













UMPSA'S CLUSTER OF KNOWLEDGE

THE EXPERT DIRECTORY



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First Published, September 2022

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Perpustakaan Negara Malaysia Cataloguing-in-Publication Data

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ACKNOWLEDGEMENT

"Hearties Gratitude to all contributors that made this book possible"

All praise to Allah (SWT), the Lord of the universe, who ease the process of completing this book. We also want to express our gratitude to every person who has contributed their time and energy in publishing this book.

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FOREWORD

After 21 years of its inception Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) has successfully built its pool of knowledge in the various technical areas including the IR 4.0, IoT Big Data and Data Analytics. It's indeed timely to systematically market these clusters of knowledge from The Pekan and Paya Besar Valley of Knowledge for collaboration with the stakeholders and industries.

Internally, access to this comprehensive list of experts either from this publication or online would certainly facilitate us in achieving selectively the 17 Sustainable Development Goals (SDGs) and the Environment Social and Governance (ESG) targets.

These are our platforms, enablers and accelerators of UMPSA Green and Smart Campus. The pool of talents highlighted would also facilitate to enhance the spreading and embedding of Science and Technology Value System and Culture for the future generation.

For this purpose, a regular STEM Festival will be held to show case the products of these innovative and technologically based knowledge. These programmes of Team Reaching Out will be pursued relentlessly. I sincerely hope this group of Talent Marketing will be the hallmark of UMPSA Success Narrative . Insya Allah



Tan Sri Dato' Sri Dr. Abdul Aziz Abdul Rahman PSM., SSAP., SIMP., DSAP., KMN.

Chairman of the University Board of Directors Universiti Malaysia Pahang Al-Sultan Abdullah

VICE CHANCELLOR NOTE

Being one of the Malaysian Technical Universities (MTUN), UMPSA holds many experts in various fields related to engineering and technology, including highlevel Technical and Vocational Education and Training (TVET).

With our motto, "Technology for Community", our team of experts are ready to assist and committed to sharing their expertise in bringing a better life to all. This booklet will serve as a strategic source of expertise that can be turned into potential future cooperation for shared knowledge and technology between the university and the community.

Thank you to the team that made this book possible for all to share.



Professor Dato' Ts. Dr. Yuserrie bin Zainuddin DIMP

Vice-Chancellor Universiti Malaysia Pahang Al-Sultan Abdullah

ABOUT UMPSA

Established as a technical university in 2002, Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) offers various engineering- and technology-based technical programmes, including high-level Technical and Vocational Education and Training (TVET) programmes.

After 21 years of glory, Universiti Malaysia Pahang (UMP) is now branded as Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA).

His Majesty Yang Maha Mulia Seri Paduka Baginda Yang di-Pertuan Agong XVI Al-Sultan Abdullah Ri'ayatuddin Al-Mustafa Billah Shah Ibni Almarhum Sultan Haji Ahmad Shah Al-Musta'in Billah, who is also the UMP Chancellor contributed a lot in shaping the country leadership, empowering education, disseminating knowledge and religion as well as the concern of His Majesty The King towards the people, especially in Pahang Darul Makmur.

The university started as the University College of Engineering and Technology Malaysia (KUKTEM), a technical university established on 16 February 2002. After five years of operation, the Government of Malaysia announced the change of the name KUKTEM to Universiti Malaysia Pahang (UMP), effective 1 February 2007.

The university's branding to UMPSA, when it was at the peak of success, was based on the Universiti Malaysia Pahang Order (Incorporation) (Amendment) 2023 (P.U. (A) 116/2023) effective 14 April 2023. This branding coincides with the university's vision towards a leading technological university, and it will realise the aspiration of excellence achieved through academic empowerment and impactful research outputs and produce outstanding graduates to become quality human capital in driving excellent national development.

This branding will also build the university's visibility, reputation and capabilities, which aligns with the university's development and achievement at the age of 21 this year.

Ranked as one of the best in research and innovation within the classifications of Malaysia Technical University Network (MTUN) and Non-Research University (Non-RU), UMPSA is steadfastly committed to innovating and developing unique academic programmes through strategic international collaborations. A milestone of such innovation is UMP's world-class dual-degree engineering programme in collaboration with Germany's Karlsruhe University of Applied Sciences (HKA) – now seen as the benchmark for other public institutions of higher learning in Malaysia.

In research, UMPSA collaborates with local industries to focus on industry-related applications. Such research collaboration enriches the teaching and learning modules at the university and simultaneously promotes the commercialisation of research output and products.

UMPSA RANGKINGS

NATIONAL







INTERNATIONAL





Ranked #781-790 in World
Ranked #10 in Malaysia (Public Universities)
Ranked #1 in MTUN



Ranked #132 in Asia Ranked #25 in South Eastern Asia Ranked #12 in Malaysia Ranked #1 in MTUN



Ranked #201-250 in World Ranked #3 in Malaysia Ranked #1 in MTUN



Ranked #301-400 in World Raked #7 in Malaysia Ranked #1 in MTUN

SDG1: No Poverty - #101-200
SDG4: Quality Education - #301-400
SDG6: Clean Water and Sanitation - #101-200
SDG7: Affordable and Clean Energy - #=53
SDG9: Industry, Innovation and Infrastructure - #401-600
SDG12: Responsible Consumption and Production - #201-300
SDG17: Partnership for the Goals - #101-200



Ranked #401-450 in World Ranked #6 in Malaysia Ranked #1 in MTUN

QS WUR BY SUBJECTS

















Ranked #201-250 in Asia Ranked #9 in Malaysia Ranked #1 in MTUN



Ranked #103 in World Ranked #1 in MTUN Ranked #5 in Malaysia



Ranked #601-800 in World Ranked #8 in Malaysia Ranked #1 in MTUN



World: 992
Asia: 269
Energy & Fuel: 161
Chemical Engineering: 201
Engineering: 256
Chemistry: 637
Materials Science: 634

INTRODUCTION

In line with the university's vision to become a world-class technical university, UMPSA has set up the niche area of the university, which is Advanced Process Engineering and Automotive. The setting of the **University Niche Area** is aimed at empowering UMPSA in international rankings and shaping and determining the university's research direction and strategy, so that it is more effective and has a high impact.

The UMPSA Research Niche Area has been set by the university based on the strength and capabilities of UMPSA. The UMPSA research niche area is used to map the research domains at UMPSA and acts as a pillar for UMPSA academics. It is also essential in connecting academic research that fosters innovation and collaboration and promotes commercialisation. There are two research niche areas of UMPSA. Chemical Engineering and Mechanical, and Automotive and Manufacturing Engineering, which are further supported by seven UMPSA Focus Areas. These focus areas serve as the foundation of the university's R&D programmes to provide high-quality research outputs in the designated niche areas. However, UMPSA Focus Areas have been expanded into four Additional Field Areas to support key economic sectors in the state of State Pahana (Pahang Socioeconomic Report, 2021, Department of Statistics Malaysia), which covers among the fields of agriculture and food security. mining, petrochemicals and construction.

UNIVERSITY NICHE
AREA

Advanced
Process
Engineering &
Automotive

Chemical
Engineering

Mechanical,
Automotive &
Manufacturing
Engineering



FOUR ADDITIONAL FOCUS AREAS



UMPSA WORLD'S TOP 2% SCIENTIST

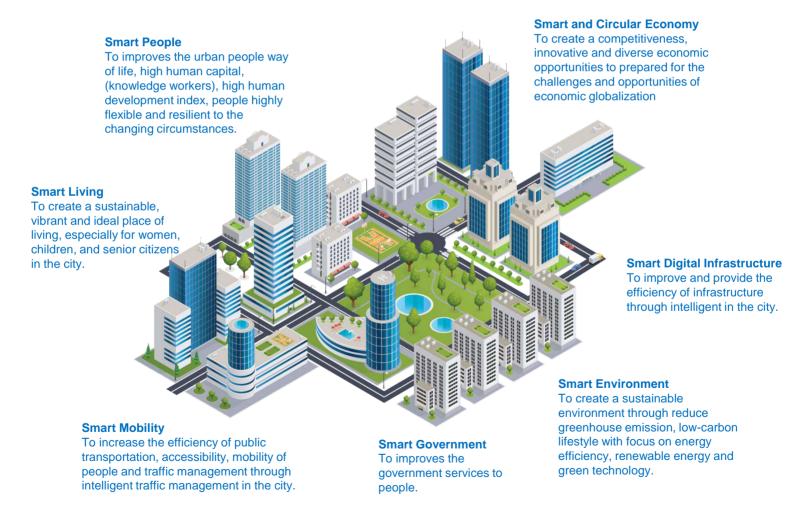


- 1. Dr. Sudhakar Kumarasamy Sustainable Energy
- 2. Professor Dr. Jose Rojan Smart City, Material Sciences,
- 3. Professor Dr. Wan Azmi bin Wan Hamzah Vehicular Technology
- 4. Professor Dr. Rizalman bin Mamat Vehicular Technology, Sustainable Energy
- 5. Professor Dato' Ts. Dr. Zularisam bin Ab Wahid Sustainable Energy, Agriculture & Food Security
- 6. Professor Ir. Ts. Dr. Kumaran a/l Kadirgama Material Sciences, Vehicular Technology
- 7. Ts. Dr. Norazlianie binti Sazali Sustainable Energy
- 8. Professor Ts. Dr. Md. Mustafizur Rahman Sustainable Energy, Vehicular Technology
- 9. Ts. Dr. Ahmad Shahrizan bin Abdul Ghani Smart City
- 10. Associate Professor Dr. Ramdhansyah Putra Jaya Construction
- 11. Professor Ts. Dr. Kamal Zuhairi bin Zamli Smart City
- 12. Associate Professor Ir. Ts. Dr. Wan Sharuzi bin Wan Harun Agriculture & Food Security
- 13. Associate Professor Dr. Mohd Herwan bin Sulaiman Sustainable Energy
- 14. Professor ChM Dr. Mohd Hasbi bin Ab Rahim Material Sciences, Fine & Specialty Chemical
- 15. Associate Professor Ir. Ts Dr. Mahendran a/I Samykano Sustainable Energy, Material Sciences
- 16. Professor Ts. Dr. Jolius bin Gimbun Sustainable Energy, Agriculture & Food Security
- 17. Professor Chm Dr. Chong Kwok Feng Rare Earth Materials, Material Sciences
- 18. Ts. Dr. Ros Azlinawati binti Ramli Agriculture & Food Security, Fine & Specialty Chemical
- 19. Dr. Izan Izwan bin Misnon Material Sciences
- 20. Associate Professor Ts. Dr. Mohd Ashraf bin Ahmad Smart City



SMART CITY

The UMPSA expertise in Smart City focus area has been categorised into 7 components based on Smart City Framework Malaysia (MSCF) consist of Smart People, Smart Living, Smart Mobility, Smart Government, Smart Government, Smart Digital Infrastructure, Smart and Circular Economy. Through the convergence of technologies incorporating machine learning and neural network capabilities, geospatial intelligence, data analytics and visualisation, sensors, and smart connected objects, artificial intelligence which one of UMPSA's focus area offers a comprehensive view of how cities are evolving as smart city ecosystems.





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Using Sum of Correlated Gamma Model and Poisson-Gamma Model



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Development of Intelligent Monitoring and Control of
Urban Traffic Light System for Jabatan Kerja Raya
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An Improved Smoothed Functional Algorithm by Using Norm – Limited Update Vector for Stable Convergence in Model – Free Control Scheme

UMPSA World's Top 2% Scientist



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A New Priority Rule Cloud Scheduling Technique That Utilizes Gaps to Increase the Efficiency of Jobs Distribution



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Associate Professor Ts. Dr. Mohd Razali Bin Daud mrazali@umpsa.edu.my 011-10776526 Intelligent Vision System for Identification of Massive and Cluttered Parts



Associate Professor Ir. Dr Addie Irawan Bin Hashim addieirawan@umpsa.edu.my 019-9785276 Development of Real-time Computer-based Multiple **Motor Drive System**





Associate Professor Dr. Hamdan Bin Daniyal hamdan@umpsa.edu.my 019-9854052 Adaptive Controller of Smart Micro Grid in Intentional Islanding Mode

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Associate Professor Dr. Abu Zaharin Bin Ahmad zaharin@umpsa.edu.my 019-4241881 Formulation of Microgrid Energy Management of Energy Internet Using Fuzzy Based Model Predictive Control

My Profile





Associate Professor Dr. Mohd Sham Bin Mohamad mohdsham@umpsa.edu.my 019-9892748
Security of Cryptosystem Using Automorphism of Cylic Groups of P-power Order







Ts. Dr. Azlyna Binti Senawi
azlyna@umpsa.edu.my
018-6652058
Formulation of New Feature Selection Methods Based on
Linear and Nonlinear Unsupervised Discriminant Analysis for
Intrusion Detection System

My Profile





Ts. Dr. Syahrulanuar Bin Ngah syahrulanuar@umpsa.edu.my 013-9809619 Implementation Artificial Network in Field Programmable Gate Array (FPGA)

My Profile



Dr. Abdul Nasir Bin Abd. Ghafar abdnasir@umpsa.edu.my 018-3709949 Development of Monitoring and Control System Using Wireless IoT Communications for Energy Saving in the Workplace

My Profile





Ts. Dr. Ngui Wai Keng
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012-2852489
Monitoring of Rotating Machinery Fault Diagnosis
Using Vibration and Artificial Intelligence Approaches



Ts. Dr. Rohana Binti Abdul Karim rohanaak@umpsa.edu.my 013-9300982 Non-Destructive Test of Pineapple Maturity Using Vision System



Ts. Dr. Ahmad Shahrizan Bin Abdul Ghani shahrizan@umpsa.edu.my 019-6339803 Automatic Fishcake Slicer Machine with Vision – Based System for Defect Monitoring



Ts. Dr. Saifudin Bin Razali saifudin@umpsa.edu.my 019-9562530 Development Of A Student Attendance Using Vicinity RFID System



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Dr. Farzad Jaliliantabar jaliliantabar@umpsa.edu.my 011-61023729 Artificial Intelligence-driven Properties Optimisation of Phase Change Material



