancellor Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed and UOMUS President Professor Dr. Hasan Shakir Majdi, the collaboration aims to nurture talents and provide cutting-edge knowledge in Electronic Systems Design Engineering for graduates in Iraq and the wider Middle East region, leveraging UOMUS's infrastructure to ensure access to quality education.



EMPOWERING TOMORROW'S VOICES: SOC USM HOSTS DIGITAL EMPOWERMENT PROGRAMME - NURTURING CRITICAL THINKERS AMONG STUDENTS

The Universiti Sains Malaysia School of Communication (SOC) successfully implemented the SDG Solution project, “Digital Democratic Literacy Education for Young Voters,” from December 2023 to February 2024. Sponsored by the All Party Parliamentary Group Malaysia (AAPGM), the hybrid program involved 15 students from USM, UiTM Permatang Pauh, and Politeknik Permatang Pauh. It delivered 12 modules covering eight core digital literacy competencies (e.g., finding/verifying information, critical thinking, online safety) and four political literacy components (e.g., understanding Malaysian government and elections). SOC Dean Associate Professor Dr. Bahiyah Omar, the project’s chief consultant, stated that the initiative aims to serve as a catalyst for change, empowering young voters to engage actively and critically in society and make informed decisions, which aligns with USM’s commitment to meaningful societal progress.



OPERATION (INSTITUTIONAL ARRANGEMENT)

BANGLADESH HIGH COMMISSIONER STRENGTHENING BILATERAL RELATIONS WITH COURTESY VISIT

Universiti Sains Malaysia Vice-Chancellor, Professor Dato' Seri Ir. Dr. Abdul Rahman Mohamed, hosted a courtesy visit from the Bangladesh High Commissioner to Malaysia, His Excellency Md. Shameem Ahsan, to explore enhanced collaboration in education and research. The meeting, described as "very fruitful," focused on fostering mutual growth and addressing 21st-century challenges through partnership. High Commissioner Ahsan highlighted the role of the Bangladesh High Commission in facilitating cooperation in business and cultural matters, noting existing partnerships across industry, education, and the economy. USM currently hosts 99 students from Bangladesh pursuing postgraduate and undergraduate degrees in fields including dental science, engineering, and computer science. Since 2019, USM has formalized three collaborations with Bangladeshi institutions, a foundation both leaders expressed confidence in building upon to shape the future of education, research, and innovation between the two nations.



USM RECEIVES VISIT FROM EACEA, DISCUSSES PARTNERSHIP AND COLLABORATION

Universiti Sains Malaysia recently hosted Dr. Roger Y. Chao Jr. from the Education and Culture Executive Agency (EACEA) for a visit focused on monitoring the progress of four Erasmus+ research projects: MICROCASA, CIRCULAR, GeoDRR, and CALOHEA. Chaired by USM Deputy Vice-Chancellor for Research and Innovation, Professor Dr. Habibah A. Wahab, the meeting affirmed USM's dedication to advancing science, technology, and sustainability, and its keen interest in collaborating with industry experts. Discussions highlighted the potential for expanding cooperation through Erasmus+ and developing micro-credentials programs, including a potential nursing project with the School of Health Sciences. Project leaders, including USM Deputy Vice-Chancellor for Academic and International, Professor Dato' Gs. Dr. Narimah Samat (GeoDRR leader), presented updates on academic matters, credit transfer, and the successful execution of these international research initiatives.



SPANISH AMBASSADOR VISITS USM SOLLAT TO MARK DESIGNATION OF SPANISH LANGUAGE EXAMINATION CENTRE

Universiti Sains Malaysia recently hosted His Excellency Mr. José Luis Pardo Cuervo, the Ambassador of Spain to Malaysia, to commemorate a major milestone: USM's designation as an official examination centre for the DELE (Diploma in Spanish as a Foreign Language) examinations. This achievement stems from a landmark Memorandum of Agreement (MoA) formalized in March 2024 with Instituto Cervantes, the worldwide non-profit organization founded by the Spanish Government. USM is now the only public university in Malaysia authorized to conduct the DELE examinations, catering specifically to the northern region. The diplomas, which attest to proficiency from A1 to C2 based on the CEFR, are internationally recognized and valid indefinitely. USM SoLLaT Acting Dean, Azril Ali, affirmed that this partnership will enhance foreign language offerings and international collaborations. The Ambassador congratulated the university on its international recognition and expressed enthusiasm for future collaborations between USM, the Spanish Embassy, and Aula Cervantes to further enrich students' learning experiences.



