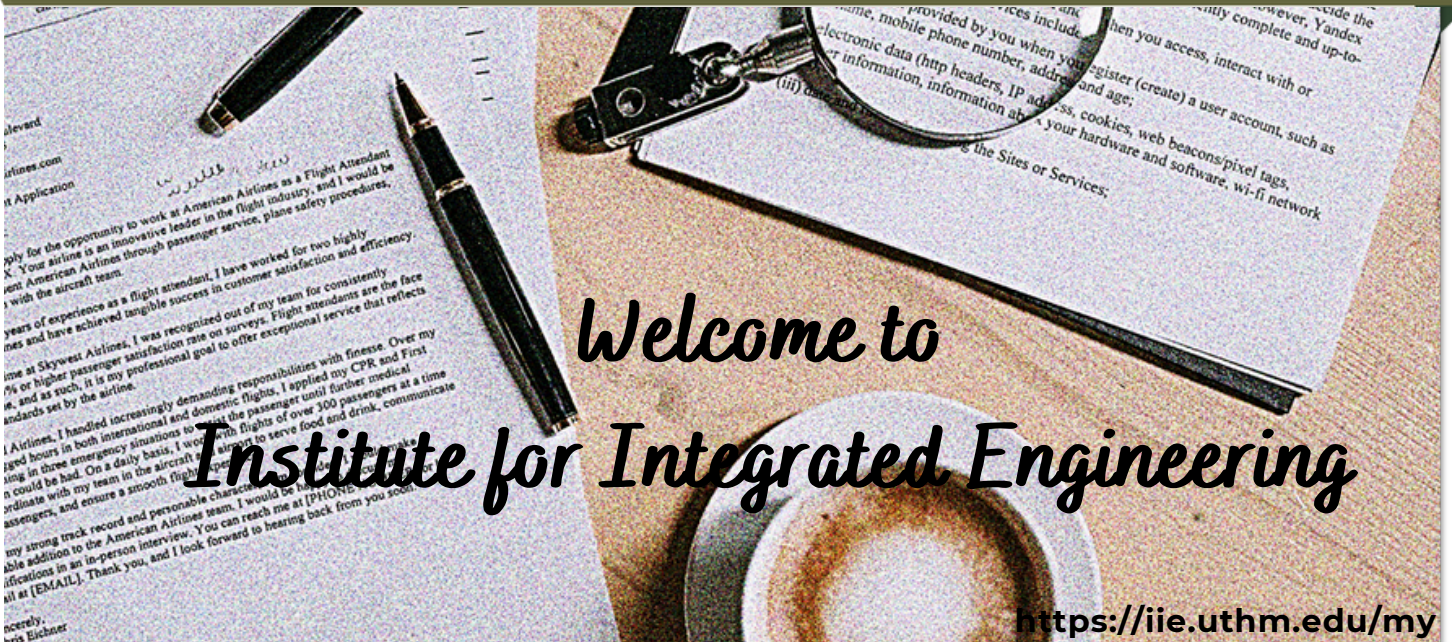


# BULLETIN



JAN-MAC 2024 EDITION

Research & Activities Highlight





### *Words from Director*

As the director of Institute for Integrated Engineering, I am proud to work with dedicated research teams from the Centre of Excellences (CoE's).

They have been working very hard to ensure that UTHM is contributing back to the community.

*Prof. Ts. Dr. Mohd Khairul bin Ahmad*

## **AIM AND OBJECTIVES**

- To lead applied research in integrated engineering for green and sustainable development.*
- I2E is committed to conduct comprehensive research, consultation and innovation as a solution provider to the needs of the nation and global.*

## **MOTTO**

*Integrated Engineering Solution Provider*

## **TAGLINE**

*Integrating, Innovation, Serving Society*





**Prof. Ts. Dr. Mohd Khairul bin Ahmad**

**HEAD OF CENTRE OF EXCELLENCE (COE)**



**HEAD OF RECESS**

**Prof. Ir. Ts. Dr.  
Adnan bin  
Zainorabidin**



**HEAD OF AMMC**

**Assoc. Prof. Dr.  
Anika Zafiah  
Mohd Rus**



**HEAD OF MINT-SRC**

**Assoc. Prof. Dr.  
Marlia Binti  
Morsin**



**HEAD OF EMCENTER**

**Assoc. Prof. Ir. Dr.  
Fauziahanim  
Binti Che Seman**



**HEAD OF MPRC**

**Assoc. Prof. Ts. ChM.  
Dr. Radin Maya  
Saphira  
Radin Mohamed**



**HEAD OF ICOE-RAIL**

**Assoc. Prof. Dr. Nor  
Aziati binti Abdul  
Hamid**

**ADMINISTRATIVE STAFF**



**SENIOR ASSISTANT  
REGISTRAR**

**Mrs. Nur Faezah Binti  
Mohamad Nor**



**RESEARCH OFFICER**

**Ms. Maizatulazrina  
Binti Yaakob**



**SENIOR  
ADMINISTRATIVE  
ASSISTANT**

**Binti Mohd Bajuri**



**ADMINISTRATIVE  
ASSISTANT**

**Mr. Mohamad Fadhil  
Bin Ja'afar**



**OPERATION  
ASSISTANT**

**Mr. Abd Halim  
Shah bin Abd  
Hamid**



**OPERATION  
ASSISTANT**

**Mrs. Norhidayah  
binti hanzah**

**LABORATORY QUALITY ACCREDITATION UNIT**



**HEAD OF UCL**

**Mr. Mohd Rostam bin  
Anuar**

# RESEARCH GRANTS

Congratulations to Prof. Ir. Dr. Chan Chee Ming, Principal Researcher (PR) for Research Center for Soft Soils (RECESS) for receiving an industry grant from Soil Instruments (M) Sdn Bhd for the year 2024-2025 with project title "Development of Roller Compacted Concrete Mix Design for Nenggiri Hydroelectric Main Dam in Kelantan" with a value of RM 40,000.