Dr. Sahimel Azwal Bin Sulaiman sahimel@umpsa.edu.my 013-6706237 RSA Digital Signature Authentication and Verification Using Cryptographic Keys Generator Based on the Compatible Actions of Cyclic P-groups

Dr. Mahfuzah Binti Mustafa mahfuzah@umpsa.edu.my 013-3614772 Handwash Screening Vision System

Dr. Ahmad Fakhri Bin Ab. Nasir afakhri@umpsa.edu.my 019-9857871 Modelling of Inter-cell Radio Interference and Thermal Noise Floor in 5G Mobile Networks Using Artificial Intelligence



My Profile





Ts. Dr. Ahmad Firdaus Bin Zainal Abidin firdausza@umpsa.edu.my 013-4771489 Anomaly-Based Malware Prediction Model with Optimised Static Features



Ts. Dr. Abdul Sahli Bin Fakharudin sahli@umpsa.edu.my 019-3251504 Bluetooth User Driven M-Advertising Using Pull-Based Approach





Omar Bin Aliman omaraliman@umpsa.edu.my 019-3825246 Optimal Sizing of Distributed Generation (Dg) in Distribution Networks







Mohd Hisyam Bin Mohd Ariff hisyam@umpsa.edu.my 017-2324232 Development of Array Antenna for UHF RFID Reader

My Profile





Rahiwan Nazar Bin Romli rahiwan@umpsa.edu.my 019-3319565 Malaysia Network Transit Route Advisor (Mantra)





Badaruddin Bin Muhammad badaruddin@umpsa.edu.my 019-9175116 Integrated Network Security System for Industry Security







VEHICULAR TECHNOLOGY

Vehicular Technology

Vehicular Technology Cluster is focusing on vehicle technology research development and industry in Malaysia. The key objective of the group is to support National Automotive Policy (NAP) 2020-2030 framework, especially in developing the next generation vehicle (NxGV) technology. The experts are divided into five components; Engines and Combustion, Electric Vehicles and Batteries, Autonomous Vehicles, Cooling and Lubrication, and Vehicle Manufacturing







VEHICULAR TECHNOLOGY COMPONENTS







Professor Dr. Rizalman Bin Mamat rizalman@umpsa.edu.my 013 929 0709 Performance Combustion Characteristics And Emissions Of Acetone-Ethanol-Gasoline Blends On Spark Ignition Engine UMPSA World's Top 2% Scientist







Associate Professor Dr. Abdul Adam Bin Abdullah adam@umpsa.edu.my 019-4997020 **Development Of Smart Campus Autonomous** Vehicle (SCAV), Diesel Engines Combustion And **Emissions**

My Profile





Associate Professor Ts. Dr. Muhamad Bin Mat Noor muhamad@umpsa.edu.my 019-2232606 Investigation And Analyzation On Combustion Behavior, Performance And Exhaust Emission Characteristics Of Homogeneous Charge Compression Ignition (HCCI)

My Profile



Ts. Dr. Mohd Razali Bin Hanipah mohdrazali@umpsa.edu.my 019-2232606 Development And Characterisation Of Flexible Valve Timing System Towards Optimised Performance Of **Small Internal Combustion Engines**

My Profile





Ts. Dr. Muhammad Yusri Bin Ismail yusriismail@umpsa.edu.my 013-2752091 Development Of Surface Vector Model For Enhancement Of Engine Performance And Lower Exhaust Emissions Of A 4 -Cylinder Four Stroke Gasoline Engine







Dr Ahmad Fitri Bin Yusop fitriy@umpsa.edu.my 013-7143525 Investigation On Combination Of Port Fuel Injection (PFI) And Direct-Injection (DI) System For Compression Ignition **Engine**

My Profile





Dr. Mohd Adnin Bin Hamidi adnin@umpsa.edu.my 019-2232606 Investigation Of Compression Ignition Through New Port Injection System In Diesel Engine Integrated With HCCI Mode

My Profile





Professor Ts. Dr. Mohd Rusllim Bin Mohamed rusllim@umpsa.edu.mv 011-10582610 Optimal Energy Management Strategies For Energy Storage Systems And Future Challenges Of Fuel cell Electric Vehicle



Associate Professor Ir. Dr Addie Irawan Bin Hashim addieirawan@umpsa.edu.my 019-9785276 Prototype Development Of Ground Mobile Assistive System With Adaptive Suspension Mechanism For Uneven Terrain And Confined Area



Associate Professor Ts. Dr. Hamzah Bin Ahmad hamzah@umpsa.edu.my 019-9306877 Investigation Of Ros Based Vehicle State Estimation On State Covariance With EKF In Uncluttered **Environment**



Associate Professor Ir. Dr Akhtar Razul Bin Razali akhtar@umpsa.edu.my 012-7467822 Development Of A Permanent Magnet Motion Driver For Electricity Power Generation And Vehicles



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Associate Professor Dr. Abdul Adam Bin Abdullah adam@umpsa.edu.my 019-4997020 **Development Of Smart Campus Autonomous Vehicle** (SCAV), Diesel Engines Combustion And Emissions







Ts. Dr. Muhammad Aizzat Bin Zakaria maizzat@umpsa.edu.my 013-4533334 Drebar: An Automation Embedded System

Module

My Profile





Ts. Dr. Mohamad Heerwan Bin Peeie mheerwan@umpsa.edu.my 010-9112045 Designing An Add-Ons Kit Toward Autonomous Electric Powered Wheelchair With IoT **Monitoring System**

My Profile



Dr. Muhammad Izhar Bin Ishak mizhar@umpsa.edu.my 09-4316178 Investigation On The Effect Of A Continuous-Transition Four-Wheel Independent Steering System To The Maneuverability And Safety For Electric Vehicle

My Profile





Ts. Dr. Mohamad Heerwan Bin Peeie mheerwan@umpsa.edu.my 010-9112045 Investigation On Differential Braking Torque Controller To Improve The Stability Of Small In-Wheel Electric Vehicle





Professor Ir. Ts. Dr. Kumaran A/L Kadirgama kumaran@umpsa.edu.my 012-6325043 Mxene Nanomaterial As An Alternative Material For Automotive Cooling System UMPSA World's Top 2% Scientist





Professor Dr. Wan Azmi Bin Wan Hamzah wanazmi@umpsa.edu.my 012-9478091 Development Of Hybrid Nanolubricants For Automotive Air Conditioning System UMPSA World's Top 2% Scientist





Professor Dr. Md Mustafizur Rahman
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016-3775026
Elucidate The Wear Rate Reduction Mechanism Of
Minimum Quantity Lubrication To Enhance Machinability
Using Hybrid Nanocoolant
UMPSA World's Top 2% Scientist

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Professor Dr. Mohd Zuki Bin Salleh zuki@umpsa.edu.my 014-5200823 Mathematical Models Of Magnetohydrodynamic (MHD) Micropolar Ferrofluid Over Various Surfaces

My Profile





Associate Professor Ir. Ts. Dr. Devarajan A/L Ramasamy deva@umpsa.edu.my 016-7580946 Elucidation Of Graphene Nano-Particles Thermo-Physical Properties As Anti-Wear Additives In Engine Oil For Resistance Of Boundary Film Lubrication







Associate Professor Dr. Abdul Rahman bin Mohd Kasim rahmanmohd@umpsa.edu.my 013-7144642 Mathematical Model for Convective Boundary Layer Stagnation Flow Past a Sheet in Viscoelastic fluid and Williamson Nanofluid

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Professor Ir. Dr. Ahmad Razlan Bin Yusoff razlan@umpsa.edu.my 013-9339934 Sustainable Optimization In Machining Stainless Steel 316 Under Dry Lubrication Using Uncoated Carbide Tools



Professor Ir. Dr Haji Nik Mohd Zuki Bin Nik Mohamed nikzuki@umpsa.edu.my 014-5200823 Die Design And Engineering, Manufacturing Optimization **And Ergonomics**





Professor Dr. Mahadzir Bin Ishak @ Muhammad mahadzir@umpsa.edu.my 09-4315347 New Technique Of Drilling/Cutting Of Polymer Composite For Automotive Part By Low Power Laser

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Associate Professor Dr. Mohd Fadzil Faisae B Ab. Rashid ffaisae@umpsa.edu.my 010-5718046 Modelling And Optimization Of Assembly Sequence Planning For Automotive Subassembly

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Associate Professor Dr. Mohd Azmir Bin Mohd Azhari azmir@umpsa.edu.my 017-8122014 Machinability Study Of Structural Automotive Alloys Using **Abrasive Waterjet Machining Process**



Associate Professor Ir. Dr Mohd Hafizi Bin Zohari hafizi@umpsa.edu.my 017-9860752 Dynamic Characteristic Investigation Of Multi-Axial Fiber Bragg Grating Accelerometer For Automotive Application





Associate Professor Ts. Dr. Mohd Shahrir Bin Mohd Sani mshahrir@umpsa.edu.my 017-9143591 Investigation And Optimization On The Effects Of Biodiesel Usage Towards The Noise And Vibration In The Diesel Engine

My Profile





Associate Professor Ir. Ts. Dr. Faiz Bin Mohd Turan faizmt@umpsa.edu.my 012-3687238 Formulation Of Flexible Hybrid-Fuzzy Technique For Reliability And Sustainability Assessment Model To Support Decision Making In Early Phase Of Product Design

My Profile





Ir. Dr. Zamri Bin Mohamed zamrim@umpsa.edu.my Vehicle Packaging And Architecture, Automotive Ergonomics, Automotive Vibration And Acoustics

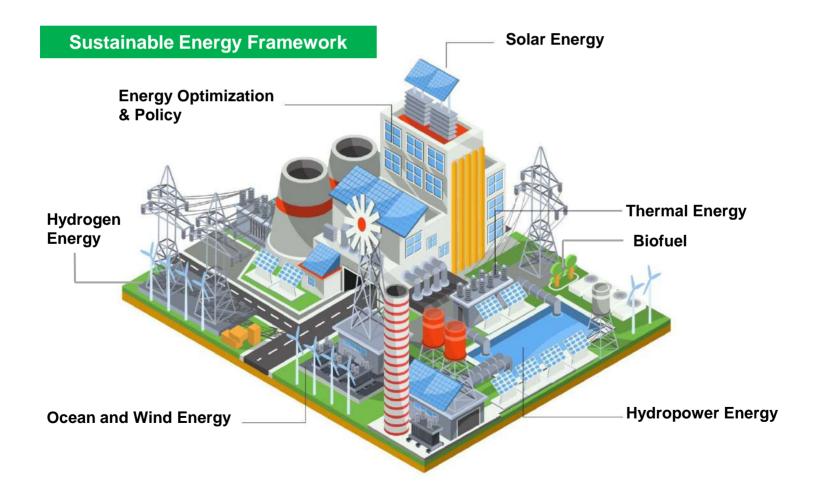
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SUSTAINABLE ENERGY

The nation heavily relies on non-renewable based substances to produce its energy, including coal, diesel and natural gas. To be in line with Sustainable Development Goal 7 (SDG 7 – Affordable and Clean Energy), the effort has been enhanced to focus on greener options. On top of that, SEDA has initiated the Malaysia Renewable Energy Roadmap 2035 (MyRER), which is a strategic framework for a low-carbon power sector and is targeted to reach 31% of the renewable energy share by 2025. Thus, UMPSA has established Sustainable Energy focus area that consists of seven components.





Professor Dr. Jose Rajan rjose@umpsa.edu.my 016-9620388 Flexible Dye-Sensitized Solar Module UMPSA World's Top 2% Scientist







Dr. Sudhakar Kumarasamy sudhakar@umpsa.edu.my 019-7308925 Performance Analysis of Floating and Submerged Photovoltaic System UMPSA World's Top 2% Scientist

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Associate Professor Dr. Abu Zaharin Bin Ahmad zaharin@umpsa.edu.my 019-4241881 Formulation Of Microgrid Energy Management Of Energy Internet Using Fuzzy Based Model Predictive Control

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Muzakir @ Lokman saifful@umpsa.edu.my 019-2763844 Theoretical And Experimental Investigations Of Lead Chalcogenide Quantum Confined Structures For Solar Cell Application Exceeding 10% Of Efficiency

Associate Professor Ts. Dr. Saifful Kamaluddin Bin

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Associate Professor Ir. Dr Muhamad Zahim Bin Sujod zahim@umpsa.edu.my 01110988048 Formulate Zero-State Control Algorithm As A New Converter Protection In Large Scale Grid-Connected Photovoltaic System



Associate Professor Ts. Dr. Amir bin Abdul Razak amirrazak@umpsa.edu.my 013-3461028 Solar Assisted Drying Systems With The Double Pass Matrix Type Collector For Fish





Associate Professor Ts. Dr. Roshahliza binti M Ramli roshahliza@umpsa.edu.my 012-2492703
Development Of Solar Operated Portable Water Pump For Agriculture Activities

My Profile





Dr. Ahmad Fadzil Bin Sharol fadzils@umpsa.edu.my 011-27012032 Solar Thermal Engineering

My Profile





Ir. Dr. Ayib Rosdi Bin Zainun ayib@umpsa.edu.my 0199894421 Development Of Perovskite Solar Cell (3rd Gen) As Power Source For Wireless Sensor Network (Wsn) In Automotive System



Dr. Norazila Binti Jaalam
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Inverter Control Optimization Using Grey Wolf
Optimizer (Gwo) To Reduce Overshoot Current In
The Grid-Connected PV System



Dr. Ahmad Syahiman bin Mohd Shah asyahiman@umpsa.edu.my 018-9087676 Energy Management Of Storage Batteries Based On Forecasted PV Output For Small-Scale Standalone System



Ts. Dr. Mohd Shawal bin Jadin
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A New Local Feature Descriptor Based On
Directional Structure Map For The Hotspot
Detection In A Large-Scale Photovoltaic System



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Associate professor Ir. Ts. Dr. Faiz Bin Mohd Turan faizmt@umpsa.edu.my 0123687238 Systematic Sustainability Assessment (Ssa) Tool For Hydroelectric Project