USM-CULI FORGE NEW ACADEMIC PARTNERSHIP: SYMBOLISING A NEW ERA OF COLLABORATIVE ENDEAVOURS

PENANG, Malaysia - Universiti Sains Malaysia, through its School of Languages, Literacies and Translation (SoLLaT), recently formalized a Memorandum of Understanding (MoU) with Chulalongkorn University's Language Institute (CULI) in Thailand. The virtual ceremony, held on June 21, 2024, establishes a pivotal collaboration to strengthen academic ties and foster ASEAN unity and diversity. USM SoLLaT Acting Dean, Azril Ali, and Chulalongkorn Acting Vice President, Associate Professor Dr. Siridej Sujiva, signed the agreement. Key areas of cooperation include the exchange of faculty and administrative staff, joint research projects—such as a special issue on CEFR policies in ASEAN countries—and student exchange programs. Both leaders emphasized that the partnership will enhance academic excellence and provide invaluable cross-cultural experiences for students, preparing them for a globalized world.



USM RECEIVES COURTESY VISIT BY CROATIAN AMBASSADOR AND UNIVERSITY OF ZAGREB REPRESENTATIVE

Universiti Sains Malaysia hosted a high-level delegation today, including the Ambassador of Croatia, H.E. Dr. Ivan Velimir Starčević, and Dr. Robert Mikac from the University of Zagreb's Faculty of Political Sciences, to significantly forge closer academic and research ties. The visit, led by USM Deputy Vice-Chancellor Professor Dr. Shaharum Shamsuddin, focused on identifying initiatives across academic programs, research, staff and student mobility, and industry collaboration. Ambassador Starčević highlighted Croatia's advanced sectors, noting the global success of Croatian unicorn companies Infobip (cloud communications) and Rimac (electric sports cars), and promoting Croatia's high-GDP economy as ideal for partnerships. The discussions, which are a return visit following USM's prior engagement in Croatia, aim to build on USM's current agreement with the Catholic University of Croatia to establish mutually beneficial, comprehensive collaboration between the two nations.



USM 62ND CONVOCATION: PENANG'S YANG DI-PERTUA NEGERI CONFERRED HONORARY DOCTORATE IN INTERNATIONAL RELATIONS

PENANG, Malaysia - Universiti Sains Malaysia conferred an Honorary Doctorate in International Relations upon Penang's 8th Yang di-Pertua Negeri, Tuan Yang Terutama Tun Dato' Seri Utama Ahmad Fuzi bin Haji Abdul Razak, during its 62nd Convocation Ceremony. The esteemed honor was presented by USM Chancellor, HRH Tuanku Syed Sirajuddin Ibni Almarhum Tuanku Syed Putra Jamalullail. The award recognizes TYT Tun's remarkable 37-year diplomatic career in the Malaysian Ministry of Foreign Affairs (Wisma Putra), his instrumental role in establishing the World Islamic Economic Forum (WIEF), and his visionary leadership in championing the Penang 2030 Vision. His post-retirement efforts have significantly boosted Penang's growth, particularly in the electrical and electronics (E&E) sector and tourism. USM also recognized Prasarana chairman Tan Sri Dato' Sri Jamaludin Ibrahim with an Honorary Doctorate in Management and conferred the title of Professor Emeritus upon USM academic figures Dato' Dr. Chan Ngai Weng (water resource management) and Dr. Abu Hassan Ahmad (vector control).



