



# UMT NEWSLETTER

Ocean of Discovery for Global Sustainability

www.umat.edu.my

Volume 1 Issue 2, May 2021

## UMT AND PHARMANIAGA TEAM UP TO INTRODUCE STINGLESS BEE HONEY GLOBALLY



The whole world will soon be introduced to tasty health-packed honey from local stingless bees. Making this possible is a collaboration agreement between UMT and Malaysia's largest listed integrated pharmaceutical group Pharmaniaga, signed in early April in the presence of two Malaysian federal ministers.

Under the agreement, UMT and Pharmaniaga will collaboratively work together on a project for large-scale stingless bee farming and stingless bee honey production. The goal is to meet high demand for stingless bee honey not only around the local region but also at the international level.

Upon its implementation, the project is expected

to produce 300 kg honey per month, with greater production expected once the project progresses.

Both parties will have a fair share of contribution towards the project in ensuring its success. UMT will allocate some 200 acres of land at its Bukit Kor campus for the project implementation, with the initial allocation of 10 acres for a bee farm. UMT's bee experts will conduct further studies to find the best methods of stingless bee farming and honey production. Pharmaniaga will fund the project cost covering the purchase of 1000 bee colonies, construction of fence, and procurement of other farming needs. Pharmaniaga will also be handling the global marketing of processed and packaged stingless bee honey.

*continued on next page*



*continued from last page*

Vice Chancellor Professor Dato’ Dr. Nor Aieni Mokhtar said that UMT’s Stingless Bee Research Group has been active since 2017, with 20 researchers specializing in various areas, such as stingless bee behaviour, honey quality, food microbiology, population genetics, protein chemistry, and product development.

“UMT is the only public university that has set up a focus group to find solutions to issues on stingless bee and honey to enable further development of Malaysian stingless bee industry,” she said. “Various studies on stingless bee honey were successfully conducted by the various experts, and this has led to better quality product.”

Seeing the initiative by UMT, Pharmaniaga was inspired to help commercialize stingless bee honey on a larger capacity. The company will enter the healthy lifestyle business segment and market high quality stingless bee honey produced through R&D

activities by UMT experts.

“We chose stingless bee honey due to its potential high return,” said Datuk Zulkarnain Md Eusope, Pharmaniaga Group Managing Director. “Stingless bee honey production is insufficient now, with demand being six times more.”

Pharmaniaga plans to market the product at the end of June, Datuk Zulkarnain said. The company also plans to penetrate overseas markets, starting with China and Europe, once the COVID-19 pandemic is over.

Signing the agreement for UMT was Professor Dato’ Dr. Nor Aieni and for Pharmaniaga Datuk Zulkarnain. Also present were Senior Minister of Defence Dato’ Sri Ismail Sabri Yaakob and Minister of Higher Education Datuk Seri Dr Noraini Ahmad.



# UMT FOSTERS OCEAN-LITERATE 'SEA TIZENS'



More than 1000 students from all over Malaysia learnt a lot about the oceans and did it in a fun and exciting way, thanks to UMT's recent initiative in organizing the United Nations Decade of Ocean Science@Universiti Malaysia Terengganu.

The event was part of UMT's effort to promote ocean literacy among the community, especially students.

UMT is aware that the oceans are a significant part of Malaysians, with the country almost completely surrounded by bodies of water. Malaysians' ocean knowledge develops in school as well as through informal settings, such as family beach vacations, stories, and experiences shared by others, especially those actually living by the sea.

But UMT believes Malaysians need to become more ocean literate, as only 5% of the ocean has been explored. As such, UMT feels it should disperse knowledge to the community to make people understand the changing oceans. The oceans are warming, they are becoming more acidic, and the sea level is rising—all leading to global warming.

Two sessions were held during the event, the morning session themed "Ocean Literacy – Securing the Future through Education" and the afternoon session themed "Ocean Future – the Science we Need for the Ocean we Want". The sessions were conducted by several UMT researchers well versed in all things oceans.

In the morning session, the researchers created three different slots on ocean literacy and ocean connectivity with authentic student activities to promote engagement and personal connections. The slots involved around 850 students, including pre-schoolers, primary and secondary school

students, as well as youths from all over Malaysia.

One of the interactive sessions was National Ocean Literacy Quiz, given to 305 students from 41 Malaysian boarding schools. It was discovered that their ocean literacy is at a moderate level, with a mean score of 38%.

The afternoon session began with public lectures by two prominent scientists. A lecture entitled 'Science and Education Requirement at the Verge of the UN Decade of Ocean Science for Sustainable Development' was delivered by Dr Arico Salvatore, Head of Ocean Science, IOC UNESCO. Another lecture entitled 'Delivering Ocean Forecast Service for Ecosystem and Humanity' was given by Professor Dr Fangli Qiao, Vice Chairman, IOC-WESTPAC.