## Congratulations

PROF. IR. DR. CHAN CHEE MING

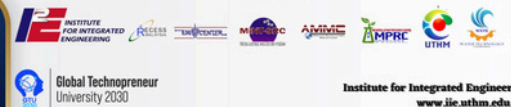
for receiving

**INDUSTRY GRANT  
RM 40,000.00**

"DEVELOPMENT OF ROLLER COMPACTED CONCRETE MIX DESIGN FOR NENGGIRI HYDROELECTRIC MAIN DAM IN KELANTAN"

from

**SOIL INSTRUMENTS (M) SDN BHD  
2024-2025**



Institute for Integrated Engineering  
[www.iie.uthm.edu.my](http://www.iie.uthm.edu.my)

Congratulations to Assoc. Prof. Ts. ChM. Dr. Radin Maya Saphira binti Radin Mohamed, Head of Micropollutant Research Center (MPRC) for receiving an Industry Grant for the Year 2023 through a project entitled "Development of ammonia sensor in water with bend optical fiber for improvement in sensitivity" with a value of RM41,800.00 from ABEX Group Sdn. Bhd 2023-2025.



## Congratulations

ASSOC. PROF. TS. CHM. DR. RADIN MAYA  
SAPHIRA BINTI RADIN MOHAMED

for receiving

**INDUSTRY GRANT  
RM 15,000.00**

"OPTIMIZATION COLOR REMOVAL IN TEXTILE WASTEWATER USING DIFFERENT COAGULANT/RESIN AND COAGULANT AIDS"

from

**ECO SOLUTION SERVICES SDN BHD  
2024-2025**



Institute for Integrated Engineering  
[www.iie.uthm.edu.my](http://www.iie.uthm.edu.my)

Congratulations to Prof. Dr. Mohd Amri bin Lajis, Principal Researcher (PR) for Advanced Manufacturing and Materials Centre (AMMC) for receiving an industry grant from Geen Screw Industries Sdn Bhd (2024-2027) with the title "Mechanical Behaviour Investigation and Materials Characterization in Multi-Stage Cold Forging of Metal Steel" with a value of RM 50,000.00.



## Congratulations

PROF. DR. MOHD AMRI BIN LAJIS

for receiving

**INDUSTRY GRANT  
RM 50,000.00**

"MECHANICAL BEHAVIOUR INVESTIGATION AND MATERIALS CHARACTERIZATION IN MULTI-STAGE COLD FORGING OF METAL STEEL"

from

**GEEN SCREW INDUSTRIES SDN BHD  
2024-2027**



Institute for Integrated Engineering  
[www.iie.uthm.edu.my](http://www.iie.uthm.edu.my)

# RESEARCH GRANTS

Congratulations to Assoc. Prof. Dr. Nadirul Hasraf bin Mat Nayan, Principal Researcher (PR) for the Research Center for Applied Electromagnetic (EMCenter) for receiving an industry grant from Malaysian Pineapple Industry Board (MPIB) with project title "Preparation Of Modified Magnetic Pineapple Cellulose Nanocrystals (Cncs) Natural Zinc Oxide (ZnO) Nanofillers Immobilize With Bromelain As Controlled Release Mechanisme For Wound Healing Cream Formulation" with a value of RM 69,000.



## Congratulations

Assoc. Prof. Dr. Nadirul Hasraf bin Mat Nayan, Prof. Dato' Ir. Dr. Mohammed Rafiq Dato' Abdul Kadir and Assoc. Prof. Dr. Huda A. Majid

for receiving

### INDUSTRIAL GRANT

Preparation Of Modified Magnetic Pineapple Cellulose Nanocrystals (Cncs)-Natural Zinc Oxide (ZnO) Nanofillers Immobilize With Bromelain As Controlled Release Mechanisme For Wound Healing Cream Formulation

## RM 69,000.00

By

**Malaysian Pineapple Industry Board (MPIB)**



Institute for Integrated Engineering  
<https://iie.uthm.edu.my>



## Congratulations

Prof. Ts. Dr. Aeslina binti Abdul Kadir

for receiving

### INTERNATIONAL GRANT

Culturing do you Kyoto Low Carbon Footprint Lifestyles from Kyoto City, Japan in Creating a Decarbonization Behavior Towards Net Zero Carbon in Developing Countries

## USD 10,000.00

By

**TOSHIBA INTERNATIONAL FOUNDATION (TIFO) 2024**



Institute for Integrated Engineering  
<https://iie.uthm.edu.my>

Congratulations to Prof. Ts. Dr. Aeslina binti Abdul Kadir, Principal Researcher (PR) for Micropollutant Research Center (MPRC) for receiving an International Grant from Toshiba International Foundation (TIFO) 2024 with the title "Culturing do you Kyoto Low Carbon Footprint Lifestyles from Kyoto City, Japan in Creating a Decarbonization Behavior Towards Net Zero Carbon in Developing Countries!" with a value of USD 10,000.00.

Congratulations to Prof. Dr. Nafarizal bin Nayan and team (Prof. Ts. Dr. Mohd Khairul bin Ahmad and Dr. riyaz Ahmad bin Mohamed Ali), Principal Researcher for Microelectronics and Nanotechnology-Shamsuddin Research Center (MiNT-SRC) for receiving an industry grant from Petronas Research Sdn. Bhd. (PRSB) with a value of RM269,860.00 through a project entitled "Feasibility Study and Experimental Demonstration of Plasma Technology for H2S Decomposition".



## Congratulations

Prof. Dr. Nafarizal bin Nayan, Prof. Ts. Dr. Mohd Khairul bin Ahmad and Dr. Riyaz Ahmad bin Mohamed Ali

for receiving

### Industrial Grant

Feasibility Study and Experimental Demonstration of Plasma Technology for H2S Decomposition

## RM 269,860.00

from

**Petronas Research Sdn. Bhd. 2023-2024**



Institute for Integrated Engineering  
<https://iie.uthm.edu.my>

# LEADERSHIP APPOINTMENT



## CONGRATULATIONS!

ASSOC. PROF. DR. NOR AZIATI BINTI ABDUL HAMID



*for being appointed as*

**Head of Industry  
Center of Excellence  
for Rail (ICoE-Rail)**

**1 Jan 2024 - 31 Dec 2025**



Global Technopreneur  
University 2030



Institute for Integrated Engineering  
[www.iie.uthm.edu.my](http://www.iie.uthm.edu.my)

Congratulations to Assoc. Prof. Dr. Nor Aziati Binti Abdul Hamid have been appointed as Head of Industry Center of Excellence for Rail (ICoE-Rail) effective on 1st January 2024 until 31st December 2025.