Associate Professor Dr. Mohd Herwan Bin Sulaiman herwan@umpsa.edu.my 012-7324001 Optimization And Control Of Small Hydropower Plant Operation







Ts. Dr. Ummu Kulthum Binti Jamaludin ummu85@umpsa.edu.my 094315381 Development And Optimization Of Screw Blade For Sustainable Micro-Hydroelectric Power

My Profile



Dr. Azizuddin Bin Abd Aziz azizuddin@umpsa.edu.my 012-2293553 Pristine Blade Characteristics Concept Emphasizing Mathematical Model Optimization Of Floating **Undershot Wheel For Picohydropower Generators**

My Profile





Ts. Dr. Nurul Nadrah Aqilah Binti Tukimat nadrah@umpsa.edu.my 012-9815977 Formulation Of Sustainability Routing Curve Assessment Model For Hydro-Electric Power Dam Operation Due To The Climate Change Impact







Ts. Dr. Wan Ismail bin Ibrahim wismail@umpsa.edu.my 019-9790523 Development Of Portable Pico – Hydrokinetic Energy Harnessing For River Application

My Profile





Idris Bin Mat Sahat idriss@umpsa.edu.my 0127288376 Optimization Of The Flow Characteristic In Various Array Arrangements Of Multiple Picohydro Power Turbines

My Profile





Associate Professor Ir. Ts. Dr. Mahendran A/L Samykan mahendran@umpsa.edu.my 0166817799 Nanoenhanced Phase Change Materials For Smart **Energy Storage And Management In Buildings** UMPSA World's Top 2% Scientist

Material Composite Derived From Waste Materials





Dr. Ahmad Fadzil bin Sharol fadzil@umpsa.edu.my 011 - 27012032 Thermal Energy Storage Materials

My Profile









Associate Professor Ts. Dr. Amir Bin Abdul Razak amirrazak@umpsa.edu.my 013-3461028 Modelling And Analysis Of Modular Wind **Turbine System**





Dr. Suliana Binti Ab Ghani suliana@umpsa.edu.my 019-7534645 The Development Of An Effect Of Integrated Photovoltaic And Wind Turbine For Distributed Connected







Dr. Azizuddin Bin Abd Aziz azizuddin@umpsa.edu.my 012-2293553 Mathematical Modelling To Predict The Drag Force Behavior Of Vertical Axis Wind Turbine Blades For Energy Harvesting Enhancement

My Profile





Dr. Amir Izzani Bin Mohamed amirizzani@umpsa.edu.my 019-9812710 Modelling Of Electrical Field Behavior On Wind Turbine Blade

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Professor Dato' Ts. Dr. Zularisam Bin Ab Wahid
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A Novel Approach For The Biohydrogen Production
From Palm Oil Mill Effluent And Subsequent Treatment,
Using Sequential Dark And Photo Fermentation
UMPSA World's Top 2% Scientist



Professor Ts. Dr. Md. Mustafizur Rahman mustafizur@umpsa.edu.my 016-3775026 Development Of Heat Transfer Techniques For Hydrogen Fuelled Internal Combustion Engine UMPSA World's Top 2% Scientist



Ts. Dr. Norazlianie Binti Sazali azlianie@umpsa.edu.my 018-9696040 Analysis On Polyimide/Nanocrystalline Cellulosed-Based Carbon Membrane For Hydrogen Purifications UMPSA World's Top 2% Scientist



Associate Professor Ts. Dr. Sumaiya Bt Zainal Abidin@ Murad sumaiya@umpsa.edu.my 019-5664177 Photocatalytic Study Of Rare-Earth Doped Oxides For Hydrogen Production Via Photoreforming Process



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Associate Professor Ts. Dr. Noor Asma Fazli Bin **Abdul Samad** asmafazli@umpsa.edu.my 013-2881807 Hydrogen Production Using Gasification



Associate Professor Ts. Dr. Herma Dina Binti Setiabudi herma@umpsa.edu.my 012-7393471 Production Of Syngas Via Bi-Reforming Of Methane From Biogas Over Palm Oil Fuel Ash Catalysts



Associate Professor Dr. Azrina Binti Abd Aziz azrinaaziz@umpsa.edu.my 010-3932711 Elucidation Of Kinetics And Mechanism Of Dye Wastewater Treatment And Hydrogen Production Over Cqds/ G-C3n4 Photocatalyst



Dr. Kamrul Fakir Bin Kamarudin kamrul@umpsa.edu.my 013-7728786 Exploration Of Potential Native Microalgae (Chlaretla Sp. and Scenedesrnus Sp.) As A Nevr Sources Of HydrogenProduction Through Biomass Fermentation And Stress Growth Pathway



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Dr. Asmida Binti Ideris
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Correlation Between Surface Properties And Catalytic
Performance Of Palm Oil Kernel Shell-Derived Carbon
Catalyst For Cox-Free H2 Production







Dr. Sureena Binti Abdullah sureena@umpsa.edu.my 013-9862161 Photocatalytic Study Of Rare-Earth Doped Oxides For Hydrogen Production Via Photoreforming Process

My Profile





Ts. Dr. Mohd Nasrullah Bin Zulkifli mnasrul@umpsa.edu.my 0139746838 Investigation Of Eletrotrophs In Microbial Electrolysis Cell (Mecs) For Hydrogen Production

My Profile





Ts. Dr. Mohd Razali Bin Hanipah mohdrazali@umpsa.edu.my 0193392839 Design And Efficient Performance Appraisal Of Hydrogen Fueled Automobile Engines Combustion Chamber And Port Injector

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Dr. Noor Intan Shafinas Binti Muhammad shafinas@umpsa.edu.my 016-3148639 Sustainability Assessment Of Biohydrogen Production From Citrus Waste

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Professor Dr. Rizalman Bin Mamat rizalman@umpsa.edu.my 013 929 0709 Performance And Emission Characteristic Of A Diesel **Engine Operating With Biofuel** UMPSA World's Top 2% Scientist



sudhakar@umpsa.edu.my Advanced Biodiesel Production From Various Bioresources And Wast Oil Blends UMPSA World's Top 2% Scientist



Professor Ts. Dr. Jolius Bin Gimbun Jolius@umpsa.edu.my 012-6512908 Solid Catalyst System And Multiple Tubular **Reactor Designing For Biodiesel Production** UMPSA World's Top 2% Scientist



Professor Ts. Dr. Gaanty Pragas A/L Maniam gaanty@umpsa.edu.my 016-4110236 Lipids From Nannochloropsis Sp. And Scenedesmus Sp. For Lipid To Be Used As Feedstock In Biodiesel Production



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Associate Professor Ts. Dr. Mior Ahmad Khushairi Bin Mohd Zahari ahmadkhushairi@umpsa.edu.my 014-8290960 Production And Recovery Of Biobutanol From Oil

Palm Frond Juice In A 21 Stirred Tank Bioreactor





Yussof
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Analysis Of Mixing Behaviour In Oscillatory Baffles Reactor
(OBR) In The Transesterification Of Refined Palm Oil To
Produce Biodiesel Using Ca (CH3O)2 As A Heterogeneous
Catalyst

Associate Professor Dr. Wan Mohd Hafizuddin Bin Wan





Associate Professor Ts. Dr. Sumaiya Bt Zainal Abidin@
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sumaiya@umpsa.edu.my
019-5664177
Investigation On The Performance Of Tubular Flow
Reactor On The Esterification Of Highly Acidified Oil Using
Heterogeneous Catalyst

My Profile





Associate Professor Ts. Dr. Azilah Bt Ajit@Abd Aziz azilahajit@umpsa.edu.my 019-9710201 Reaction Mechanisms And Kinetic Establishment On The Sono- Fermentation And Sono-Enzymatic Hydrolysis For An Alternative Biofuel

My Profile





Associate Professor Ts. Dr. Ruwaida Binti Abdul Rasid ruwaida@umpsa.edu.my 013-3669874 Torrefaction Of Oil Palm Wastes For Enhanced Solid Fuel Properties





Associate Professor Ir. Dr Mohamad Rizza Bin
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rizza@umpsa.edu.my
019-6241335
Experimental And Theoretical Studies Of A Diving
Wall Columns Used For The Separation Of High Purity
Products In Biodiesel Production





Ts. Dr. Nur Hidayah Binti Mat Yasin hidayahyassin@umpsa.edu.my 019-7391938 Immobilization Of Chlorella Vulgaris For Biomass Recovery And Biodiesel Production

My Profile



Dr. Mohd Fazli Bin Farida Asras mohdfazli@umpsa.edu.my 019-720 6799 Bioprospecting Of Novel Biomass-Degrading Genes Form The Rumen Of Cattle Using Integrated Metatranscriptomic Analyses For The Production Of Biofuel

My Profile





Dr. Suriyati Binti Saleh suriyati@umpsa.edu.my 018-2281611 Investigation On Co-Pelletization Of Torrefied Forestry Residues And Sewage Sludge As Binding Agent For Biofuel Production





Associate Professor Ir. Dr Muhamad Zahim Bin Sujod zahim@umpsa.edu.my 011-10988048 Performance Analysis Of Grid Connected Photovoltaic Power Plant Using New Protection Scheme In Dc-Link







Ts. Dr. Wan Isni Sofiah Binti Wan Din sofiah@umpsa.edu.my 019-2262602 Two Tier Design In Wireless Sensor Network To Select Cluster Head Using Fuzzy Logic For Energy Efficiency

My Profile





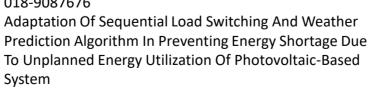
Dr. Wan Norlinda Roshana Bt Mohd Nawi roshana@umpsa.edu.my 0129985950 Integrated Planning And Management Model To Regulate Co2 Emission

My Profile



Dr. Ahmad Syahiman Bin Mohd Shah asyahiman@umpsa.edu.my

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Dr. Norhafidzah Binti Mohd Saad norhafidzah@umpsa.edu.my 014-8456063 Optimization Of Photovoltaic Distributed Generation In **Smart Grid Distribution Network Considering** Uncertainty For Power Loss Minimization Based On Fuzzy Embedded Grey-Wolf Optimizer (Fuzzy-Gwo)







Ts. Roziah Binti Zailan roziahz@umpsa.edu.my 094315958 Systematic Optimisation Modelling Of Sustainable Palm Oil Mill Based-Biomass Cogeneration Facility In The **Eco-Industrial Park**

My Profile





Ts. Muhammad Ikram Bin Mohd Rashid mikram@umpsa.edu.my 019-7978595 Design And Development Of Battery Management System For 18650 Lithium-Ion Battery For Electric Vehicle

My Profile



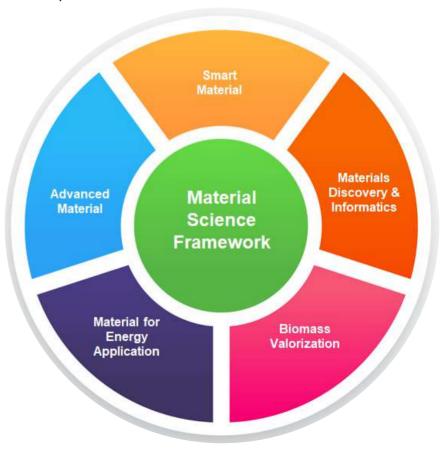


MATERIAL SCIENCES

Material science is an interdisciplinary field that focuses on advancing the design and discovery of material. The novel or innovative materials with desired properties and behaviour provide new functionalities that lead to technological betterment and sustainability in society, and are key to become a high-income nation. The Malaysian government has implemented several policies related to material science, which include:

- 10-10 Malaysian Science, Technology, Innovation and Economy (MySTIE) Framework.
- National Policy on Science, Technology and Innovation (NPSTI) 2021-2030 and
- National Advanced Materials Technology Roadmap 2021-2030.

Numerous game changer materials have been proposed for various application. The university will support the initiatives and work together in accelerating the innovation ecosystem, reaching out to the industries, and building-up strategic partnerships with relevant parties on focused strengths. includina smart materials. advanced materials, biomass valorisation, material for energy application, and material discovery and informatics.





Professor ChM Dr. Mohd Hasbi Bin Ab Rahim mohdhasbi@umpsa.edu.my 013-3441998 Bio-based Vitrimers: Synthesis And Functionalization For **Electrical And Optical Applications** UMPSA World's Top 2% Scientist



Professor Ts. Dr. Che Ku Mohammad Faizal Bin Che Ku Yahya mfaizal@umpsa.edu.my 019-2703219 Production Of Polyhydroxyaalkanoates (PHA) From Oil Palm Biomass





Professor Ts. Dr. Gaanty Pragas A/L Maniam gaanty@umpsa.edu.my 016-4110236 Functioning Palm Mill Biomass-Based Carbon As A Solid Acid Catalyst For Esterification Of Palm Fatty Acid Distillate(PFAD)

My Profile





mimi@umpsa.edu.my 019-9221475 Optimization Of The Pretreatment Of Red Meranti Wood Sawdust For The Production Of Cellulose Using Response Surface Methodology In Pilot Batch Reactor Tank

Professor Datin Ts. Dr. Mimi Sakinah Binti Abdul Munaim

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Associate Professor Dr. Wan Mohd Hafizuddin Bin Wan Yussof hafizuddin@umpsa.edu.my
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Biochemical Platform For Conversion Of Diversified
Lignocellulosic Biomass To Priceless Precursor And Biobased
Fine Chemicals







Associate Professor Ts. Dr. Ruwaida Binti Abdul Rasid ruwaida@umpsa.edu.my 013-3669874
Development Of A Biomass Torrefaction System For Solid Fuel Production

My Profile





Associate Professor Ts. Dr. Mohamad Ashry Bin Jusoh ashry@umpsa.edu.my
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Carbon Black From Pyrolised Agricultural Wastes As
Electromagnetic Shielding Material

My Profile





Associate Professor Ts. Dr. Saidatul Shima Binti Jamari sshima@umpsa.edu.my 017-8123278 Hybrid Hydrothermal Carbonisation Of Oil Palm Biomass: Process Optimisation And Evaluation Of Its Characterisation For Agro-Environmental Potential

My Profile





Dr. Suriyati Binti Saleh suriyati@umpsa.edu.my 018-2281611 Development Of Torrefied Pellet From Palm Oil Waste For **Biofuel Production**



Dr. Mohd Fazli Bin Farida Asras mohdfazli@umpsa.edu.my 019-720 6799 Elucidation Of The Biotransformation Mechanism Of The Municipal Waste To Volatile Fatty Acids.