The session was then followed by an interactive forum entitled 'Ocean Decades: Shaping Researchers' Mindset for Right Action', with invited panellists from UMT and Universiti Malaya.

The event highlighted the need for more ocean literacy programmes that can guide informed decision making, the exact spirit within the UN Decade of Ocean Science for Sustainable Development 2021-2030.

Ocean literacy's moderate score by the secondary students in the quiz signals that UMT ocean scientists need to help improve the public's understanding of the oceans and the importance of sustainable ocean use.

Since the oceans have given the people so much, UMT feels it is high time the people return the favour by becoming more ocean literate, a prerequisite for becoming better 'sea tizens'.

# ARTIFICIAL REEFS FROM FISHING VESSELS CREATED NEAR UMT RESEARCH STATION



The joint effort by UMT and Terengganu division of Malaysian Maritime Enforcement Agency (APMM) to create artificial reefs near Bidong Island is getting closer to success after two forfeited Vietnamese fishing vessels were submerged at a designated location in early April.

The vessels, seized in 2020 for encroaching into the country's waters and later forfeited by the court, were submerged at a depth of 15 metres from the seafloor, 600 metres from Bidong Island, where one of UMT's several nature research stations is located.

Once the vessels have become the habitat for various fish species around the area, they will allow UMT lecturers to conduct studies there and students to learn more about fisheries resources and other aspects of marine science.

The vessels, in their function as artificial reefs, will not only provide shelters to various commercial fish species but also promote the growth of coral reefs and other marine organisms. In addition, the reefs may become one of the newest attractions for scuba divers from around Terengganu as well as other places.

To make full use of the reefs, UMT is currently discussing with the Department of National Heritage under the Ministry of Tourism, Arts, and Culture to designate the area around the reefs as a training site for underwater archaeological study. When the plan materializes, it will be the first training site of its kind.

Both UMT and APMM hope that news coverage of the event will increase society's awareness of the marine environment and subsequently motivate the public to stop polluting the oceans, which in turn will improve the sustainability of the country's fisheries resources.

The joint effort is also in line with the theme of the United Nations, UN Decade of Ocean Science for Sustainable Development 2021-2030, where two objectives of Sustainable Development Goals (SDG) have been met, Life Below Water (SDG 14) and Partnership For The Goals (SDG 17).

The gifting of the two forfeited vessels to UMT for teaching and learning as well as research purposes was the first of its kind, as stated by Rear Admiral (M) Datuk Saiful Lizan Ibrahim, Director of Maritime Security and Monitoring Division. The event reflected the close strategic relationship between the enforcement agency and UMT, he added.

Strategic partnership between UMT and APMM has begun several years back, and a number of collaborations that required maritime expertise from both parties have been successfully completed. Last year, both worked together on an event in conjunction with the Merdeka Day celebration.

The latest accomplishment will surely motivate UMT and APMM to continue collaborating in years to come.

# UMT JOINS FORCES WITH INDUSTRY PLAYERS FOR GREATER CONTRIBUTIONS



UMT has recently signed three memorandums of understanding/agreement with CyberSecurity Malaysia, Halal Development Corporation, and Celcom Axiata to collaboratively work on projects that will benefit not only each other but many additional parties.

UMT signed a memorandum of agreement in late March with CyberSecurity Malaysia, an agency under the Ministry of Communication and Multimedia, to collaborate on cyber security improvement efforts.

These efforts include conducting cyber security testing and research, particularly cloud security. Three pioneer projects by UMT researchers relating to cyber security are included. Two of the projects are led by Associate Professor Ts. Dr Noraida Hj Ali from the Faculty of Ocean Engineering Technology and Informatics, and the other project by Associate Professor Ts. Dr Mustafa Man, also from the same faculty.

According to Dr Noraida, the three projects will improve the quality of teaching and research not only at UMT but throughout the country.

UMT and CyberSecurity allocated some fund for the projects to ensure the success of their collaboration.



UMT signed a memorandum of understanding in early April with Halal Development Corporation

(HDC), an agency under the Ministry of International Trade and Industry, to collaborate on halal industry expansion in Terengganu through the setting up of Halal Innovation Centre in the state.

Through the centre's establishment, more local companies and business owners are expected to venture into halal industry with high potential for international market penetration.

HDC will use its position to help with international market penetration, while UMT will prepare modules and conduct training for executives to equip them with essential knowledge regarding halal industry.

The collaboration is poised to boost the significance of halal industry at the global level, with a current demand reaching RM12.42 trillion annually.

UMT is the first institution of higher learning in Terengganu to be collaborating with HDC. Vice Chancellor Professor Dato' Dr Nor Aieni Mokhtar said that UMT possesses the expertise to help with the development of Halal Innovation Centre.