# LEADERSHIP APPOINTMENT

Congratulations to Prof. Ts. Dr. Aeslina binti Abdul Kadir, Principal Researcher for Micropollutant Research Center (MPRC) being appointed as External Examiner for Diploma of Civil Engineering Program by Faculty of Engineering and Life Sciences, University Selangor.



**CONGRATULATIONS!**

PROF. TS. DR. AESLINA BINTI ABDUL KADIR

for being appointed as

**External Examiner**

1 Feb 2024 - 31 Jan 2026

for

Diploma of Civil Engineering Program  
Faculty of Engineering and Life Sciences,  
University Selangor.

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## CONGRATULATIONS!

PROF. TS. DR. AESLINA BINTI ABDUL KADIR

for being appointed as

**Committee Member**

by

Cooperation Coordination Committee Solid Waste Corporation (SWCorp) - Korea Environment Corporation (K-Eco)



Institute for Integrated Engineering  
[www.iie.uthm.edu.my](http://www.iie.uthm.edu.my)

Congratulations to Prof. Ts. Dr. Aeslina binti Abdul Kadir, Principal Researcher for Micropollutant Research Center (MPRC) being appointed as Committee Member for Collaboration Coordination of Solid Waste Corporation (SWCorp) - Korea Environment Corporation (K-Eco).

Congratulations to Assoc. Prof. Ir. Dr. Fauziahanim binti Che Seman, Head of Applied Electromagnetic Research Center (EMCenter) for being appointed as IEEE Woman in Microwaves Subcommittee Member 2024 by IEEE Malaysia Section.



**CONGRATULATIONS!**

ASSOC. PROF. IR. DR. FAUZIAHANIM BINTI CHE SEMAN

for being appointed

**IEEE Woman In Microwaves Subcommittee Member 2024**

by

**IEEE MALAYSIA SECTION**

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# LEADERSHIP APPOINTMENT

Congratulations to Prof. Ts. Dr. Aeslina binti Abdul Kadir, Principal Researcher for Micropollutant Research Center (MPRC) being appointed as Evaluator by Engineering Technology Accreditation Council (ETAC).



**CONGRATULATIONS!**  
PROF. TS. DR. AESLINA BINTI ABDUL KADIR

for being appointed as

**Evaluator**

by  
Engineering Technology Accreditation Council (ETAC)

Global Technopreneur University 2030 | Institute for Integrated Engineering www.iie.uthm.edu.my

## CONGRATULATIONS!

ASSOC. PROF. DR. KHAIRUN NIDZAM BIN RAMLI



for being appointed as

**Head of Department  
(Science, Technology and Innovation)**

1 Feb 2024

by

Institut Ahli Sunnah Wal Jamaah (ISWAJ)



Global Technopreneur University 2030

Institute for Integrated Engineering www.iie.uthm.edu.my

Congratulations to Assoc. Prof. Dr. Khairun Nizam bin Ramli, Principal Researcher for Applied Electromagnetic Research Center (EMCenter) for being appointed as Head of Department (Science, Technology and Innovation) by Institute Ahli Sunnah Wal Jamaah (ISWAJ) on 1 February 2024.

Congratulations to Assoc. Prof. Dr. Shazarel bin Shamsudin, Principal Researcher (PR) for Advanced Manufacturing and Materials Centre (AMMC) for being appointed as Associate Professor, Grade DS54.



**CONGRATULATIONS!**  
ASSOC. PROF. DR. SHAZAREL BIN SHAMSUDIN

for being appointed as

**Associate Professor  
(Grade DS54)**

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## CONGRATULATIONS!

ASSOC. PROF. TS. DR. NUR KAMILAH BINTI YUSUF



for being appointed as

**Associate Professor  
(Grade DS54)**



Global Technopreneur University 2030

Institute for Integrated Engineering www.iie.uthm.edu.my

Congratulations to Assoc. Prof. Ts. Dr. Nur Kamilah binti Yusuf, Principal Researcher (PR) for Advanced Manufacturing and Materials Centre (AMMC) for being appointed as Associate Professor, Grade DS54.



# LEADERSHIP APPOINTMENT

Congratulations to Prof. Ir. Dr. Yusri bin Yusof, Principal Researcher (PR) for Advanced Manufacturing and Materials Centre (AMMC) for being appointed as External Reviewer Panel for School of Engineering Program by Taylor's University from 1 January 2024 till 31 December 2024.



**CONGRATULATIONS!**  
PROF. IR. DR. YUSRI BIN YUSOF

*for being appointed as*  
**External Reviewer for School of Engineering Programmes**  
1 Jan 2024 - 31 Dec 2024

by  
**Taylor's University**

Global Technopreneur University 2030 | Institute for Integrated Engineering www.iie.uthm.edu.my



**CONGRATULATIONS!**  
PROF. IR. DR. YUSRI BIN YUSOF

*for being appointed as*  
**Expert Panel for Research and Development (R&D) Project Fund**  
1 January 2024 - 31 December 2026

by  
**Ministry of Science, Technology and Innovation (MOSTI)**

Global Technopreneur University 2030 | Institute for Integrated Engineering www.iie.uthm.edu.my

Congratulations to Prof. Ir. Dr. Yusri bin Yusof, Principal Researcher (PR) for Advanced Manufacturing and Materials Centre (AMMC) for being appointed as Expert Panel for Research and Development (R&D) Project Fund by Ministry of Science, Technology and Innovation (MOSTI) on 1 January 2024 till 31 December 2026.

Congratulations to Assoc. Prof. Dr. Nurmiza binti Othman, Affiliate Researcher (AR) for Applied Electromagnetic Research Center (EMCenter) for being appointed as Associate Professor, Grade DS54.