Dr. Fatin Zafirah Binti Mansur fatinzafirah@umpsa.edu.my 018-2281611 Biomass-Based Carbon Aerogel From Oil Palm Waste Materials For Thermal Insulation Properties

My Profile





Dr. Rasidi Bin Roslan rasidi@umpsa.edu.my 013-3104007 Fast And Effective Production Of Nanocellulose From **Biomass**

My Profile





Dr. Mazni Binti Ismail mazni@umpsa.edu.my 013-9593067 Utilization Of Food Waste As Biomass Energy Source



Ts. Shahril Bin Mohamad shahrilm@umpsa.edu.my 0179485598 Production Of Ferulic Acid From Banana Stem Waste

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Professor ChM Dr. Mohd Hasbi Bin Ab Rahim mohdhasbi@umpsa.edu.my 013-3441998 Formulation Of Locally Available Materials Into Catalyst Support For Oil And Gas Industry UMPSA World's Top 2% Scientist





Professor Ts. Dr. Kamal Bin Yusoh
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Surface Modification Of Graphene Nanofillers Through
Controlled Radical Polymerization To Improve The Interaction
In Polylactic Acid (PLA) -Graphene Nanocomposites.





Professor Ts. Dr. Gaanty Pragas A/L Maniam gaanty@umpsa.edu.my 016-4110236 Evaluation Of Properties Of Industrial Wastes As Adsorbents In Removing Steryl Glucosides In Palm Based Biodiesel

My Profile





Associate Professor Ts. Dr. Saifful Kamaluddin Bin Muzakir @ Lokman saifful@umpsa.edu.my 019-2763844
A Study On Properties Of MoS2 Fabricated Using Vacuum Thermal Evaporation Technique At Steady And Rapid Rate Of Heating

My Profile





Associate Professor Ir. Dr Syed Mohd Saufi Bin Tuan Chik smsaufi@umpsa.edu.my 013-2897675 Nanocellulose-based Membrane For Water Treatment And Purification







Associate Professor Dr. Fatmawati Binti Adam fatmawati@umpsa.edu.my
Mechanism And Molecular Interaction Of Carrageenan In The Crosslinking Of Cellulose Nanocrystals Biocomposite

My Profile





Dr. Farah Hanani Binti Zulkifli farahhanani@umpsa.edu.my 0162054397 In Vitro Evaluation Of Electrospun Edible Bird Nest/Poly (Vinyl Alcohol) Scaffolds For Fibroblast Cell Proliferation In Wound Healing

My Profile





Ts. Dr. Siti Noor Hidayah Binti Mustapha snhidayah@umpsa.edu.my 018-6682884 Characterization And Optimization Of Hydrophobicity And Thermophysical Properties Of Fluorinated Palm Oil-based Polyurethane

My Profile





Ts. Dr. Muhammad Hafiz Bin Mazwir muhammadhafiz@umpsa.edu.my 016-2185851 Mechanism Of Electrospun Bi-2223 Superconducting Nanowires With Controlled Grain Size In Forming Bulk Bi-2223 Superconductors



Ts. Dr. Azri Bin Alias azribalias@umpsa.edu.my 017-9030887 A New Mechanism Of Double-negative Metamaterial-based Anti-reflective Coating Towards Vis-light And Near-infrared (NIR) Solar Energy





Dr. Rodziah Binti Nazlan rodziah@umpsa.edu.my 012-2394504 Materials Formulation And Processing Design For Magnetic **Ferrites Cores**





Dr. Nurul Akmal Binti Che Lah akmalcl@umpsa.edu.my 011-37430086 Elucidating The Effect Of Mechanical Durability, Optical Transparency And Conductivity Of Fabricated Copper Nanostructures-PTFE Thin Film







Dr. Siti Maznah Binti Kabeb smaz@umpsa.edu.my 013-7666353 Corrosion Resistance Enhancement Mechanism Of Hybrid Modified Cellulose Nanowhiskers And Graphene Oxide Epoxy Nanocomposite Coating







Dr. Wan Norfazilah Binti Wan Ismail norfazilah@umpsa.edu.my Antimicrobials Encapsulated Nanoparticles For Socks To **Prevent Bromodosis**

My Profile





Ts. Dr. Ahmad Zamani Bin Ab Halim ahmadzamani@umpsa.edu.my 012-3456934 Synthesis And Characterization Nanofiber Metal Oxide Catalyst Via Electrospinning And Its Potential For Carbon Dioxide Methanation

My Profile





Professor ChM Dr. Chong Kwok Feng ckfeng@umpsa.edu.my 017-7110262 Nanocarbons-graphene Hybrid Material As High-Performance Supercapacitor UMPSA World's Top 2% Scientist



Professor Ts. Ir. Dr. Kumaran A/L Kadirgama
Kumaran@umpsa.edu.my
012-6325043
Formulation Of A Titanium Carbide/Mxene (Ti3c2tx)
Nanomaterial Optical Property Model For Potential Heat
Transfer Liquid
UMPSA World's Top 2% Scientist



Professor Dr. Jose Rajan
rjose@umpsa.edu.my
016-9620388
A Development Of Ceramic Reinforced Porous Carbonbased High-performance Electrode Paste For
Supercapacitor Application
UMPSA World's Top 2% Scientist



Associate Professor Ir. Ts. Dr. Mahendran A/L Samykano
mahendran@umpsa.edu.my
016-6817799
Characterizing Of Mxene For Solar Application
UMPSA World's Top 2% Scientist



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ChM Dr. Izan Izwan Misnon
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013-9221487
UMPCAP: Supercapacitor From Local Activated
Carbon
UMPSA World's Top 2% Scientist





Associate Professor Ts. Dr. Muhamad Bin Mat Noor muhamad@umpsa.edu.my 0139841610 Enhancing Thermal Energy Storage Of Pvt System Using Modified Carbon-based Nano Phase Change Materials For Rural Applications

My Profile





Associate Professor Dr. Ahmad Salihin Bin Samsudin ahmadsalihin@umpsa.edu.my 0123716071 Producing Favorable Mobile Free Ions Of Carboxymethyl Cellulose-polyvinyl Alcohol As Hybrid Polymer Electrolytes

My Profile





Ts. Dr. Noor Sabrina Binti Ahmad Mutamim noorsabrina@umpsa.edu.my 012-7383371 Behavioral Of Activated Carbon As Attached Growth In Microbial Fuel Cell For Wastewater Treatment And Energy Recovery Sustainability

My Profile





Associate Professor Dr. Syarifah Nur Aqida Binti Syed Ahmad aqida@umpsa.edu.my 0175807746 Atomic Diffusion In Superhydrophobic Laser Modified Glass Surface For Light Transmission Properties





Dr. Wan Salwanis Binti Wan Md Zain salwanis@umpsa.edu.my 011-10666127 Design And Fabrication Of Functional Surfaces With Controllable Wettability, Adhesion And Reflectivity







Dr. Rasidi Bin Roslan
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013-3104007
Development Of UV-curable Lignin-based Coating
Aerosol Prototype With Cellulose Nanocrystal As Selfhealing Accelerator For Automotive Application

My Profile



Ir. Ts. Dr. Juliawati Binti Alias juliawati@umpsa.edu.my 013-4074907 Ph-responsive Nanocontainer For Corrosion Inhibition Agent Of Smart Coating For Car Body Paint

My Profile







Dr. Zulhelmi Bin Ismail zulhelmii@umpsa.edu.my 013-6166919 Investigation On The Effect Of Graphene/Photo Paper Composite In Mechanical Reinforcement And Tuned-phonon Detection (Strain Sensitive) For Polyvinyl Alcohol







Ts. Dr. Shamsul Bin Zakaria shamsulzakaria@umpsa.edu.my 012-2934375 Evaluation Of Electromechanical Properties Of Stretch Sensor From Dielectric Elastomer

My Profile





Professor Ts. Dr. Kamal Zuhairi Bin Zamli
kamalz@umpsa.edu.my
013-9326049
An Artificial Neural Network-sine Cosine Algorithm (Ann-SCA)
Based Hybrid Prediction Model For The Production Of
Cellulose Nanocrystals (CNC) From Oil Palm Empty Fruit Bunch
(OPEFB)
UMPSA World's Top 2% Scientist



Professor Dr. Jose Rajan rjose@umpsa.edu.my 016-9620388 Materials 4.0 @ Asean UMPSA World's Top 2% Scientist





Associate Professor Ts. Dr. Noor Asma Fazli Bin Abdul Samad asmafazli@umpsa.edu.my 013-2881807 Integration Of Gasification Process And High Temperature Proton Exchange Membrane Fuel Cells For Stationary Applications: A Simulation Study

My Profile





Associate Professor Dr. Mohamed Ariff Bin Ameedeen mohamedariff@umpsa.edu.my
Extending Internet Of Things (IoT) To Create A Manufacturing Condition Of Super-capacitive Energy Storage Materials

My Profile





Associate Professor Ts. Dr. Norida Binti Ridzuan norida@ump.edu.my 013-2097675 The Role Of Nanoparticle-gemini Surfactant As Wax Deposition Suppressant In Malaysian Crude Oil Using Molecular Dynamics (Md)simulation



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INDUSTRIAL BIOTECHNOLOGY

By 2030, biotechnology will transform Malaysia into a high-tech bio-innovation nation that is progressive, prosperous, inclusive and sustainable. Thus, UMPSA has established an Industrial Biotechnology focus area that consists of five components to facilitate those interested in exploring industrial biotechnologyrelated fields; Molecular Biology, Bioprocess, Microbiology, Plant and Mammalian, and Enzymology and **Proteomic**





Associate Professor Dr. Aizi Nor Mazila Binti Ramli aizinor@umpsa.edu.my 016-9210232 Isolation And Heterologous Expression Of Genes Associated With Formation Of Marker Compounds (Sesquiterpenes) Of Agarwood





Dr. Lee Chin Mei

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019-7443648

Structure-function Elucidation Of Indigenous Microbial
Consortium In Rice Straw Degradation Via Integrated Analysis
Of Metagenomic

My Profile





Dr. Hajar Fauzan Bin Ahmad
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013-8160272
Elucidating The Role Of The Gut Mycobiome And
Metabolomes As Putative Markers For The Prediction Of
Colorectal Cancer Pathogenesis

My Profile



Dr. Nurul 'Azyyati Binti Sabri azyyatis@umpsa.edu.my 012-6554163 Assessment Of Antibiotic Resistance Genes, Heavy Metals And People On Landfill: A Preliminary Insight For A Sustainable Landfill

My Profile





Dr. Shariza Binti Jamek sharizaj@umpsa.edu.my 0196993107 Analysis Of Microbial Communities And Diversity In Malaysian Fermented Foods Using Metagenomic Approach





Dr Noor Suhana Binti Adzahar
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019-4495477
Molecular Characterization Of The DNA And Protein
Interaction, Cell-based Assay And
Cytotoxicity, Phytochemical Analysis Of The Natural
Products For Anti-cancer Properties

My Profile





Mohd Hairul Bin Ab Rahim
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012-3220874
Molecular Characterization Of Fragrance-Related
Transcripts In Benzenoid/Phenylpropanoid Pathway Of
Vanda Mimi Palmer (Fragrant-Orchid)

My Profile





Associate Professor Dr. Chua @ Yeo Gek Kee chua@umpsa.edu.my 018-9135855
Tertiary Treatment Of Palm Oil Mill Effluent (POME) By The Combination Of Microalgae And Activated Sludge Using Sequential Batch Reactor







Associate Professor. Ts. Dr. Farhan binti Mohd Said farhan@umpsa.edu.my 017-2791038
Kinetics Study of *Monascus Purperus* in Solid State Fermentation for Red Pigment Production

My Profile





Ts. Dr. Nasratun Binti Masngut
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012-3041935
Growth Kinetic And Microbial Dynamics Between Indigenous
Microbes For Acetic Acid Production

My Profile



Dr. Nazira Mahmud
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013-4270056
Elucidation Of The Effect Of Biosurfactant In Sequential
Fungal And Hydrothermal Pre-treatment Of Lignocellulosic
Waste For Sugar Recovery

My Profile





Dr. Mohd Fazli Bin Farida Asras mohdfazli@umpsa.edu.my 019-720 6799 Elucidation of the Biotransformation Mechanism of the Municipal Waste to Volatile Fatty Acids







Ir. Dr. Chew Few Ne cfne@umpsa.edu.my 0123028588 Kinetics And Isotherm Studies Of In-Situ Immobilized Laccase On Bacteria Cellulose Valorize From Pineapple Waste For Dye Degradation

My Profile





Associate Professor Dr Tan Suat Hian tshian@umpsa.edu.my 018-2779888 Pro-Golive: Mixed Starter Inoculum Powder



Associate Professor Dr Nina Suhaity Binti Azmi nina@umpsa.edu.my 012-7980497 Immobilization Of Potential Probiotics Of Lactic Acid Bacteria (LAB) Strains Isolated From Selected Fermented Products





Dr. Nurul 'Azyyati Binti Sabri azyyatis@umpsa.edu.my 012-6554163 Evaluation Of Antibiotics And Antibiotic Resistance Genes In Wastewater Treatment Plant

My Profile





Ts. Dr. Nasratun Binti Masngut
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012-3041935
Profile study of microbial acetic acid production from
pineapple peel waste

My Profile





Dr. Lee Chin Mei lcmei@umpsa.edu.my 019-7443648 Isolation Of Cellulolytic Microorganisms For Rice Straw Degradation