"We are confident the collaboration will increase the commercial values of products by local entrepreneurs," she said.



UMT signed a memorandum of understanding in early April with Celcom Axiata Berhad to work together and utilize their resources on projects and activities that will benefit each other.

The collaboration will see a host of projects and activities carried out. These include the development of students' entrepreneurial skills, mindsets, and talents; grooming of potential digital entrepreneurs among students; expanding students' businesses through online transactions; and industrial training for students and staff.

# NEW STUDENT COUNCIL FORMED, AGAIN LED BY FEMALE PRESIDENT



When newly elected members of UMT student representative council gathered in a ceremony last month to receive their appointment letters, one encouraging thing could be observed. Like last year, elected president is again a female student.

Deputy Vice Chancellor for Student Affairs and Alumni, Associate Professor Dr Hafiz Zakariya, said that UMT provides equal opportunity for every student, regardless of race or gender, to reach their potential in many aspects of their university lives, including leadership.

President Rahni Rahman, third-year Bachelor of Management (Maritime) student, is eager to prove that women are not here only to fill required quotas in leadership roles but have the necessary traits to become good leaders. "I felt honoured being given the trust to lead the current lineup, and I will do my very best," she said.

Rahni was lost for words on finding out she had won the top post. "I never expected that so many students had supported me by casting their votes in my favour," she said.

She will focus on three main goals in her role as president. The first is improving the learning system to help students cope with the challenges of COVID-19. The second is ensuring holistic and inclusive students' intellectual and social developments. The third is improving concerns towards students' welfare. "These are in line with our motto—Inclusive Concern, Holistic Students," she said.

Rahni also promised to concentrate on a special cause she is passionate about. Although she herself

is normal, Rahni has been fighting for the welfare of disabled students. "I care deeply about their welfare, and I think they are counting on me to help them," she said.

For deputy president Hairul Asraf Abas, it is never an issue having a female student leader, and he looks forward to working together for the benefits of all students. "I welcome the experience and will support her in my role as her deputy," he said.

The Segamat-born Bachelor of Management (Policy Studies) student never thought about winning the election, as he believed other candidates were in a better position to garner more votes. "I was surprised, but also grateful having been given the trust to represent the students," said Hairul, a recipient of the Duke of Edinburgh International Gold Award.

Deputy Director of the Centre of Holistic and Co-curriculum Development, Dr Izan Dato' Haji Jaafar, is confident the current line-up will be as good or better than the previous. "I have a firm belief that they will maintain the teamwork spirit and make themselves approachable for UMT students," she said.

UMT student representative council election was successfully conducted earlier in February. The voting process was held online in view of the COVID-19 pandemic.

According to Dr Izan, a student committee oversaw the entire election process from start to finish, following a tradition practiced at UMT since 2018. "It goes to show that our students are able to carry out big responsibilities," she said.



**UMT's Directory of Experts (UMT-DoE)** is published to facilitate a more convenient exchange of expertise information. The directory contains details about UMT researchers and experts from various fields including fundamental, applied, and social science. It provides ample information to other researchers, organizations, or industries, enabling them to envision possible collaborations with UMT researchers and experts.

An underwater photograph showing a vibrant coral reef on the left side, with numerous small orange fish swimming in the clear blue water. The scene is brightly lit, suggesting a shallow depth.

# UMT NEWSLETTER

Vol 1 Issue 2, May 2021

---

## Executive Editor

Professor Dr Fauziah Abu Hassan

## Editor

Wan Zulkifli Wan Kassim

## Content Advisors

Associate Professor Dr Yusliza Mohd Yusoff  
Dr Azza Jauhar Ahmad Tajuddin  
Sayed Mohd Tamimuddin Sayed Ibrahim  
Wan Ab Hafiz Wan Ibrahim  
Shafie Umardi@Kamarol Bahrin

## Coordinators

Aini Zahida Din  
Rozita Alias@ Abdul Latiff  
Shamsul Hafizi Saleh  
Amirul Salam Hasan

## Designer

Azlin Abdullah

## Photographers

Tengku Iskandar Zulfahmi Tengku Mohamad  
Mohd Sharwan Abd Ghani  
Mohd Shukry Tahar  
Nur Hafiza Elias

## Contributors

Associate Professor Dr Hasrizal Shaari  
Associate Professor Dr Noraida Haji Ali  
Dr Azza Jauhar Ahmad Tajuddin  
Muhd Nurazuar Mohammad Razmi  
Rozita Alias@ Abdul Latiff  
Shafie Umardi@Kamarol Bahrin

---

Corporate Communication Office  
Universiti Malaysia Terengganu  
email : [pro@umt.edu.my](mailto:pro@umt.edu.my)