**CONGRATULATIONS!**  
ASSOC. PROF. DR. NURMIZA BINTI OTHMAN

*for being appointed as*  
**Associate Professor (Grade DS54)**

Global Technopreneur University 2030 | Institute for Integrated Engineering www.iie.uthm.edu.my

# LEADERSHIP APPOINTMENT

Congratulations to Assoc. Prof. Dr. Shazarel bin Shamsudin, Principal Researcher (PR) for Advanced Manufacturing and Materials Centre (AMMC) for being re-appointed as Director of Quality Management Office from 1 January 2024 till 31 December 2025.



**CONGRATULATIONS!**  
DR. SHAZAREL BIN SHAMSUDIN

*for being re-appointed as*  
**Director of Quality Management Office**

1 January 2024 - 31 December 2025

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**CONGRATULATIONS!**  
DR. MOHD HAIRUL BIN KHAMIDUN

*for being re-appointed as*  
**Head of Department (Sport and Culture)**

1 January 2024 - 31 December 2025

by  
Center of General Studies and Co-Curricular

Global Technopreneur University 2030 | Institute for Integrated Engineering www.iiie.uthm.edu.my

Congratulations to Dr. Mohd Hairul bin Khamidun, Principal Researcher (PR) for Micropollutant Research Center (MPRC) for being re-appointed as Head of Department (Sport and Culture) by Centre of General Studies and Co-Curricular (PPUK) from 1 January 2024 till 31 December 2025.

Congratulations to Dr. Nor Amani Filzah binti Mohd Kamil, Principal Researcher (PR) for Micropollutant Research Center (MPRC) for being appointed as Safety Liaison Officer (SLO) from 5 January 2024 till 31 December 2025.



**CONGRATULATIONS!**  
DR. NOR AMANI FILZAH BINTI MOHD KAMIL

*for being appointed as*  
**Safety Liaison Officer (SLO)**

5 January 2024 - 31 December 2025

Global Technopreneur University 2030 | Institute for Integrated Engineering

# STAFF COMPETENCIES

Congratulations to Prof. Ir. Dr. Yusri bin Yusof, Principal Researcher (PR) for Advanced Manufacturing and Materials (AMMC) has been certified as ASEAN Chartered Professional Engineer (ACPE) by ASEAN Chartered Professional Engineer Coordination Committee (ACPECC)



**UTHM**  
Universiti Tun Hussein Onn Malaysia

*Congratulations*

**Prof. Ir. Dr. Yusri bin Yusof**  
being certified as

**ASEAN CHARTERED PROFESSIONAL ENGINEER (ACPE)**

from

**ASEAN CHARTERED PROFESSIONAL ENGINEERS COORDINATING COMMITTEE (ACPECC)**

**INSTITUTE FOR INTEGRATED ENGINEERING**

RECESS | IICoE-Rail | AMMC | AMPRC | S&M

Institute for Integrated Engineering  
<https://iie.uthm.edu.my>

Congratulations to Ir. Ts. Mustapha Kamil bin Omran, Affiliate Researcher (AR) for Industry Center of Excellence for Rail (ICoE-Rail) has been certified as ASEAN Chartered Professional Engineer (ACPE) by ASEAN Chartered Professional Engineer Coordination Committee (ACPECC)



**UTHM**  
Universiti Tun Hussein Onn Malaysia

*Congratulations*

**Ir. Ts. Mustapha Kamil bin Omran**  
being certified as

**ASEAN CHARTERED PROFESSIONAL ENGINEER (ACPE)**

from

**ASEAN CHARTERED PROFESSIONAL ENGINEERS COORDINATING COMMITTEE (ACPECC)**

**INSTITUTE FOR INTEGRATED ENGINEERING**

RECESS | IICoE-Rail | AMMC | AMPRC | S&M

Institute for Integrated Engineering  
<https://iie.uthm.edu.my>

Congratulations to Ir. Muhamad Faiz bin Abd Latif, Affiliate Researcher (AR) for Industry Center of Excellence for Rail (ICoE-Rail) has been certified as ASEAN Chartered Professional Engineer (ACPE) by ASEAN Chartered Professional Engineer Coordination Committee (ACPECC)



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Universiti Tun Hussein Onn Malaysia

*Congratulations*

**Ir. Muhamad Faiz bin Abd Latif**  
being certified as

**ASEAN CHARTERED PROFESSIONAL ENGINEER (ACPE)**

from

**ASEAN CHARTERED PROFESSIONAL ENGINEERS COORDINATING COMMITTEE (ACPECC)**

**INSTITUTE FOR INTEGRATED ENGINEERING**

RECESS | IICoE-Rail | AMMC | AMPRC | S&M

Institute for Integrated Engineering  
<https://iie.uthm.edu.my>

# STAFF COMPETENCIES

Congratulations to Prof. Ir. Dr. Mohd Amri bin Lajis, Principal Researcher (PR) for Advanced Manufacturing and Materials (AMMC) has been certified as Professional Engineer by Board of Engineer Malaysia (BEM)



Congratulations to Assoc. Prof. Ir. Ts. Dr. Alvin John Lim Meng Siang, Affiliate Researcher (AR) for Research Center for Soft Soils (RECESS) has been certified as Professional Engineer by Board of Engineer Malaysia (BEM)

Congratulations to Ts. Dr. Mariah binti Awang, Affiliate Researcher (AR) for Industry Center of Excellence for Rail (ICoE-Rail) has been certified as Facility Management Manager Accreditation (Level 5) by Malaysian Construction Industry Development Board (CIDB)



Congratulations to Ir. Ts. Dr. Zeety binti Md Yusof, Principal Researcher (PR) for Research Center for Soft Soils (RECESS) has been certified as Professional Engineer by Board of Engineer Malaysia (BEM)



## Congratulations

**ASSOC. PROF. TS. CHM. DR. RADIN MAYA  
SAPHIRA BINTI RADIN MOHAMED**

Nur Hidayah Kamilia binti Rassman, Assoc. Prof. Ir. Dr. Soon Chin Foong,  
Assoc. Prof. Ts. Dr. Rafidah binti Hamdan, Wan Afnizan bin Wan Mohamed  
@ Wan Abd Ghani

for receiving

**SILVER MEDAL AWARD**

**“NUTRISAVER ”**

from

**MALAYSIA TECHNOLOGY EXPO (MTE 2024)**



Institute for Integrated Engineering  
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Congratulations to Assoc. Prof. Ts. ChM. Dr. Radin Maya Saphira binti Radin Mohamed, Head of Micropollutant Center of Excellence (MPRC) and her team for being awarded Silver Medal Award for project Nutrisaver from Malaysia Technology Expo (MTE 2024).