RESEARCH & INNOVATION

NPC IDENTIFIES E-CIGARETTE POISONING TRENDS: URGENT CALL FOR REGULATORY ACTION

The National Poison Centre (NPC) at USM reported a significant surge in e-cigarette poisoning cases, monitoring 111 exposures since 2015. The highest number of calls occurred in 2023 (30.6% of total cases), a five-fold increase since 2019, coinciding with the removal of nicotine from the Poisons Act 1952. While early cases involved children due to poor storage, the latest trend shows more teenagers (15-19 years) experiencing deliberate poisoning. The NPC, which has also recorded 23 cases linked to the drug Magic Mushroom in e-liquids since 2021, strongly urges the government to immediately implement the Control of Smoking Products for Public Health Act 2023 to ensure product control and safeguard public health.



Photo by Koke Mayayo (TheVisualKiller) on Unsplash

2ND GCC INTERNATIONAL CONFERENCE ON GLOBAL CITIZENSHIP EDUCATION (ICGCED 2024) AT USM

Universiti Sains Malaysia successfully hosted the 2nd GCC International Conference on Global Citizenship Education (ICGCED 2024) at its Penang campus, organized by the School of Educational Studies under its Global Citizenship Education Cooperation Centre (GCC-USM). The three-day event united academics, educators, and practitioners from across Asia under the theme “Building Inclusive Communities Through Global Citizenship Education,” serving as a strategic platform to advance SDG 4.7 and foster inclusive, sustainable communities. Participants shared research and policy insights on topics including inclusive education, digital global learning, and cultural sensitivity, while facilitating international networking to collaborate and benchmark their work. The USM Vice-Chancellor emphasized that the conference equips learners with the values, knowledge, and skills necessary to act responsibly in our interconnected world and drive transformative education.



ENGAGEMENT (INDUSTRY & COMMUNITY)

USM RCE PENANG COLLABORATES WITH SMAN 10 FAJAR HARAPAN IN INTERNATIONAL SEMINAR ON SDGS TO EMPOWER YOUTH FOR SUSTAINABLE DEVELOPMENT

Universiti Sains Malaysia, through its Regional Centre of Expertise (RCE) Penang initiative, partnered with SMAN 10 Fajar Harapan in Banda Aceh, Indonesia, to host the International Seminar on SDG Practices: Enriching the Well Being Among Nations in early November 2024. The event focused on fostering youth engagement in the Sustainable Development Goals (SDGs) and strengthening regional partnerships. Led by Dr. Rohaya Abdullah of RCE Penang, USM representatives presented projects via Digital Story Book and Video Storytelling to inspire students with a deep understanding of the SDGs. Dr. Rohaya specifically addressed SDG 4 (Quality Education), discussing challenges like declining STEM interest and promoting alternative education measures like TVET and Global Citizenship Education (GCED). The seminar emphasized collaborative efforts on multiple goals, including SDG 6, 11, and 17, showcasing USM's commitment to championing the SDGs and developing the next generation of leaders equipped to address global challenges.



SOLLAT CELEBRATES INTERNATIONAL TRANSLATION DAY 2024

The Universiti Sains Malaysia School of Languages, Literacies and Translation (SoLLaT) celebrated International Translation Day (ITD) from November 4 to 8, 2024, under the theme “Translation: An Art Worth Protecting.” The week-long hybrid event served as a tribute to language professionals, gathering experts and students to discuss the latest industry trends. A major highlight was the launch of the 100,000 Fakta science book series—a significant project translating six science books from Chinese into Bahasa Melayu—officiated by USM Deputy Vice-Chancellor Professor Dr. Azlan Amran and the Vice Consul-General of the People’s Republic of China in Penang, Madam Ding Qiao. Other activities included the MentorDash: Swift Sessions for Success with industry mentors, a research seminar, and a forum addressing the evolving role of translators in the AI era. The event underscored the critical importance of translation in fostering global dialogue and international collaboration as USM continues its commitment to being a leading provider of translation and interpreting services.