My Profile





Associate Professor Dr Tan Suat Hian tshian@umpsa.edu.my 018-2779888 Mass Propagation On Pisang Lang And Pisang Tanduk



Dr Nor Adila Binti Mhd Omar nadila@umpsa.edu.my 012 5754767 Bioactive compounds of plants, Nutrition, Carbohydrate quality and health: sugars and fibers, sugars analysis





Dr Normaiza Binti Zamri maiza@umpsa.edu.my 018-9593641 Evaluation Of Human Wharton'S Jelly Stem Cells (HWJSCS) In The Management Of Alzheimer'S Disease

My Profile





Ts. Muhammad Adam Lee Bin Abdullah adamlee@umpsa.edu.my 019-4995477 Investigation Of The Roles Of Cutaneous Papillomaviruses Oncoproteins In Cellular Transformation

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Dr Ahmad Mahfuz Bin Gazali mahfuz@umpsa.edu.my 013-6399697 Culture of human immunological cells Human Type 1 diabetes





Associate Professor Dr Jaya Vejayan A/L Palliah jayavejayan@umpsa.edu.my 016-6063804 The Isolation Of Bioactive Protein Of Tongkat Ali For The Elevation Of Testosterone Hormone In Male



Associate Professor Dr. Aizi Nor Mazila Binti Ramli aizinor@umpsa.edu.my 016-9210232 Development Of An Immobilized Biocatalyst With Keratinase And Protease Activities As A Multipurpose Cross-linked Enzymes Aggregate (Multi-clea) On Edible Bird **Nest Cleaning Process**



Dr. Shariza Binti Jamek sharizaj@umpsa.edu.my 019-6993107 Kinetic Studies On Transfructosylation By Fos-Producing Enzymes Isolated From Fruit Plantation

Dr. Hong Pui Khoon hongp@umpsa.edu.my 017-964 2839 Enzymatic Hydrolysis Of Protein For Bioactive Peptides. Transglutaminase Mediated Protein Conjugation



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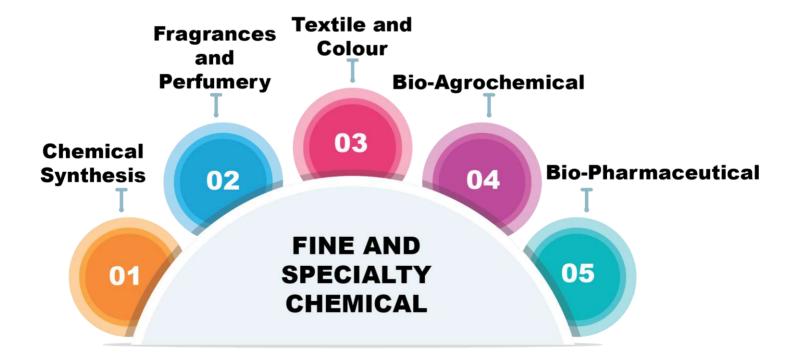
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FINE AND SPECIAL TY CHEMICAL

Fine and specialty chemicals are chemical substances that are produced by complex synthesis processes with a guaranteed degree of purity and possess properties that suit certain applications, depending on their respective active effect. The potential applications of fine and specialty chemicals include several examples of sectors that depend on fine and specialty chemicals, including automotive. pharmaceuticals. agrochemicals. electronics. cosmetics and construction. Five components are listed under fine and specialty chemicals focus areas at UMPSA. including Chemical Synthesis, Fragrances and Perfumery, Textile and Colour, Bio-Agrochemical and Bio-Pharmaceutical





Professor ChM Dr. Mohd Hasbi Bin Ab Rahim mohdhasbi@umpsa.edu.my 013-3441998 Oil Palm Sap As A New Feedstock For The Catalytic Synthesis Of Organic Carbonate UMPSA World's Top 2% Scientist





Professor Ts. Dr. Che Ku Mohammad Faizal Bin Che **Ku Yahva** mfaizal@umpsa.edu.my 019-2703219 Production Of Polyhydroxyaalkanoates (PHA) From Oil Palm Biomass





Yussof hafizuddin@umpsa.edu.my 019-9851850 Optimization Of Acid Pretreatment Of Lignocellulosic Biomass For Xylooligosaccharides Production

Associate Professor Dr. Wan Mohd Hafizuddin Bin Wan

My Profile



Razali ainirazali@umpsa.edu.my 019-7828204 Synthesis And Characterization Of Metal Supported Sba-15 Nanacatalyst For Conversion Of Carbon Dioxide To **Fine Chemicals**

Associate Professor Dr. Nurul Aini Binti Mohamed

My Profile





FINE AND SPECIALTY CHEMICAL | CHEMICAL SYNTHESIS

Associate Professor Ts. Dr. Mior Ahmad Khushairi Bin Mohd Zahari ahmadkhushairi@umpsa.edu.my 014-8290960 Optimization, Scale-Up And Characterization Of Sesquiterpene From Oil Palm Frond Juice





Associate Professor Ts. Dr. Norida Binti Ridzuan norida@umpsa.edu.my 013-2097675 Sythesize, Characterization And Performance Evaluation Of Novel Pour Point Depresant (PPD) Polymer For Wax Deposition Inhibition Of Malaysia Crude Oil





Ts. Dr. Siti Noor Hidayah Binti Mustapha snhidayah@umpsa.edu.my 018-6682884 Synthesis And Characterization Of Biodegradable Plastic From Corn Starch And Nata De Coco

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Dr. Nurul Aini Binti Mohd Azman ainiazman@umpsa.edu.my 013-3330766 Characterization Of Semi-refined Carrageenan (SRC) Based Film Incorporated With A-Tocopherol

My Profile





Dr. Mohd Fadhlizil Fasihi Bin Mohd Aluwi fasihi@umpsa.edu.my 012-9661942 Design, Synthesis And In Silico Evaluation Of Novel Antideny From The Lead Of Usnic Acid







Ir. Dr. Mohd Sabri Bin Mahmud mohdsabri@umpsa.edu.my 013-9510384 Synthesis Of Phytosterol From Cocoa Shell Waste (CSW) By Using Microwave Assisted Extraction Hydrodistillation (Mae-Hd) For Antidiabetic

My Profile





Dr. Noor Ida Amalina Binti Ahamad Nordin idamalina@umpsa.edu.my 016-2022940 Production Of Ferulic Acid From Fiber Presses Oil Palm Frond (FPOPF) Biotransformation Using Ferulyl Esterases From Co-Culture Inoculum.

My Profile





Professor Dato' Ts. Dr. Rosli Bin Mohd Yunus rmy@umpsa.edu.my 019-2401134 Essential Oil Quality And Standards Based On Novel Marker Compounds Isolated And Identified For Agualaria Malaccensis





Professor Dr. Abdurahman Hamid Nour abrahman@umpsa.edu.my 012-9134403 Comparison Of Microwave Assisted Hydrodistillation With The Conventional Hydrodistillation Method In The Extraction Of **Essential Oil**

My Profile





Associate Professor Ir. Dr Norazwina Binti Zainol azwina@umpsa.edu.my 019-2719331 Essential Oil Production From Patchouli (Pogostemon) Cablin And Waste Recovery

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My Profile Associate Professor Dr. Saiful Nizam Bin Tajuddin



saifulnizam@umpsa.edu.my 019-9894742 Incense Smoke Quality And Standard Based On Marker Compounds Isolated And Indentified For Agarwood (Gaharu) Chipowoods





Associate Professor Dr. Muhammad Sharfi Bin Najib sharfi@umpsa.edu.mv 019-3894833 A Method Of Determining Grade Of Agarwood At Ambient **Temperature**







Associate Professor Dr. Aizi Nor Mazila Binti Ramli aizinor@umpsa.edu.my 016-9210232 Molecular Cloning And Overexpression Of Stem Bromelain From Ananas Comosus In Kluyveromyces Lactis

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Associate Professor Dr. Hazrulrizawati Binti Abd Hamid hazrulrizawati@umpsa.edu.my 019-7778603 Production Of Aroma Compounds By Degradation Of Carotenoid From Crude Oil

My Profile



Associate Professor Dr. Saiful Anwar Bin Che Ghani anwarcg@umpsa.edu.my 019-7178104 Development Of An Open Architaecture Temperature Module Of Hybro-Distillation Essential Oil Extractor

My Profile





Associate Professor Ts. Dr. Raihana Zahirah Binti **Edros** rzahirah@umpsa.edu.my 019-2762419 Mechanism Of Antibacterial Action, Chemical Profiling And Development Of Malaysian Honey As Topical Antibacterial Hydrogel



Dr. Mohd Fadhlizil Fasihi Bin Mohd Aluwi fasihi@umpsa.edu.my Evaluation Of In Silico And Chemopreventive Effects On Breast Cancer Cell Lines Of Novel Flavonoid Hybrid Of Usnic Acid



Dr. Wan Nurul Huda Binti Wan Zainal wannurulhuda@umpsa.edu.my 012-6377745 Development And Encapsulation Of Propolis Powder From **Raw Propolis Of Stingless Bees Species**



Dr. Siti Kholijah Binti Abdul Mudalip Kholijah@umpsa.edu.my 012-5662739 Crystallization Of Pharmaceutical Compound



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Associate Professor Dr. Norhayati Binti Rosli norhayati@umpsa.edu.my 019-9544531 Stochastic Modelling Of The COVID - 19 Outbreak Under Non-Pharmaceutical Intervention (NPI) Enforcement







Associate Professor Dr. Fatmawati Binti Adam fatma@umpsa.edu.my 012-6377745 Polymorphism Of Pharmaceutical Compound: 2,6-Dihydroxybenzoic Acid Case Study

My Profile





Associate Professor Dr. Fazeeda Binti Mohamad fazeedamohamad@umpsa.edu.my 012-9661942 Development Of A Vaccination Capsule - An Optimal Vaccination Centre Virtual Model To Increase Agility, Flexibility And Performance Efficiency In Malaysia

My Profile



Dr. Daing Mohamad Nafiz Bin Daing Idris daingnafiz@umpsa.edu.my 019-2762419 Study On Gelam Essential Oil: Extraction Technique Optimization, Pharmaceutical And Therapeutic Potential

My Profile





Associate Professor Dr. Nina Suhaity Binti Azmi 012-7980497 nina@umpsa.edu.my Kleva Showcase Farm



Associate Professor Ts. Dr. Saidatul Shima Binti Jamari sshima@umpsa.edu.my 017-8123278 Investigation On The Water Absorbency And Swelling Behaviour Of Carbonaceous Fiber & Nanocellulose Hydrogels





Dr. Noormazlinah Binti Ahmad mazlinah@umpsa.edu.my 013-9832041 Production Of Fructooligosaccharides From The Enzymatic Conversion Of Sucrose Catalyzed By Phytoenzymes Extracted From Ananas Comosus Waste Hydroponics And Aquaponics With Aiot In Qatar (Haiat)

My Profile





Dr. Siti Hajar Noor Binti Shaarani hajarnoor@umpsa.edu.my 017-5174452 Isolation And Characterization Of Biodegradable Genes From Municipal Solid Waste

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Dr. Noraziah Binti Abu Yazid noraziahay@umpsa.edu.my 017-2814685 Kinetic Mechanism Of Microbial Succession During Production Of Multi-Enzymes Via Solid State Fermentation Of Agro-Industrial Waste





Dr. Nor Hanuni binti Ramli @ Said drhanuni@umpsa.edu.my 012-3024184 Development Of High Quality And Economical Fertilier By Utilizing Palm Oil Mill Effluent (POME) Sludge And Red Gypsum (RG)

My Profile





Ts. Dr. Ros Azlinawati Binti Ramli azlinawati@umpsa.edu.my 014-9664254 Synthesis And Field Evaluation Of In-Situ Slow-Release Fertilizer Hydrogel Based On Super Absorbance Polymer Composite For **Home Gardening Applications**

My Profile





Professor Datin Ts. Dr. Mimi Sakinah Binti Abdul Munaim mimi@umpsa.edu.my 019-9221475 Optimization Of The Pretreatment Of Red Meranti Wood Sawdust For The Production Of Cellulose Using Response Surface Methodology In Pilot Batch Reactor Tank

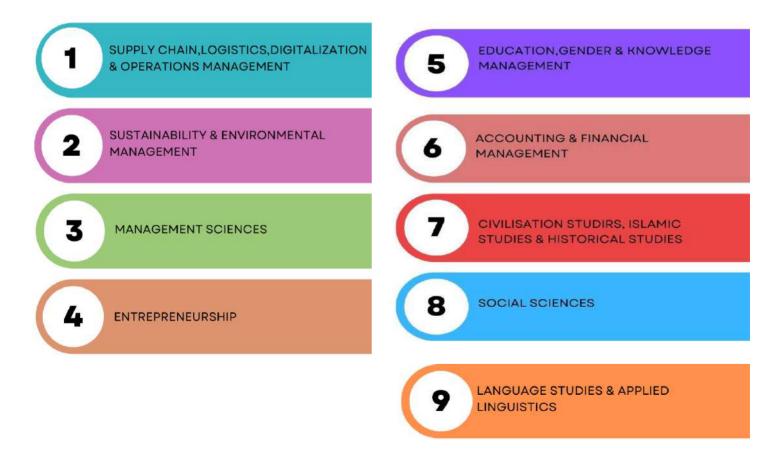
My Profile





MANAGEMENT AND SOCIAL SCIENCE

The Management and Social Science are key elements in supporting engineering and technological principles and development. In fact, The Management, Humanities and Social Science are also critical in ensuring the sustainability of digital innovation, and technical and engineering solutions. The Management, Humanities and Social Science focus area in UMPSA includes nine components such as Supply Chain, Logistics, Digitalisation & Operations Management, Sustainability & Environmental Management, Management Sciences, Entrepreneurship, Education, Gender & Knowledge Management, Accounting & Financial Management, Civilisation Studies, Islamic Studies, & Historical Studies, Social Studies, and Language Studies & Applied Linguistics.