Congratulations to Dr. Nor Amani Filzah binti Mohd Kamil, Principal Researcher (PR) for Micropollutant Center of Excellence (MPRC) and her team for being awarded Bronze Medal Award for project Ujimakro Kit from Malaysia Technology Expo (MTE 2024)



## Congratulations

**DR. NOR AMANI FILZAH BINTI MOHD KAMIL**

Ts. Dr. Mohd Ariff bin Mohd Nazri, Puan Hanayati binti Hafit, Dr. Muhammad Salleh bin Haji Abustan, Dr. Siti Hidayah binti Abu Talib, Assoc. Prof. Ir. Dr. Mohd Adib bin Mohammad Razi, Muhammad Azhari bin Mohd Zaidie

for receiving

**BRONZE MEDAL AWARD**

**“RIVER RANGERS : UJIMAKRO WATER MONITORING KIT ”**

from

**MALAYSIA TECHNOLOGY EXPO (MTE 2024)**



Institute for Integrated Engineering  
[www.iie.uthm.edu.my](http://www.iie.uthm.edu.my)

Congratulations to Ts. Dr. Nur Anida binti Jumadi, Affliate Researcher (AR) for Shamsuddin-Mikroelectronic and Nanotechnology Research Center (MiNT-SRC) and her team for being awarded Gold Medal Award for project Optical Glucometer from Malaysia Technology Expo (MTE 2024)



## Congratulations

**TS. DR. NUR ANIDA BINTI JUMADI**

Muhammad Hazlisham Hanafi, Cik Ng Li Mun, Assoc. Prof. Ir. Dr. Audrey Huong, Dr. Wan Mahani Hafizah Wan Mahmud, Dr. Hisyam Abdul Rahman, Mohammad Haziq Hakimi Mohd Shariman, En. Nurul Azman Abdul Kadir (Project Manager RS Tech), En. Noor Hisyam Ibrahim (CTO RS Tech).

for receiving

**GOLD MEDAL AWARD**

**“OPTICAL GLUCOMETER ”**

from

**MALAYSIA TECHNOLOGY EXPO (MTE 2024)**



Institute for Integrated Engineering  
[www.iie.uthm.edu.my](http://www.iie.uthm.edu.my)



**UTHM**  
Universiti Tun Hussein Onn Malaysia

## Congratulations

**DR. HERDAWATIE BINTI ABDUL KADIR**

Encik Mohd Helmy Abd Wahab, Dr. Radzi Ambar, Ts. Dr. Khalid Isa, Ahmad Aiman bin Abd Muttalib, Muhammad Hafiz bin Mansor, Muhammad Azwar Hakim bin Othman, Nur Diyanah Hazwani binti Abdul Roni , Nur Nazifa binti Mod Arsad, Muhammad Zulfauzan Fahmi bin Che Alias

for receiving  
**GOLD AWARD**

“BUOY ONE : WATERFALL ALARM SYSTEM FOR HEADWATER PHENOMENA ”

from

BANGKOK INTERNATIONAL INTELLECTUAL  
PROPERTY, INVENTION AND TECHNOLOGY EXPOSITION  
(IPITEX 2024) IN THAILAND'S INVENTOR DAY  
2024



Institute for Integrated Engineering  
[www.iie.uthm.edu.my](http://www.iie.uthm.edu.my)

Congratulations to Dr. Herdawatie binti Abdul Kadir, Principal Researcher (PR) for Applied Electromagnetics Research Center (EMCenter) and her team for being awarded Gold Award for project “Buoy One : Waterfall Alarm System For Headwater Phenomena”, Bangkok International Intellectual Property, Invention, Innovation and Technology Exposition (IPITEX 2024) In Thailand Inventors' Day 2024

Congratulations to Dr. Herdawatie binti Abdul Kadir, Principal Researcher (PR) for Applied Electromagnetics Research Center (EMCenter) and her team for being awarded Silver Award for project “Real-Time Monitoring System For Aquatic Surface Cleaning Robot”, Bangkok International Intellectual Property, Invention, Innovation and Technology Exposition (IPITEX 2024) In Thailand Inventors' Day 2024.



**UTHM**  
Universiti Tun Hussein Onn Malaysia

## Congratulations

**DR. HERDAWATIE BINTI ABDUL KADIR**

Encik Mohd Helmy Abd Wahab, Dr. Radzi Ambar, Ts. Dr. Khalid Isa, Nor Hazira binti Hashim, Nur Diyanah Hazwani binti Abdul Roni , Muhammad Azwar Hakim bin Othman, Muhammad Hafiz bin Mansor, Nur Nazifa binti Mod Arsad, Muhammad Zulfauzan Fahmi bin Che Alias

for receiving  
**SILVER AWARD**

“REAL TIME MONITORING SYSTEM FOR AQUATIC SURFACE  
CLEANING ROBOT ”

from

BANGKOK INTERNATIONAL INTELLECTUAL  
PROPERTY, INVENTION AND TECHNOLOGY EXPOSITION  
(IPITEX 2024) IN THAILAND'S INVENTOR DAY  
2024



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**UTHM**  
Universiti Tun Hussein Onn Malaysia