EPEHUB@CGSS CONGRATULATES GREEN AMBASSADORS IN EMBRACING ENVIRONMENTAL PROTECTION AND SUSTAINABLE LIFESTYLES

Universiti Sains Malaysia recently held its third Green Ambassadors' Appreciation Night to honor the dedication and commitment of its Green Ambassadors (GA) volunteer team, operating under the Environmental Protection and Education Hub (EPEHub) at the Centre for Global Sustainability Studies (CGSS). The ceremony acknowledged the GA's significant work in promoting environmental protection and sustainable practices both on the USM campus and within the wider Penang community. Assoc. Prof. Dr. Mohd Sayuti Hassan, representing the CGSS Director, congratulated the volunteers for their positive impact as "champions in environmental protection." EPEHub Coordinator, Assoc. Prof. Dr. Ng Theam Foo, praised the GA and Tzu-Chi Society volunteers for increasing awareness and changing attitudes toward sustainability. GA Main Coordinator, Amber Wang Zi Yan, emphasized the ongoing mission to inspire future generations to create a more sustainable world, aligning with USM's vision.



USM AND USK COLLABORATE ON INTERNATIONAL SEMINAR TO EMPOWER YOUTH TOWARDS SDGS

Universiti Sains Malaysia, through its Regional Centre of Expertise (RCE) Penang, co-hosted an international seminar with Universitas Syiah Kuala (USK) in Banda Aceh, Indonesia, in early November 2024, to advance the Sustainable Development Goals (SDGs). The event focused on empowering youth and emphasized key goals like Quality Education (SDG 4), Clean Water (SDG 6), and Sustainable Communities (SDG 11). Six USM students presented practical approaches to addressing these global challenges, highlighting the integration of sustainable practices in education and community planning. Dr. Rohaya Abdullah from USM's School of Educational Studies delivered a keynote, showcasing RCE Penang's initiatives and commitment to youth participation. Attended by the Rector of USK and over 100 students and faculty, this cross-border collaboration reinforces USM's pivotal role in championing SDG implementation and fostering regional partnerships for a sustainable ASEAN future.



STRENGTHENING INTERNATIONAL LINKS: USM ENGINEERING CAMPUS HOSTS OFFICIAL VISIT FROM KYUTECH

Universiti Sains Malaysia recently hosted an official visit from Japan's Kyushu Institute of Technology (KYUTECH), signaling a significant step toward strengthening international academic collaboration. The meeting, chaired by USM's Dean of the School of Civil Engineering, Associate Professor Ir. Dr. Fadzli Mohamed Nazri, is part of KYUTECH's initiative to establish 10 global strategic partnerships by 2026. The two institutions already have existing collaborations in Civil Engineering and Biotechnology, including PhD mobility and joint supervision. KYUTECH aims to designate USM as its fifth international strategic partner, which is expected to formalize and expand the existing ties to include various levels of engagement. This partnership aligns with USM's vision to strengthen its global presence and foster meaningful cooperation in research, academic exchange, and internationalisation.



UNIVERSITI SAINS MALAYSIA RECEIVES EXCLUSIVE DIGITAL IMAGE ACCESS RIGHTS FOR LIGHT LETTERS

Universiti Sains Malaysia has secured exclusive digital access to the historical “Light Letters” from the School of Oriental and African Studies (SOAS), University of London (UoL). Under a September 2018 Memorandum of Agreement (Loan of Light Letters), the USM Centre for Policy Research (CPR) and the USM Library gained rights to the digital images, making this the first such loan granted to an institution outside of SOAS. The collection, considered the largest collection of Malay manuscripts in the world, contains 1,200 letters (2,400 images) spanning 1768-1794, documenting trade, culture, and communications between Francis Light, his associates, and prominent figures, including the Kedah royal family, from across the Malay Archipelago. The USM Library is responsible for providing public access to this valuable historical resource, complete with descriptive metadata, transcriptions, and transliterations, via a dedicated online portal. USM Vice-Chancellor Professor Dato’ Seri Ir. Dr. Abdul Rahman Mohamed affirmed that access to the digital collection will significantly benefit researchers in the Humanities, enhancing the availability of historical sources for studies on the Nusantara region.