Professor Dato' Ts. Dr. Yuserrie Bin Zainuddin yuserrie@umpsa.edu.my 019-4164455 Lean Management And Human Resource Management Practices In Relation Towards Operational Performance



Associate Professor Dr. Yudi Fernando yudi@umpsa.edu.my 019-5718008 2RELOGCARCHAIN Using Blockchain Technology For Carbon Footprint Tracking And Monitoring





Associate Professor Dr. Cheng Jack Kie jackkie@umpsa.edu.my 012-2666053 A New Forecasting Algorithms For Performance Measurement In Manufacturing Industries

My Profile





Associate Professor Ts. Dr. Awanis Binti Romli awanis@umpsa.edu.my 010-4388036 Blockchain Network Model To Improve Supply Chain Visibility Based On Smart Contracts

My Profile





Associate Professor Dr. Fazeeda Bt. Mohamad fazeedamohamad@umpsa.edu.my 013-7031224 Logistics-related Knowledge Process Capabilities In Malaysian Courier Service Industries



Ts. Dr. Nur Farhayu Binti Ariffin farhayu@umpsa.edu.my 013-7003769 Investigation Of Abandoned Building In Malaysia - Cause And Effect To The Social, Economy And Safety



Ts. Dr. Lee Khai Loon leekhailoon@umpsa.edu.my 012-4731081 The Role Of Educational Supply Chain Management (EduSCM) In Developing Professional



Dr. Muhammad Ashraf Bin Fauri@Fauzi ashrafauzi@umpsa.edu.my 013-3005169 Customer Engagement Towards Mobile Banking: A Study On Government Service Sector Employees In Malaysia



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Dr. Adam Shariff Bin Adli Aminuddin adamshariff@umpsa.edu.my 012-4797320 Pairwise Aggregated Rank Based Approach for Malaysian Eco-Friendly Car Purchasing Preference







Kartina Binti Johan @ Rahmat kartina@umpsa.edu.my 012-6813531 Formulation Of Flexible Hybrid-fuzzy Technique For Reliability And Sustainability Assessment Model To Support Decision Making In Early Phase Of Product Design

My Profile





Associate Professor Dr. Yudi Fernando yudi@umpsa.edu.my 019-5718008 Interventions To Enhance Fishermen Value Chain Towards Sustainability In Kuala Pahang







Ts. Dr. Muhammad Fakhrul Bin Yusuf mfakhrul@umpsa.edu.my 016-2380780 Model For The Implementation Of Environmental Technological Innovation In The Malaysian Manufacturing Industry

My Profile





Associate Professor Dr. Lee Chia Kuang chia@umpsa.edu.my 013-7023668 Formulation Of Macro-micro Safety Predictors In Construction Sites Based On DEMATEL Algorithm And Structural Equation



Dr. Fatimah Binti Mahmud fatimahm@umpsa.edu.my 019-2828011 Socio-economic Analysis And Business Model Of Nanocellulose From Oil Palm Fiber And Its Composites For Biodegradable Food Packaging Application





Dr. Hamirahanim Binti Abdul Rahman hamirahanim@umpsa.edu.my 019-2752779 **Development Of Decision-Making Framework Decommissioning Malaysian Offshore Platforms**

My Profile





Dr. Mohd Hanafiah Bin Ahmad hanafiah@umpsa.edu.my 019-9587400 Research On Ump Advanced Human Resources Administration & Management Effectiveness

My Profile





Associate Professor Dr. Yudi Fernando yudi@umpsa.edu.my 019-5718008 Identification Of Entrepreneurship Learning In Technology Based Business Incubators

My Profile





Professor Ts. Dr. Mohd Rashid bin Ab Hamid rashid@umpsa.edu.my 019-9831340 Innovation Excellence Framework for Malaysian Higher **Education Institutions.**







Associate Professor Dr. Irene Ting Wei Kiong irene@umpsa.edu.my 017-9868819 Knowledge Creation, Efficiency Performance And University Rankings: An Analysis Of Vietnam Universities

My Profile



Associate Professor Dr. Zuraina Binti Ali zuraina@umpsa.edu.my 012-9676507 A New Integrated Framework For Practitioners In English-based Huffaz Program For Preschools

My Profile



Associate Professor Dr. Puteri Fadzline Binti Muhamad **Tamyez**



012-6138147 Formulation Of Slow Learners Cognitive Development Model Through Playground Equipment Design

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Associate Professor Dr. Noor Raha Mohd Radzuan nraha@umpsa.edu.mv 019-5766 145 Professional Development Programme for Zon Timur and Zon Barat Preschool Educators of Persatuan Pengasuh Negeri Pahang: Communication English and Effective Storytelling Techniques





Associate Professor Dr. Nik Hafizoah Kassim hafizoah@umpsa.edu.my 019-3367005 Formulation of a New Creative Learning Framework for a Technology-Infused Language Learning Environment in the 4IR Context

My Profile



Dr. Azwin Arif Bin Abdul Rahim ariftesl@umpsa.edu.my 012-3060590 Meaningful English as Second Language (ESL) Seamless Learning Model for B40 Undergraduates in the East Coast of Malaysia

My Profile



Dr. Rohana Binti Hamzah rohanahamzah@umpsa.edu.my 019-7515516 Formulation Of The Sustainable Educational Development Model (SEDM) To Evaluate Workforce Contribution Based On Migrant Labours In Malaysia

My Profile





Associate Professor Dr. Irene Ting Wei Kiong irene@umpsa.edu.my 017-9868819 Does Government Monitor Managerial Overconfidence To The Benefits Of Promoting R&d Investments Among Malaysian Listed Companies?





Associate Professor Dr. Mohd Ridzuan Bin Darun mridzuand@umpsa.edu.my 016-6693267 Role Of Life Cycle Cost Analysis To Examine Economic Assessment Of Artificial Intelligence Based Malaysian Petrochemical Industrial Wastewater Treatment

My Profile





Dr. Norwazli Binti Abdul Wahab norwazli@umpsa.edu.my 019-2482419 Stock Market Modeling And Forecasting: Stock Market Return And Volatility Behavior During Covid-19 Outbreak On Asean Stock Market

My Profile





Associate Professor Dr. Mahyuddin Bin Ismail mahyuddin@umpsa.edu.my 019-9800573

The Application Of Islamic Reflexology Treatment To Cure Erectile Dysfunction (Ed): A Study On Its Effectiveness To Patients In Al-manarah Islamic Treatment Centre At Kuang, Selangor





Associate Professor Dr. Mansor Bin Sulaiman mansor@umpsa.edu.my 019-3380432 Modeling A Fundamental Of Islamic Finance System Based On Magasid Al-Shari`Ah

My Profile





Dr. Ahmad Irfan Bin Ikmal Hisham irfan@umpsa.edu.my 012-9787895 Formulasi Asas Astrometri Dalam Penentuan Zon Waktu Solat Di Kawasan Tanah Tinggi Dan Sempadan Di Pahang

My Profile



Dr. Mohamad Hilmi Bin Mat Said hilmi@umpsa.edu.my 013-9287274 Kajian Keabsahan Batu Nisan Permatang Pasir Bukti Kedatangan Terawal Islam

Mv Profile





Professor Dr. Muhammad Nubli Bin Abdul Wahab nubli@umpsa.edu.my 012-9683117 Human Performance | Youth Development | Svariah | Biofeedback/Brainfeedback | Soft Skills







Associate Professor Dr. Hasan Bin Ahmad hasanahmad@umpsa.edu.my 019-9550139 Islamic Studies | Andalusia | Arabic Language | Halal Studies | Medieval Arabic Literature | Social Policies | Religious curricular | Zakat, Wagaf and Had al-Kifayah | Malay culture and multicultural studies | Civilizational studies

My Profile





Associate Professor Dr. Jamal Rizal Bin Razali jamalrizal@umpsa.edu.my 019-9322292 Adat Budaya Melayu | Sosiolinguistik | Linguistik Kognitif | Dialektologi | Semantik | Leadership | Linguistik Melayu | Endangered Language | Local Wisdom | Sejarah Kenegaraan & Patriotisme | Pahang Heritage | Human Development

My Profile





Dr. Mohamad Hilmi bin Mat Said hilmi@umpsa.edu.my 013-9287274 Islamic Studies (Pengajian Islam) | Pahang Heritage (Warisan Pahang) | Halal Management (Pengurusan Halal) | Isu-isu Aqidah Dan Syariah | Islamic Studies (Humanities)/ Human Development | Tamadun (Civilization)

My Profile



Mv Profile



Dr. Munira Binti Abdul Razak munira@umpsa.edu.my 012-3880277 Human Sciences | Political Sciences | Administrative Science | Human Development | Adult Education



Dr. Mohd Rahimi Bin Ramli rahimiramli@umpsa.edu.my 017-9061934 Sosiologi Politik | Pengajian Etnik | Pembangunan Komuniti







Dr. Ahmad Irfan Bin Ikmal hisham irfan@umpsa.edu.my 012-9787895 Islamic Studies | Hadith | Falaq | Syariah Islamiyah | Islamic Jerusalem Studies

My Profile





Dr. Muhammad Khalis Bin Ibrahim Khalis@umpsa.edu.my 014-7248851 Turkish Studies; Modern Muslim Political Thoughts; Islamic Movement | Islamism | Political Islam; Modern Islamic History an Civilization

My Profile





Dr. Abdul Kamil Bin Jamaludin adbulkamil@umpsa.edu.my 012-2963721 Islamic Studies | Arabic Language | Modern Islamic Thought | Classical Islamic Thought





Dr. Ahmad Muhaimin Bin Mohamad amuhaimin@umpsa.edu.my 019-9679043 Pendidikan | Soft skills | Human development | Instructional design and technology

My Profile





Ahmad Bin Ibrahim ahmadbi@umpsa.edu.my 019-3732166 Political Science | Malaysian Leadership | Public Policy

My Profile



Mohd Azam Bin Muhammad Akhir azam@umpsa.edu.my 019-9703770 Politic | Ethic | Malaysian Study | Ethnic Study

My Profile





Wan Nazrul Helmy Bin Wan Mohd Azin nazrulhelmy@umpsa.edu.my 013-3526352 Ethics | Governance | Leadership | Monarchy | Policy and Government | Legal History





Professor Dr. Muhammad Nubli Bin Abdul Wahab nubli@umpsa.edu.my 012-9683117 Pembangunan Dan Pengujian Program Latihan Pemulihan Dadah Berbantukan Latihan Spiritual Islam Dan Biofeedback Untuk Pengukuhan Kepulihan Orang Kena Pengawasan (OKP)





Associate Professor Dr. Hasan Bin Ahmad hasanahmad@umpsa.edu.my 019-9550139 Pembangunan 'Mental Model' Bagi Pengukuran Wasatiyah Dan Extremism Dalam Kalangan Umat Islam Di Malaysia

My Profile







Associate Professor Dr. Nik Aloesnita Binti Nik Mohd Alwi aloesnita@umpsa.edu.my 011-65658717 An Analysis of Foreign Language (FL) Learner Writing: The Role of Feedback and the Classroom Environment



Associate Professor Dr. Jamal Rizal Bin Razali jamalrizal@umpsa.edu.my 019-9322292 Kajian Tahap Keterancaman Bahasa Che Wong (Study Of Threatened Level Of Che Wong Language)





Associate Professor Dr. Hasan Bin Ahmad hasanahmad@umpsa.edu.my 019-9550139 Arabic Language and Medieval Arabic Literature

My Profile



Dr. Nor Yazi Binti Khamis nyazi@umpsa.edu.my 012-2039112 A New Competency Based Framework For English For Specific Engineering Purposes (ESEP) Practitioners

My Profile





Dr. Fatimah Binti Ali tym@umpsa.edu.my 011-65658717 A CEFR-aligned English Language Proficiency Writing Test Framework for Higher Education: A Way Forward **Approach**



Dr. Wan Jumani binti Fauzi jumani@umpsa.edu.my 012-644 3701 Development Of A Process Model For CEFR-Informed English Syllabus For Age 4 For Malaysian Preschools





Dr. Asiah Binti Kassim asiah@umpsa.edu.my 013-386 7137 Developing a Customised Essay Generator App to Facilitate ESL Learners Writing Tasks

My Profile



Dr. Abdul Kamil Bin Jamaludin abdulkamil@umpsa.edu.my 012-2963721 Arabic Language

My Profile





Khairul Bahri Bin Abdul Samad khairulbahri@umpsa.edu.my 010-9141850 Applying Multiple Intelligence Theory In Foreign Language Teaching (German As Foreign Language In UMP)



Rosnani Binti Ismail rosnani@umpsa.edu.my 019-9867879 Using "Hot Potatoes" Application To Develop An Online **Vocabulary Test**





Azimah Binti Ahmad Zaki Azimahaz@umpsa.edu.my 013-2227083 Assessment Modelling For Creativity Enhancement And Cognitive Load Management In Technical Writing

My Profile





Fathiah Izzati Binti Mohamad Fadzillah fathiah@umpsa.edu.my 019-9673782 An Analysis Of Foreign Language (FI) Learner Writing: The Role Of Feedback And The Classroom Environment

My Profile





Dr. Azwin Arif Bin Abdul Rahim ariftesl@umpsa.edu.my 012-3060590 English For Specific Academic Purpose Mobile Learning (MOESAP) Prototype For Engineering Students' Communication Skill: Development & Evaluation





My Profile



Ezihaslinda Binti Ngah ezi@umpsa.edu.my 013-9339776 ADevelopment Ump English Language Proficiency Test (UMP-ELPT)

My Profile





Siti Norzaimalina Binti Abd Majid norzaimalina@umpsa.edu.my 012-7281587 Virtual Reality Teaching Approach In Reading Classroom



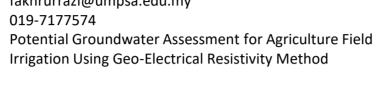
AGRICULTURE AND FOOD SECURITY

The Agriculture and Food Security play important roles in securing the nation during challenging times like pandemic, natural disasters, regional conflicts, economic downturn etc. The Agriculture and Food Security focus area consist of 16 key components including the number of experts from UMPSA for each key component that can be a reference to those interested in increasing the crop yield and planning strategic food security measures in Malaysia.