## Congratulations

**DR. HERDAWATIE BINTI ABDUL KADIR**

Encik Mohd Helmy Abd Wahab, Dr. Radzi Ambar, Nur Diyanah Hazwani binti Abdul Roni, Muhamad Faizul Akmal bin Hamdan, Muhammad Amirul Amri Adam, Muhammad Azwar Hakim bin Othman, Muhammad Zulfauzan Fahmi bin Che Alias, Nur Nazifa binti Mod Arsad

for receiving  
**SILVER AWARD**

“REAL TIME INTEGRATED SYSTEM FOR SMART BUILDING  
USING IOT (RIDE-SMART IOT) ”

from

BANGKOK INTERNATIONAL INTELLECTUAL  
PROPERTY, INVENTION AND TECHNOLOGY EXPOSITION  
(IPITEX 2024) IN THAILAND'S INVENTOR DAY  
2024



Institute for Integrated Engineering  
[www.iie.uthm.edu.my](http://www.iie.uthm.edu.my)

Congratulations to Dr. Herdawatie binti Abdul Kadir, Principal Researcher (PR) for Applied Electromagnetics Research Center (EMCenter) and her team for being awarded Silver Award for project "Real-Time Integrated System For Smart Building Using Iot (Ride-Smart IoT)", Bangkok International Intellectual Property, Invention, Innovation and Technology Exposition (IPITEX 2024) In Thailand Inventors' Day 2024.

## AWARD AND RECOGNITION



Congratulations to Dr. Noor Kamalia binti Abd Hamed, Postdoctoral from Microelectronic and Nanotechnology - Shamsuddin Research Center (MiNT-SRC) has been awarded with AFMD Emerging Women in Material Science Award (Sponsored by Wiley) in International Conference on Advanced Functional Materials and Devices (AFMD-2024)

Congratulations to Assoc. Prof. Ts. ChM. Dr. Radin Maya Saphira binti Radin Mohamed, Head of Micropollutant Center for Excellence (MPRC) has been nominated as Best Oral Presentation Award in 3rd International Conference on Civil Engineering and Construction Technology (ICECON) 2024



Congratulations to postgraduate students from MiNT-SRC under Assoc. Prof. Dr. Marlia binti Morsin who has been nominated as Best Oral Presentation and Best Poster Presentation Award in International Conference on Advanced Functional Materials and Devices (AFMD-2024)

# WEBINAR & WORKSHOP



## SYARAHAN PERDANA

### Siri 1/ 2024

Oleh:

**Prof. Dr. Mohd Amri bin Lajis**  
Fakulti Teknologi Kejuruteraan

### "Sustainable Aluminum Recycling for a Circular Economy"

15 Januari 2024 (Isnin) | 9.30 Pagi  
Bilik Banquet  
Dewan Sultan Ibrahim

Anjuran bersama:  
Majlis Profesor Universiti, Pejabat Canselori dan  
Fakulti Teknologi Kejuruteraan



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University 2030



UTHM Johor www.uthm.edu.my



WE ARE RANKED #1001-1200  
QS World University Rankings | 2023



WE ARE RANKED 1201-1500  
For World University Rankings 2023



STARS™ RATING SYSTEM  
Excellent



165  
WORLD  
9  
MALAYSIA



## SYARAHAN PERDANA

Siri 2 / 2024

Oleh:

**Prof. Ir. Dr. Chan Chee Ming**  
Fakulti Teknologi Kejuruteraan

### "Ashes to Ashes, Earth to Earth: A Soil Story"

7 Mac 2024 (Khamis)  
9.30 Pagi  
Big Stage, Aras 2, Perpustakaan Tunku Tun Aminah

Anjuran bersama:  
Majlis Profesor Universiti, Pejabat Canselori dan  
Fakulti Teknologi Kejuruteraan

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# WEBINAR & WORKSHOP

Congratulations to Assoc. Prof. Ir. Dr. Soon Chin Fhong who has been invited as a speaker for webinar entitled “How to register for HRDCorp Trainer” organized by Faculty of Electrical and Electronics Engineering (FKEE).

This session was conducted via Microsoft team meeting on 27th February 2024. Assoc. Prof. Ir. Dr. Soon Chin Fhong is one of certified trainer register with HRDCorp.



Faculty of Electrical and Electronic Engineering

How to register for **HRDCorp Trainer**

Topic : **TRAINER REGISTRATION**

As a HRD Corp Accredited Trainer, your training is claimable to HRD Corp Registered employer. The implementation of HRD-TDF will create a pool of competent and skilled Trainer professionals. This will support the human capital development needs of the nation through better quality and more effective training delivery.

QR Code

All Staff Invited!

Associate Prof. Ir. Dr. **Soon Chin Fhong**  
Speaker

**27 FEB, 2024 (Tue)**  
10:00 am - 11:00 am  
Microsoft Teams meeting  
Meeting ID: 496 228 083 557 Passcode: NkckQp

Organized by FKEE - JK Potential Staff

FKEE STAKEHOLDERS #GTU2030 UTHM TV UTHM Professionals



Institute for Integrated Engineering (I<sup>2</sup>E) was successfully presented their Annual Work Target for year 2024 with the Deputy Vice-Chancellor (Research and Innovation), Prof. Ts. Dr. Rabiah binti Ahmad.

The presentation session was chaired by the Director of I<sup>2</sup>E, Prof. Ts. Dr. Hj. Mohd Khairul bin Ahmad. While the Head of Centre of Excellence (CoE) and administrative staffs were also present during the presentation session.

Hoping for the best and all the Key Performance Index (KPI) achieved for year 2024.





Institute for Integrated Engineering (I<sup>2</sup>E) was successfully organized a Higher Education Center of Excellence (HICoE) Workshop for all CoE's in UTHM. This workshop was chaired by the Director of I<sup>2</sup>E, Prof. Ts. Dr. Hj. Mohd Khairul bin Ahmad. While the invited speaker for this workshop is Prof. Ts. Dr. Rosziati binti Ibrahim, one of HICoE panel as appointed by the Ministry of Higher Education (MOHE).

I<sup>2</sup>E aim that two (2) CoE's will be upgraded to HICoE for fiscal year 2024 which is Microelectronics and Nanotechnology-Shamsuddin Research Center (MiNT-SRC) and also Advanced Manufacturing and Materials Center (AMMC) with different niche area.