USM AND FSU INK MOU TO PURSUE COLLABORATIONS AT VARIOUS LEVELS

Universiti Sains Malaysia School of Distance Education (SDE) recently signed a Memorandum of Understanding (MoU) with Fergana State University (FSU) during a visit to Uzbekistan to cement a promising international collaboration. The SDE delegation, led by Dean Associate Professor Dr. Zulnaidi Yaacob, engaged in scholarly exchanges where USM researchers shared cutting-edge findings on language, innovation, and Artificial Intelligence (AI) alongside experts from two US universities. The visit also included presentations to FSU students on international mobility and Master's programs, and a Scopus publication workshop for FSU staff. Significantly, FSU's top management expressed high interest in sending approximately 10 lecturers to pursue PhDs at USM via a hybrid modular learning approach, establishing a robust foundation for academic and research cooperation between the two institutions.



USM, SHIZENKAN UNIVERSITY SIGN MOU, INAUGURATION OF THE PAN-ASIAN BUSINESS SCHOOL NETWORK

Universiti Sains Malaysia recently signed a Memorandum of Understanding (MoU) with Shizenkan University in Tokyo, Japan, formalizing a shared commitment to academic excellence and international collaboration. The MoU was signed by USM Graduate School of Business (GSB) Dean, Associate Professor Dr. Fathyah Hashim, and Shizenkan University Vice President, Professor Katsuhiko Yoshikawa. The partnership will focus on key collaborative areas including research collaborations, international academic mobility for students and researchers, joint symposiums and conferences, and networking activities. An immediate outcome of this collaboration was the kick-off event for the Pan-Asian Business School Network, where Dr. Fathyah delivered a keynote speech on “Sustainability Leadership from an Asian Perspective.” This agreement marks a significant new beginning in fostering cross-cultural exchange and global citizenship between the two institutions.



USM HOLDS SUSTAINABILITY TALK 2.0 ON ‘SUSTAINABILITY AND RUKUN NEGARA’ BY UCSI SCHOLAR

Universiti Sains Malaysia recently hosted Sustainability Talk 2.0, organized by the Regional Centre of Expertise (RCE) Penang under the USM Centre for Global Sustainability Studies (CGSS), to explore the vital connection between global goals and national principles. Featured speaker Emeritus Professor Tan Sri Omar Abdul Rahman of UCSI University delivered a talk titled “SDG, Rukun Negara, Harmoni-Mesra: Global Goals, National Priorities, Institutional Action.” He argued that the Sustainable Development Goals (SDGs) can be effectively implemented by focusing on the five principles and five objectives of the nation’s Rukun Negara, which he noted remains relevant 54 years after its inception. He proposed that the Rukun Negara’s objectives—creating a nation that is Harmonious, Prosperous, Progressive, and Sustainable (HPPS)—are perfectly aligned with SDG 16 (Peace, Justice, Strong Institutions). Professor Omar stressed that social harmony is the crucial pillar for maintaining the other HPPS elements, especially in light of “Disruptions, Displacements, Destructions, Disfigurements, and Deaths” globally. He introduced the Harmoni-Mesra concept, developed through ‘Dialog Rakyat’ sessions, as an initiative to strengthen community ties and counter ‘cultural ignorance’ through practicing ‘Budipekerti, Budibahasa, Budibicara’ (courtesy in all aspects of life), urging its implementation in higher educational institutions.