Associate Professor Dr. Mohd Fakhrurrazi Bin Ishak fakhrurrazi@umpsa.edu.my 019-7177574





Associate Professor Ir. Dr. Ngien Su Kong nsukong@umpsa.edu.my 019-8243072 Aquaponic system



Associate Professor Ts. Dr. Roshahliza Binti M Ramli roshahliza@umpsa.edu.my 012-2492703 IoT-Powered Solar Irrigation System for Oil-Palm Prenursery



Ts. Nazriyah Haji Che Zan @ Che Zain nazriyah@umpsa.edu.my 013-4287721 Optimised Design Agriculture Drone for Small Scale Farmers



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Dr. Nor Hanuni Binti Ramli @ Said drhanuni@umpsa.edu.my 012-3024184 UMP Model Farm: Fertigation Economic Driven



Dr. Erny Afiza Binti Alias erny@umpsa.edu.my Microbubbles Generator for Agriculture



My Profile





Associate Professor Dr. Tan Suat Hian tshian@umpsa.edu.my 018-2779888 Mass Propagation on Pisang Lang and Pisang Tanduk



Dr. Siti Hajar Noor Binti Shaarani hajarnoor@umpsa.edu.my 017-5174452 Characterisation of Aquilaria malaccensis Callus Cells using SEM and Somatic Embryogenesis Associated Genes Identification



My Profile





Associate Professor Dr. Suriati Binti Ghazali suriati@umpsa.edu.my 019-5700317 Studies of Single-Coated Controlled-Release Fertilizer and Water-Retention (Crwr) with Green Supersorbent Polymer Composites



Associate Professor Dr. Nina Suhaity Binti Azmi nina@umpsa.edu.my 012-7980497 Kleva Bio Fertilizer Plus +



Ts. Dr. Ros Azlinawati Binti Ramli azlinawati@umpsa.edu.my 014-9664254 Slow-Release FertiliSer Hydrogel **UMPSA World's Top 2% Scientist**



Dr. Noormazlinah Binti Ahmad mazlinah@umpsa.edu.my 013-9832041 Hydroponics And Aquaponics with Aiot in Qatar (Haiat)



My Profile



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Dr. Rohaida Binti Che Man rohaida@umpsa.edu.my 012-9472376 Establishment of Optimum BiofertiliSer'S Parametric Conditions for the Plantation of Fruit, Essential Oil and Herb Plants





Associate Professor Dr. Aizi Nor Mazila Binti Ramli aizinor@umpsa.edu.my 016-9210232 Isolation and Heterologous Expression of Genes Associated with Formation of Marker Compounds (Sesquiterpenes) of Agarwood



Dr. Lee Chin Mei lcmei@umpsa.edu.my 019-7443648 Metagenomics Analysis of Microbial Community in a Palm Oil Mill Biogas Plant



Dr. Siti Hajar Noor Binti Shaarani hajarnoor@umpsa.edu.my 017-5174452 Transcriptome Profiling of Stevia Rebaudiana MS007 Revealed Genes Involved in Flower Development



Dr. Hajar Fauzan Bin Ahmad fauzanahmad@umpsa.edu.my 013-8160272 Elucidating the Role of Gut Microbiomes and Metabolomes as Putative Biomarkers Sea Cucumbers Species from East Coast, Malaysia.



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Professor Dato' Ts. Dr. Zularisam Bin Ab Wahid zularisam@umpsa.edu.my 012-7575476 Fundamental Application of Two-Stage Fermentation for Sustainable Hythane Production and Treatment Efficiency of Palm Oil Mill Effluent UMPSA World's Top 2% Scientist



Dr. Nurashikin Binti Yaacof nurashikin@umpsa.edu.my 016-7026904 Investigate the Effect of Polyvinyl Alcohol (Pva) in Peat Soil as Natural Adsorbent to Reduce Malodour Problem at Palm Oil Mill Effluent (Pome)



My Profile





Dr. Nurzety Aqtar Binti Ahmad Azuan aqtar@umpsa.edu.my 012-2840027 A Noble Knowledge Management Framework For Agriculture Industries In Malaysia



Dr. Fatimah Binti Mahmud fatimahm@umpsa.edu.my 019-2828011 Empirical Analysis On The Critical Success Factor For Benchmarking Implementation In Palm Oil Industry



My Profile



Byproducts



Associate Professor Dr. Aizi Nor Mazila Binti Ramli aizinor@umpsa.edu.my 016-9210232 Ananaspro: Green Detergent From Pineapple



My Profile

Associate Professor Dr. Wan Mohd Hafizuddin Bin Wan Yussof
hafizuddin@umpsa.edu.my
019-9851850
Optimization Of Acid Pretreatment Of Lignocellulosic
Biomass For Xylooligosaccharides Production



My Profile



Associate Professor Dr. Saiful Nizam Bin Tajuddin saifulnizam@umpsa.edu.my 019-9894742 Development Of Cocoa Leaves As Potential Source Of Health Beverage (Green Tea)

My Profile



Mohd Zahari
ahmadkhushairi@umpsa.edu.my
014-8290960
Fundamental Study On The Reaction Mechanisms And
Kinetics Of Biobutanol Production From Oil Palm Frond
Juice In A Stirred Tank Bioreactor

Associate Professor Ts. Dr. Mior Ahmad Khushairi Bin

My Profile





Associate Professor Ir. Dr Norazwina Binti Zainol azwina@umpsa.edu.my 019-2719331 Understanding The Reaction Mechanism Of Feruloyl-Polysaccharide Hydrolysis Of Banana Stem Waste Using Mixed Culture From Soil



Ts. Dr. Nasratun Binti Masngut nasratun@umpsa.edu.my 012-3041935 Ferulic Acid Production From Banana Stem Waste **Using Mechanical Extraction**



Dr. Shalyda Binti Md Shaarani@Md Nawi shalyda@umpsa.edu.my 019-4817883 Formulation Of Enzyme Juice Derived From Pineapple Waste To Be Used As Poultry Feed



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Professor Ts. Dr. Jolius Bin Gimbun jolius@umpsa.edu.my 012-6512908 Effect Of Auxiliary Energy On The Yield Of Polyphenols **Extraction From Andrographis Paniculata** UMPSA World's Top 2% Scientist



Professor Dr. Abdurahman Hamid Nour abrahman@umpsa.edu.my 012-9134403 Charaterization Of Bioactive Compounds Extracted From Bitter Leaf (Vernonia Amygdalina) Using Soxhlet And Microwave Assisted Methods



Associate Professor Dr. Hazrulrizawati Binti Abd Hamid hazrulrizawati@umpsa.edu.my 019-7778603 Formulation Of Microemulsion Containing C. Nutans **Extract For Topical Antifungal Therapy**



Dr. Siti Kholijah Binti Abdul Mudalip kholijah@umpsa.edu.my 012-5662739 Mechanism Of Self-Diffusion And Molecular Recognitions Of Mahkota Dewa (Phaleria Macrocarpa) Active Ingredients In Green Solvents Extraction Process



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Dr. Normaiza Binti Zamri maiza@umpsa.edu.my 018-9593641 Effects Of Christia Vespertilionis Leaf Extract Against Breast Cancer Cell Line And The Expression Of Growth Receptor



Dr. Mazita Binti Mokhtar mazita@umpsa.edu.my 019-9121068 Quality Control At The Farm Level In Producing High Quality Herbal Raw Material Product In Malaysia



Dr. Noormazlinah Binti Ahmad mazlinah@umpsa.edu.my 013-9832041 Extraction Of Phytochemical Compound In Leucaena Leucocephala (Petai Belalang) By Using Microwave Assisted Hydrodistillation (MAH)



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Associate Professor Dr. Jaya Vejayan Palliah

jayavejayan@umpsa.edu.my 016-6063804

Testosterone Boosting Capabilities of the Isolated Protein in *Eurycoma Longifolia* (Tongkat Ali) Root As the Active Ingredient of Prototype Product: Men Hormone Generator (Mhg)



Dr. Nazikussabah Zaharudin

nazikussabah@umpsa.edu.my 011-33938518

Effect of Drying Methods on Nutrient Composition and Physicochemical Properties of Malaysian Seaweeds Determination of Proximate Composition of Malaysian Horseshoe Crab (*Tachypleus gigas*)



Dr. Nor Adila Binti Mhd Omar

nadila@umpsa.edu.my 012-5754767

Bioactive compounds of plants carbohydrate quality and immunomodulatory



Dr. Hong Pui Khoon

hongp@umpsa.edu.my 017-9642839

Evaluation of the Aqueous Extraction Method for the Determination of Taste Active Compounds in Selected Malaysian Durian Cultivars and their Techno-Functional Properties

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THE EXPERT DIRECTORY



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Associate Professor Ir. Ts. Dr. Wan Sharuzi Bin Wan Harun sharuzi@umpsa.edu.my 019-9590039 Production of Pineapple Vinegar from Pineapple Fruits and Microbes Inhibitor from Pineapple Leaves **UMPSA World's Top 2% Scientist**



Ts. Dr. Rohana Binti Abdul Karim rohanaak@umpsa.edu.my 013-9300982 Development of Colour Measuring Instrument for Canned Pineapple using Image Processing Technique



My Profile





Associate Professor Dr. Aizi Nor Mazila Binti Ramli

aizinor@umpsa.edu.my 016-9210232

Physicochemical properties and tenderness analysis of bovine meat using proteolytic enzymes extracted from pineapple (Ananas comosus) and jackfruit (Artocarpus heterophyllus) by-products



Dr. Shariza Binti Jamek

sharizaj@umpsa.edu.my 019-6993107

Metagenomic Analysis for Assessing Microbial Communities and Diversity in Malaysian traditional Prebiotic Fermented Foods



Dr. Noor Suhana Binti Adzahar

nsuhana@umpsa.edu.my 019-4495477

Development of Natural Additives for Organic Derived Semi-Processed Foods to Extend the Shelf Life



Dr. Rozaimi Bin Abu Samah

rozaimi@umpsa.edu.my 013-7745183

Production of Pineapple Vinegar from Pineapple Fruits and Microbes Inhibitor from Pineapple Leaves



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Dr. Ahmad Mahfuz Bin Gazali mahfuz@umpsa.edu.my 013-6399697 Investigation Disease Related to White Shrimp (Fenielopnaeus Vannamei) Aquaculture Industry





Associate Professor Dr. Norhayati Binti Rosli norhayati@umpsa.edu.my 019-9544531 Stochastic Modelling of the Covid - 19 Outbreak Under Non pharmaceutical Intervention (NPI) Enforcement

My Profile





Ts. Dr. Norazaliza Binti Mohd Jamil norazaliza@umpsa.edu.my 013-7407016 Modelling the Impact of Covid – 19 Border Reopening for Malaysia Using SIRD Compartmental Framework

My Profile





Professor Dato' Ts. Dr. Rosli Bin Mohd Yunus rmy@umpsa.edu.my 019-2401134 Halal Gelatin Production Incubator Development





Associate Professor Dr. Jaya Vejayan Palliah jayavejayan@umpsa.edu.my 016-6063804 Application of Milk Coagulants from Selected Plant Sources in the Development of Halal and Value-**Added Dairy Products**

My Profile





Associate Professor Ts. Dr. Farhan Binti Mohd Said farhan@umpsa.edu.my 017-2791038 Carboxymethyl Sago Starch (CMSS) As Halal Thickener for Food and Beverages Industry

My Profile





Associate Professor Dr. Fatmawati Binti Adam fatmawati@umpsa.edu.my Developing CMSS Application in Pharmaceutical as Halal Binder, Thickener and Soft/Hard Capsule

My Profile





Associate Professor Dr. Jaya Vejayan A/L Palliah jayavejayan@umpsa.edu.my 016-6063804 Analysis of Gelatin Extracted in Bovine Bone for its **Protein Quality and Safety**



Dr. Noor Suhana Binti Adzahar nsuhana@umpsa.edu.my 019-4495477 Development of Microbiological Testing Procedure for **Edible Gelatine**



Dr. Nazikussabah Zaharudin nazikussabah@umpsa.edu.my 011-33938518 Physical and Chemical Testing of Gelatine Protein **Products**



Dr. Hong Pui Khoon hongp@umpsa.edu.my 017-9642839 Extraction of Halal Gelatin from Bovine Bones



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AGRICULTURE AND FOOD SECURITY | HALAL SCIENCES & MANAGEMENT HALAL BUSINESS & MANAGEMENT (FOOD SECURITY)



Professor Dato' Ts. Dr. Yuserrie Bin Zainuddin yuserrie@umpsa.edu.my 019-4164455 Halal Supply Chain Adoption Barriers Among Halal Manufacturers in Malaysia





Associate Professor Dr. Mohd Ridzuan Bin Darun mridzuand@umpsa.edu.my 016-6693267 Improving the Integrity of Halal Supply Chain Management through Blockchain Technology





Dr. Mohamad Hilmi Bin Mat Said hilmi@umpsa.edu.my 013-9287274 Membangunkan Kit Maklumat Halalan Tayyiba (Developing Information Kit)

My Profile





Dr. Mazita Binti Mokhtar mazita@umpsa.edu.my 019-9121068 Organizational Innovativeness Among Model of Success SMEs in Malaysia Halal Industry

My Profile



AGRICULTURE AND FOOD SECURITY | HALAL SCIENCES & MANAGEMENT SHARIAH & HALAL LAWS (FOOD SECURITY)



Associate Professor Dr. Hasan Bin Ahmad hasanahmad@umpsa.edu.my 019-9550139 Development of Islamic Personal Comprehensive Guidelines and Kit Complaint with Halal- Adhered Slaughter Procedure



Dr. Tuan Sidek Bin Tuan Muda sidek@umpsa.edu.my 013-3374911 Magasid Syariah And Halal Studies



Dr. Mohamad Hilmi Bin Mat Said hilmi@umpsa.edu.my 013-9287274 Membangunkan Kit Maklumat Halalan Tayyiba (Developing Information Kit)