## EVENTS AND ACTIVITIES

**PROGRAM SOLAT HAJAT, BACAAN YASIN DAN TAHLIL  
SEMPENA TAHUN BAHARU 2024, PTJ DIBAWAH  
PORTFOLIO PEJABAT TIMBALAN NAIB CANCELOR  
(PENYELIDIKAN & INOVASI) UTHM  
11 JANUARI 2024 (KHAMIS)  
BILIK PERSIDANGAN ARAS 1 PUSAT PENYELIDIKAN**



**PUSAT INOVASI DAN PENGKOMERSIALAN (ICC)**



[www.icc.uthm.edu.my](http://www.icc.uthm.edu.my)



**HAJAT PRAYER, YASIN AND TAHLIL RECITATION  
PROGRAM IN CONJUNCTION WITH NEW YEAR EVE 2024,  
FOR ALL OFFICES UNDER THE PORTFOLIO OF THE  
DEPUTY VICE-CHANCELLOR'S (RESEARCH &  
INNOVATION) UTHM**

**11 JANUARY 2024 (THURSDAY)**

**8.00 AM TO 11.00 AM**

**Conference Room Level 1, UTHM Research Centre**



**PROGRAM SOLAT HAJAT, BACAAN YASIN DAN TAHLIL SEMPERA TAHUN BAHARU 2024,  
PTJ DIBAWAH PORTFOLIO PEJABAT TIMBALAN NAIB CANCELOR  
(PENYELIDIKAN & INOVASI) UTHM  
11 JANUARI 2024 (KHAMIS)  
BILIK PERSIDANGAN ARAS 1 PUSAT PENYELIDIKAN UTHM**



**Good Governance Rating (GGR) Audit at the  
Institute for Integrated Engineering. The session  
was led by Assoc. Prof. Dr. Marlia binti Morsin,  
Head of MiNT-SRC Centre as a representative to  
the Director, followed by Madam Nur Faezah  
binti Mohamed Noor, Senior Assistant Registrar  
and Mr. Mohamad Fadhil bin Ja'afar,  
Administrative Assistant.**

**The auditor team was led by Ts. Dr. Shamsul bin  
Mohamad, assisted by PM Ir. Ts. Dr. Saifulnizan  
bin Jamian, Puan Zarina binti Md Ali and Dr.  
Rohaida binti Mat Akir.**

**Exhibition of Muar District Agriculture Office in  
conjunction with the visit of the Honorable  
Minister of Agriculture and Food Security to the  
Paddy Cultivation Project in Sawah Ring,  
Tangkak, Johor.**

**This initiative involves Muar Living Lab  
researchers, Research Centre for Soft Soils  
(RECESS), Faculty of Technology and Business  
Management (FPTM) and Faculty of Engineering  
Technology (FTK). The exhibition was also  
attended by collaborators such as Muar District  
Office, Muar Municipal Council, J-Biotech,  
Malaysian, Nuclear Agency, SIRIM STV, Sungai  
Balang Farmers Group and local Khat  
Entrepreneurs.**



## EVENTS AND ACTIVITIES



Congratulations Principal Researcher (PR) Micoelectronics and Nanotechnology-Shamsudin Research Center (MiNT-SRC), Assoc. Prof. Ir. Dr. Soon Chin Fhong and collaborators (UPSI & UUM) on the final presentation of the closing of the Research Excellence Consortium grant (KKP) for Water Pollution Resilience Consortium grant in MOHE.

Micoelectronics and Nanotechnology-Shamsudin Research Center (MiNT-SRC), was successfully organized Ramadhan Talk. This talk was led by Assoc. Prof. Dr. Marlia binti Morsin.

Besides academic and KPI fulfillment, our spiritual and emotional needs also need to be feeds and balanced. Well done MiNT-SRC.



**Knowledge Transfer Program by AMMC:**

Advanced Manufacturing and Materials Centre (AMMC) was successfully organized a Knowledge Transfer Program (KTP) & Sharing Facilities regarding Pineapple Leaf Paper Manufacturing to Small Medium Enterprise (SME) Industry especially for Pineapple Fiber Thread Business.



### INSTITUTE FOR INTEGRATED ENGINEERING (I<sup>2</sup>E) LAMBUK PORRIDGE PROGRAM 2024

Institute for Integrated Engineering Staff Club was successfully organised the Lambuk Porridge Program for year 2024 at Block F6, Research Building, UTHM. This program was organised in conjunction with the month of Ramadhan and was participated by various levels of staff under I2E. This program was led by the Director of the Institute for Integrated Engineering, Prof. Ts. Dr. Hj. Mohd Khairul Ahmad, followed by Head of CoE, Principal Researchers, Administrative Staffs, Laboratory Staffs and also postdoctoral of I2E.



### MINT-SRC VISIT TO BUNGE LODERS CROKLAAN, PASIR GUDANG, JOHOR

Assoc. Prof. Ts. Dr Nur Hanis Hayati Hairom, Assoc. Prof. Dr. Marlia Morsin, Ir. Dr. Farhanahani Mahmud and team conducted a site visit to the effluent treatment plant and effluent extraction at an oil palm refinery, Bunge Loders Croklaan, Pasir Gudang, Johor.

The team is conducting research on industrial effluent treatment using nano and membrane technology.

## EVENTS AND ACTIVITIES



### VISIT FROM PETRONAS RESEARCH SDN BHD TO MINT-SRC

MiNT-SRC received a visit from Petronas Research Sdn. Bhd. for the purpose of cooperation in the field of research and testing.

MiNT-SRC team was led Prof. Dr. Nafarizal bin Nayan followed by Prof. Ts. Dr. Mohd Khairul bin Ahmad, Dr. Riyaz bin Ahmad and team

### VISIT FROM MICRO-NANO SYSTEM ENGINEERING (MNSE) RESEARCH GROUP, UTM TO MINT-SRC

MiNT-SRC received a visit from MNSE Research Group, UTM led by Assoc. Prof. Ir. Ts. Dr. Mohd Ridzuan Bin Ahmad, Dr. Amri Bin Md. Yunus, Dr. Shaharin Fadzli Bin Abd Rahman, Ts. Dr. Mastura Shafinaz Binti Zainal Abidin, Dr. Muhammad Asraf Mansor, Dr. Amirjan Bin Nawabjan & Ms. Gan Shin Pyng.