USM SHINES BRIGHT AT 23RD IMT-GT VARSITY CARNIVAL CLOSING CEREMONY

Universiti Sains Malaysia successfully hosted the closing ceremony of the 23rd IMT-GT Varsity Carnival, bringing together delegates from 12 universities across Indonesia, Malaysia, and Thailand to celebrate ASEAN unity under the theme ‘Embracing Differences of ASEAN Values for Sustainable Partnership.’ Over six days, the event promoted athleticism, intellectual discourse, and cultural appreciation. USM excelled, securing Gold medals for Badminton and Best Paper (including Best Overall Paper) in the academic seminar, a Silver in Basketball, and the award for Best Cultural Performance. USM Vice-Chancellor, Professor Dato’ Seri Ir. Dr. Abdul Rahman Mohamed, lauded the participants’ “pursuit of excellence, passion, and hard work,” highlighting the event’s importance in fostering regional cooperation. The carnival’s success, which reinforced the unity among the ASEAN community, concluded with the announcement that Thaksin University will host the next edition in 2025.



17 PARTNERSHIPS
FOR THE GOALS



Strengthen the means
of implementation
and revitalize the
global partnership
for sustainable
development

TEACHING AND LEARNING/ CURRICULUM

USM AND SONGKHLA RAJABHAT UNIVERSITY INK MOU TO STRENGTHEN ACADEMIC COLLABORATION

Universiti Sains Malaysia has reinforced its commitment to Sustainable Development Goal 17 (Partnerships for the Goals) by signing a renewed Memorandum of Understanding (MoU) with Songkhla Rajabhat University (SRU), Thailand. This strategic cross-border alliance is designed to enhance regional academic development, capacity building, and cultural understanding across ASEAN nations. The MoU establishes a framework for diverse joint activities, including faculty exchange, student mobility programmes focused on cultural immersion, and collaborative research initiatives. A key area of focus is joint research on cross-border tourism and language studies, leveraging the unique geographical and cultural proximity of both institutions. By promoting the exchange of knowledge and expertise, this partnership strengthens institutional bonds and directly supports the regional integration agenda, creating high-quality, impactful academic opportunities essential for sustainable development in Southeast Asia.



USM-CULI FORGE NEW ACADEMIC PARTNERSHIP; SYMBOLIZING A NEW ERA OF COLLABORATIVE ENDEAVORS

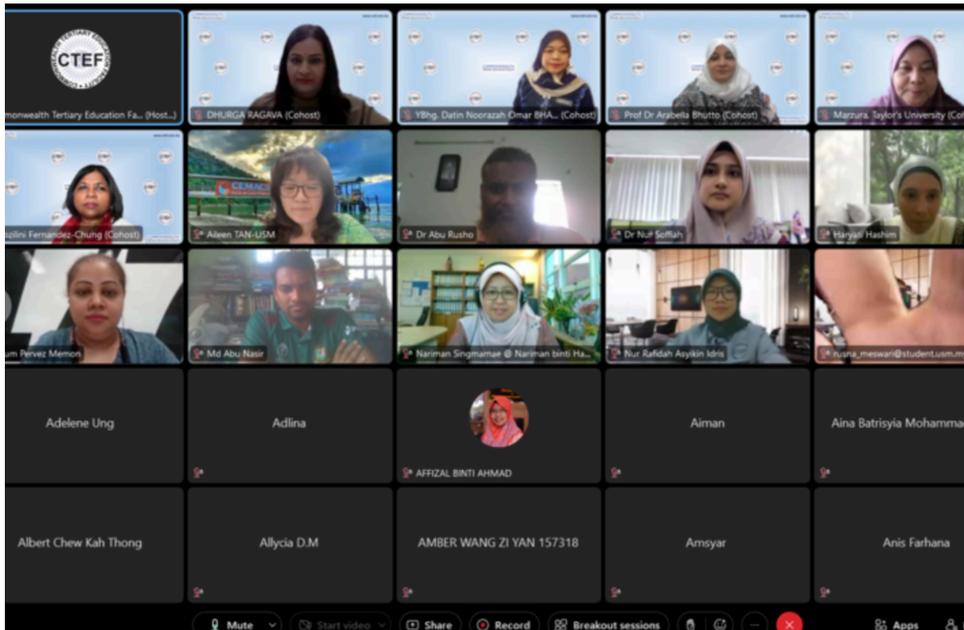
Universiti Sains Malaysia, through its School of Languages, Literacies and Translation (SoLLaT), has significantly advanced its commitment to Sustainable Development Goal 17 (Partnerships for the Goals) by forging a key academic alliance with Chulalongkorn University's Language Institute (CULI) in Thailand. This strategic Memorandum of Understanding (MoU), formalized in June 2024, symbolises a new era of collaborative endeavours aimed at enhancing regional academic capacity in language and educational studies. The partnership establishes a robust framework for mutual cooperation, directly supporting cross-border knowledge sharing. Key initiatives include the exchange of academic and administrative staff, collaborative research focusing on ASEAN-wide language policies, and the joint development of innovative educational materials. Furthermore, the alliance will facilitate short-term student mobility and specialized research exchanges, ensuring that future graduates are equipped with vital intercultural competencies. By pooling expertise, USM and CULI are collectively working to strengthen institutional bonds, foster mutual growth, and promote academic excellence, thereby creating high-impact opportunities essential for sustainable regional development.



OPERATION (INSTITUTIONAL ARRANGEMENT)

COMMONWEALTH ACADEMIC FORUM 2024: EMPOWERING WOMEN'S LEADERSHIP IN HIGHER EDUCATION

Universiti Sains Malaysia, through the Commonwealth Tertiary Education Facility (CTEF), successfully co-organised the Commonwealth Academic Forum 2024, focusing on “Shattering Expectations: Women Leadership in Higher Education.” This major event strongly reaffirms USM’s dedication to SDG 17 (Partnerships for the Goals) by leveraging global networks, including the Ministry of Higher Education and the Commonwealth Secretariat, to drive progress on SDG 5 (Gender Equality) and SDG 4 (Quality Education). The virtual forum brought together experts and policymakers to address the critical juncture of women assuming leadership roles in academia, emphasizing their pivotal role in transformative change. The discussions underscored the necessity of collaborative efforts and targeted initiatives to create an inclusive environment for women leaders. This partnership strengthens USM’s global standing as an institution actively fostering diversity and excellence in higher education, paving the way for a more equal future across the Commonwealth network.



USM HOSTS 38TH IMT-GT VARSITY COUNCIL MEETING AND VARSITY CARNIVAL FOR REGIONAL COLLABORATION

On 18–20 March 2024, Universiti Sains Malaysia (USM), via its Division of Student Development Affairs & Alumni (BHEPA), hosted the 38th IMT-GT Varsity Council Coordination Meeting and Varsity Carnival — gathering 12 universities from Indonesia, Malaysia, and Thailand. The event, spanning sports, culture and seminars, provided a platform for students and staff to showcase talents, foster cross-border friendship, and strengthen regional academic collaboration. The opening ceremony was officiated by USM’s Deputy Vice-Chancellor (Student Development), highlighting the Carnival as a bridge uniting ASEAN youths, promoting solidarity, knowledge-sharing, and global citizenship among participants.



RESEARCH & INNOVATION

USM-INTEL SIGNING CEREMONY FOR THE ADVANCED PACKAGING RESEARCH GRANT 2024

Universiti Sains Malaysia formalized a strategic, long-term partnership with Intel through the signing of the Advanced Packaging Research Grant 2024. This significant industry-academia collaboration directly champions SDG17 (Partnerships for the Goals) by mobilizing knowledge, expertise, and financial resources (Target 17.6) to strengthen the means of implementation. The multi-year research grant focuses on critical semiconductor fields, including electronic packaging and Artificial Intelligence (AI). By aligning academic research with Intel's global industry expertise and Malaysia's National Semiconductor Strategy, USM ensures the development of a highly skilled talent pipeline. This partnership is vital for enhancing national research capacity, driving technological innovation, and securing Malaysia's competitive position in the global high-tech economy.