The Institute for Integrated Engineering as co-organizer for International Conference on Advanced Functional Materials and Devices (AFMD-2024). The main organizer for this conference is the Nanotechnology Research Centre, SRM Institute of Science and Technology (SRMIST), in Chennai, India. This conference was held from 26th until 29th February 2024.

UTHM delegation was led by the Director of I2E, Prof. Ts. Dr. Hj. Mohd Khairul bin Ahmad, followed by Assoc. Prof. Dr. Marlia binti Morsin (Head of MiNT-SRC), staff and postgraduates student.



### VISIT TO EVERGREEN FIBREBOARD

Kickoff meeting with Evergreen Fibreboard Berhad on Tree Planting Program in UTHM campus. The program will be conducted in May 2024 by Micropollutant Centre of Excellence (MPRC). MPRC was led by Prof. Ts. Dr. Aeslina binti Abdul Kadir and Dr. Nor Amani Filzah binti Mohd Kamil.



### CPTU FIELD TESTING BY RECESS

Research Centre for Soft Soils (RECESS) team was led by Prof. Ir. Ts. Dr. Adnan bin Zainorabidin followed by Mr. Mohamad Johari bin Zainal and Mr. Amirzaki bin Salikin had successfully conducted CPTU Field Testing to obtained quality and accurate data. Cone Penetration Test with Pore Water Pressure Measurement is a geotechnical engineering method used to determine soil properties and delineate soil stratigraphy.



## VISIT BY J-BIOTECH GROUP TO UTHM

Congratulations Ts. Dr. Nor Azizi bin Yusoff, may the collaboration between UTHM and J-Biotech continue to be strong for the excellence of research and consultation in the field of biotechnology and biodiversity.



## ICOE-RAIL WAS INVITED TO NEW STATION LAUNCHING CEREMONY

Assoc. Prof. Ts. Dr. Joewono Prasetijo, Principal Researcher (PR) for Industry-Centre of Excellence for Rail (ICoE-Rail) was invited to the launching ceremony of the Seremban Sentral New Station, which was officiated by honorable Mr. Loke Siew Fook, Minister of Transport Malaysia. Thank you to DMIA, General Tan Sri Dato' Seri Panglima Mohd Azumi (Rtd.) (Deputy Chairman of Dhaya Maju LTAT Sdn Bhd) and Tuan Haniff Ghazali for invitation and collaboration.





## KEYNOTE AND PLENARY TALK IN PAKISTAN

Congratulations Prof. Ir. Dr. Yusri bin Yusof, Principal Researcher (PR) for Advanced Manufacturing and Materials Centre (AMMC) for being invited as Keynote and Plenary Speaker to Quest University of Engineering Nawabshah and Mehran University of Engineering and Technology, Khaipur, Pakistan



## ICOE-RAIL WAS INVITED TO NEW STATION LAUNCHING CEREMONY

Well done Assoc. Prof. Ir. Dr. Soon Chin Fhong and Prof. Ts. Dr. Norzila binti Othman from CoE MiNT-SRC and MPRC respectively for successfully attending the UK-CHINA-ASEAN-EASTERN EUROPEAN CONSORTIUM symposium. The 4th and 5th UCAEE IR4.0 and Partnership for Sustainable Development Symposium was held from 14th to 16th January 2024 in College of Arts, Media and Technology, Chiang Mai University, Thailand.

## EVENTS AND ACTIVITIES



### The First 2024 Gathering of EMCenter Principal Researchers (PR)

The Applied Electromagnetic Research Center recently held its initial management meeting, concluding the activities of 2023 and paving the way for more productive endeavors in 2024.

### EMCenter visited Alphabet Capital Sdn Bhd.

EMCenter researchers visited Alphabet Capital Sdn Bhd which is located at Mount Kiara. Alphabet capital is a local company, specializes in delivering cutting-edge network devices tailored to the requirements Industry, Enterprise and Consumer.



### VISIT BY Dr. JOHN RICHARD PASLEY TO COE'S LABORATORY

Visit to the Centre of Excellence (CoE) Laboratory, Institute for Integrated Engineering by Dr. John Richard Pasley from The School of Physics, Engineering and Technology at the University of York, United Kingdom. Dr. John was taken to visit the Sustainable Manufacturing and Recycling Technology (SMART) laboratory, AMMC, then to the GeoPhysics laboratory and Geo Environment laboratory, RECESS and also the Failure Analysis laboratory, MiNT-SRC.



## MiNT-SRC visit to JEOL ASIA, SINGAPORE

Training and demonstration of Energy Dispersive Spectrometer (EDS) for UTHM Commercial Laboratory (UCL) in Jeol Asia, Bruker, Singapore. UTHM delegation was led by Assoc. Prof. Ir. Dr. Soon Chin Fhong and followed by MiNT-SRC staffs. This training and demonstration (EDS) was conducted to meet the annual audit requirements of MS/ISO 17025 MiNT-SRC for 2024



## MUAR LIVING LAB COFFEE TABLE BOOK HANDOVER

The Muar Living Lab book was handover by Ts. Dr. Nor Azizi bin Yusoff to the Deputy Vice-Chancellor (Research and Innovation), Prof. Ts. Dr. Rabiah binti Ahmad. Also present during this session are Director of the Institute for Integrated Engineering, Prof. Ts. Dr. Hj. Mohd Khairul bin Ahmad and Heads of CoE. May CoS Muar Living Lab continue to move forward and contribute back to the local community.



# Credits

## Editors

“

Prof. Ts. Dr. Hj. Mohd Khairul bin Ahmad  
Ms. Maizatulazrina binti Yaakob

”

## Illustrators

“

Ms. Maizatulazrina binti Yaakob

”

EXCELLENT