USM-RIKEN INTERNATIONAL CONFERENCE ON ADVANCED SCIENCES 2024 BRIDGES LIFE SCIENCE AND PHYSICS

The USM-RIKEN International Conference on Advanced Sciences 2024 (URICAS) exemplifies a successful, long-standing commitment to SDG 17 (Partnerships for the Goals), specifically Target 17.6 on enhancing global knowledge-sharing. The two-day conference convened keynote and invited speakers from premier Japanese institutions, including RIKEN, and USM to bridge physics and life science under the theme 'Advancing Science for a Sustainable Future'. This robust academic partnership, which spans over three decades, has proven instrumental in human capital development, evidenced by the graduation of 53 PhD students through its International Programme Associate (IPA) initiative since 2002. By fostering interdisciplinary research and international academic exchange, this collaboration directly addresses complex global challenges, such as climate change and pandemics, that require solutions beyond a single nation's capacity. The conference thereby strengthens international cooperation for science, technology, and innovation, solidifying USM's crucial role in global sustainable development efforts.



ENGAGEMENT (INDUSTRY & COMMUNITY)

USM AND USK COLLABORATE ON INTERNATIONAL SEMINAR TO EMPOWER YOUTH TOWARDS SDGS

Universiti Sains Malaysia, through its Regional Centre of Expertise (RCE) Penang, formalized a vital cross-border partnership with Indonesia's Universitas Syiah Kuala (USK) to host the International Seminar on SDG Youth Empowerment. This initiative strongly addresses SDG 17 (Partnerships for the Goals) by strengthening regional cooperation and mobilizing shared knowledge for capacity building (Target 17.9). Held in Banda Aceh, the seminar brought together students and faculty to share youth-led actionable projects on key global challenges, specifically tackling issues related to Quality Education (SDG 4) and Sustainable Communities (SDG 11). This joint effort highlights the pivotal role of academic institutions in fostering global networks, exchanging expertise, and empowering the next generation across the ASEAN region to lead sustainable development and realize the 2030 Agenda.



USM ENGAGES UGM IN STUDY TOUR, EXPLORING SKILLS IN JOURNAL-WRITING ALONG WITH EXPERIENCE IN COMMUNITY WORK

Universiti Sains Malaysia collaborated with Indonesia's Universitas Gadjah Mada (UGM) for a study tour under their respective Regional Centres of Expertise (RCE Penang and RCE Yogyakarta). This strategic cross-border program directly supports SDG 17 (Partnerships for the Goals) by strengthening institutional collaboration and boosting the transfer of technical knowledge (Target 17.9). The program, titled "Embracing The Heart of Community Care," focused on enhancing academic journal-writing skills related to community engagement projects. By enabling students and faculty to transform practical field experience into publishable research, the partnership not only improves institutional research quality but also facilitates the international dissemination of best practices. This enduring alliance is key to building shared capacity and accelerating progress towards sustainable development within the ASEAN region.



USM ENGAGES IN STRATEGIC GLOBAL COLLABORATION AT THE IUNRC COUNCIL MEETING IN CHONGQING

Universiti Sains Malaysia, as a founding member and Co-Chair, actively participated in the Second Council Meeting of the University Network for Research Collaboration (iUNRC) in Chongqing. This high-level engagement directly advances SDG 17 (Partnerships for the Goals) by strengthening global multi-stakeholder partnerships (Target 17.16) for sustainable development. The iUNRC network, which promotes the Belt and Road Science and Technology initiative, serves as a crucial platform for over ten member universities to establish collaborative research frameworks. USM's leadership emphasizes the network's vital role in addressing pressing global challenges, including climate change and sustainable development, through joint scientific efforts. Discussions focused on new cooperation strategies and operational mechanisms necessary to foster a community with a shared future for humanity. Looking forward, the iUNRC outlined ambitious plans for 2025, including the establishment of an innovation fund to support ten joint projects, promote international project applications, and organize a Presidents Roundtable. This continued commitment ensures that USM's research expertise is strategically mobilized across international boundaries, building capacity (Target 17.9) and achieving impactful, global solutions that benefit all partners in the network.