My Profile



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AGRICULTURE AND FOOD SECURITY | DATA CACHING (FOOD SECURITY)



Ts. Dr. Fauziah Binti Zainuddin fauziahz@umpsa.edu.my 016-8182575 Modelling and Simulation for Quick Steam Food Processing in Vending Machine



Dr. Rozlina Binti Mohamed rozlina@umpsa.edu.my 019-9422871 Food Chain on Database and Ontology (Food Traceability)







Associate Professor Ts. Dr. Saidatul Shima Binti Jamari sshima@umpsa.edu.my 017-8123278 The Roles of Silver Nanoparticles into Cellulose Nanocrystal (CNC) to Reinforce Biodegradable Composite Film for **Antimicrobial Food Packaging Application**





Dr. Nurul Aini Binti Mohd Azman ainiazman@umpsa.edu.my 013-3330766 Development of New Carrageenan Active Packaging Film Incorporated with Natural Antioxidant from Eucheuma Cottonii and Kappayachus Alvarezii Seaweed

My Profile



Dr. Sureena Binti Abdullah sureena@umpsa.edu.my 013-9862161 Formulation of Food Packaging from Palm Oil Waste Cellulose

My Profile





Dr. Nazikussabah Zaharudin nazikussabah@umpsa.edu.my 011-33938518 Investigation of Feed Quality and Growth Performance of Poultry by using Seaweed as a Pellet Binder





My Profile



Dr. Nor Hanuni Binti Ramli @ Said drhanuni@umpsa.edu.my 012-3024184 The effect of Protein Composition on the Properties of Fish Pellet

Dr. Shalyda Binti Md Shaarani@Md Nawi



shalyda@umpsa.edu.my 019-4817883 Elucidation Of In-Vitro Poultry Feed Digestion Kinetics Through Enzymatic Hydrolysis Using Local Pineapple Enzymes

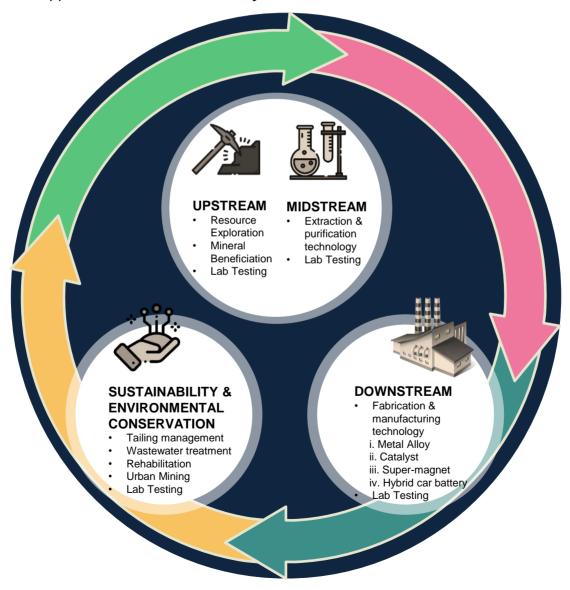
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RARE EARTH MINERALS

Malaysia has strategised its mineral industry development by focusing on RE minerals as a strategic mineral commodity. In UMPSA, the Rare Earth Mineral focus area consists of four components based on Rare Earth Mineral value chain, which are Upstream Sector: Rare Earth Mineral Mining Activities, Midstream Sector: Rare Earth Mineral Processing, Downstream Sector: Rare Earth Mineral Application, and Sustainability and Environmental Conservation.



Ionic Liquid (PSIL)



Profesor Dato' Ir. Dr. Badhrulhisham Bin Abdul Aziz badhrulhishamaz@umpsa.edu.my Gold And Rare Earth







Associate Professor Ts. Dr. Sumaiya Binti Zainal Abidin@ Murad sumaiya@umpsa.edu.my 019-5664177 Ionic liquid Studies On Isotherm, Kinetic And Mechanism Of Rare

Earth Elements (REE) Adsorption On Polymeric Resin Supported

My Profile



Associate Professor Ts. Dr Mohd Yusri Bin Mohd Yunus yusri@umpsa.edu.my 017-8121977 Leaching system and solvent extraction design, modelling & optimization.

My Profile



Associate Professor Dr. Mazrul Nizam Bin Abu Seman mazrul@umpsa.edu.my 019-7517812 REE separation using liquid membrane

My Profile





Associate Professor Dr. Mohd Fakhrurrazi Bin Ishak fakhrurrazi@umpsa.edu.my 019-7177574 Subsurface Exploration And Modelling To Determine Potential Ore Body On Secondary Deposit



Associate Professor Ir. Dr. Mohd Rizza Bin Othman rizza@umpsa.edu.my 019-6241335 Development Of Solvent Extraction Process Model For Separation Of Rare Earth Elements





Dr. Wan Hanisah Binti Wan Ibrahim anisah@umpsa.edu.my 019-9782800 Modelling And Simulation Of Separation Sequence Of Rare Earth Elements







Ts. Dr. Noorlisa Binti Harun noorlisa@umpsa.edu.my 019-9708277 Mathematical Modelling Of Rare Earth Recovery By Ion **Exchange Leaching From Ion Adsorption Clays**

My Profile





Professor Dr Jose Rajan
rjose@umpsa.edu.my
016-9620388
Metal Oxide Semiconducting Hole Transport Materials For
Stable Perovskite Solar Cells
UMPSA World's Top 2% Scientist



Professor Dr. Chong Kwok Feng ckfeng@umpsa.edu.my 017-7110262 Evaluation Of The Ce-Based Materials As F Ions Removal UMPSA World's Top 2% Scientist



chM Dr. Izan Izwan Bin Misnon
iezwan@umpsa.edu.my
013-9221487
Metal Oxides-Conducting Polymers Composites For High
Performance Asymmetric Supercapacitor Assembly
UMPSA World's Top 2% Scientist



Dr. Jun Haslinda Binti Haji Shariffuddin junhaslinda@umpsa.edu.my 016-9801406 Study Of Photocatalytic Degradation Of Pome Over Lanthanum Doped Calcium Derived From Cockle Shells



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Profesor Ts. Dr. Gaanty Pragas A/L Maniam gaanty@umpsa.edu.my 0164110236 The Effect Of Alkali And Rare Earth Metals Loading On Waste Deoiled-Spent Bleaching Clay As A Catalyst In Transesterification Reaction



0162185851 Light Rare Earth Oxide Nanoparticles As Flux Pinning Centers To Enhance Critical Current Density In Ag-Sheathed Bi-2223 **Superconductor Tapes**



Dr. Sureena Binti Abdullah sureena@umpsa.edu.my 0139862161 Photocatalytic Study Of Rare-Earth Doped Oxides For Hydrogen Production Via Photoreforming Process



Dr Asmida Binti Ideris asmida@umpsa.edu.my 019-7571404 Synthesis And Characterization Of Ni-Based Catalysts Modified With Rare Earth And Alkaline Metal Oxides (CeO2, La₂O₃, BaO) For Methane Cracking



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Associate Professor Dr. Mohd Yuhyi Bin Mohd Tadza dryuhyi@umpsa.edu.my 019-7552500 The use of gypsum and waste gypsum for electrical grounding backfill.





Associate Professor Ts. Dr. Muzamir Bin Hasan muzamir@umpsa.edu.my 012-7480820 Investigation On The Physical And Chemical Properties Of Bauxite Mining And Solutions To Minimize The Potential Environmental Impacts In Kuantan

My Profile





Associate Professor Ts. Dr. Mohd Yusri Bin Mohd Yunus yusri@umpsa.edu.my 017-8121977 Development Of Real Time Radiological Monitoring Framework Based On Lynas Advanced Materials Piant (LAMP)

My Profile





Associate Professor Dr Mohd Fakhrurrazi Bin Ishak fakhrurrazi@umpsa.edu.my 019-7177574 The Application of Unmanned Aerial Vehicles (UAV) for Slope Mapping with the Determination of Potential Slope Hazards.

My Profile





Dr. Abdul Halim Bin Abdul Razik abdhalim@umpsa.edu.my 018-9114275 Development Of Optimal Supply Chain Model For Malaysian Rare Earth Resources





Dr. Mohd Aizudin Bin Abd Aziz maizudin@umpsa.edu.my 017-6142443

Development of a continuous pneumatic jig for solid waste separation.



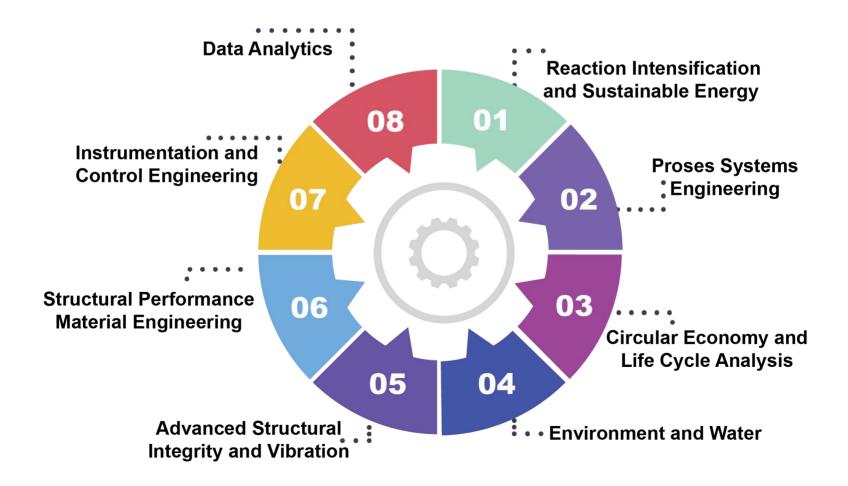






PETROCHEMICAL

Malaysia is rich in oil and gas reserves, and petrochemical feedstocks, as well as equipped with world-class facilities in petrochemical zones such as Gebeng Industrial Estate. Malaysia petrochemical industry anticipates an annual growth of 5-6%. The strategic location of UMPSA provides favourable opportunities to the petrochemical focus area in collaborating with the petrochemical industries in the following components: Reaction Intensification and Sustainable Energy, Proses Systems Engineering, Circular Economy and Life Cycle Analysis, Environment and Water, Advanced Structural Integrity and Vibration, Structural Performance, Material Engineering, Instrumentation and Control Engineering, and Data Analytics





Associate Professor Ts. Dr. Sumaiya Binti Zainal Abidin@Murad sumaiya@umpsa.edu.my 019-5664177 Methane Dry Reforming Over Electrospun Nanofibrous Ni-Based Catalyst For Hydrogen-Rich Syngas Production



Associate Professor Ts. Dr. Rohayu Binti Jusoh rohayu@umpsa.edu.my 013-9094187 Photodegradation Of Dibenzothiophene Using Modified Fibrous Silica (Kcc-1) Catalyst



Associate Professor Ts. Dr. Herma Dina Binti Setiabudi herma@umpsa.edu.my 012-7393471 Ethylene Production From Ethanol Dehydration Over SBA-15 Derived From Palm Oil Fly Ash



Associate Professor Ir. Dr. Chin Sim Yee chin@umpsa.edu.my 012-9638273 Transfer Of Reactor Modeling Knowledge For Intensifying The Production In A Petrochemical Plant



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Dr. Sureena Binti Abdullah sureena@umpsa.edu.my 013-9862161 Hydrogen Production Via Simultaneous Reactions Of Methane Reforming And Water Splitting Using Hollow Fiber Perovskites Membrane Reactor



Dr. Mazni Binti Ismail mazni@umpsa.edu.my 013-9593067 Reaction Kinetics Of Methane Dry Reforming Over Ni/Efb Biochar Catalysts



Dr. Suriyati Binti Saleh suriyati@umpsa.edu.my 018-2281611 Development Of Torrefied Pellet From Palm Oil Waste For Biofuel Production



Dr. Hamidah Binti Abdullah hamidah@umpsa.edu.my 013-4281981 Kinetics And Mechanistic Studies Of Photocatalytic Reduction Of CO2 Over Phytochemically Synthesized Ag Doped TiO2 Nanoparticles



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Associate Professor Ir. Dr Mohamad Rizza Bin Othman rizza@umpsa.edu.my 019 - 624 1335 Development Of A Monitoring And Control System For Operational Study Of Dividing Wall Column Pilot Plant





My Profile



Dr. Abdul Halim Bin Abdul Razik abdhalim@umpsa.edu.my 018-9114275 Process Analysis, Modification And Improvement Of A Small-Scale LNG Plant

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Waste-based Drug Epidemiology Study In Selected Malaysia
Cities. Collaboration Study With Indah Water Konsortium
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Professor Dr. Abdurahman Hamid Nour abrahman@umpsa.edu.my 012-9134403 A Novel Demulsifier, Nd-20-02 Assisted Microwave Technology For Separation Of Crude Oil Emulsions



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Ts. Dr. Yasmin Binti Abdul Wahab yasmin@umpsa.edu.my 017-7536394 Ultrasonic Transmission-mode Tomography For Multiphase Flow Regime Identification



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Professor Ir. Dr. Mohd Faizal Bin Jamlos faizaljamlos@umpsa.edu.my 012-7001248 Terahertz Sensing Analysis For Early Detection Of Ganoderma Boninense Disease Using Near Infrared (Nir) Spectrometer





Dr. Norvanti Binti Muhammad noryanti@umpsa.edu.my 011-37701334 Application Of Statistical Classifiers In Modelling And Prediction Of Cardiovascular Diseases (CVDS) Using Newly Devising Score System





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CONSTRUCTION

The Ministry of Work's National Construction Policy (NCP) 2030 is one of the government's initiatives in transforming the Malaysian construction industry towards the digitalisation era. Construction is one of the UMPSA focus areas that covers several components including Strengthen Quality and Safety, Embrace a Sustainable Built Environment, Improve Construction Productivity, Strengthen Infrastructure Maintenance, Strengthen Internationalisation and Competitiveness, and Strengthen Good Governance and Adoption of Best Practices.

CONSTRUCTION COMPONENTS





Associate Professor Dr. Ahmad Tarmizi Bin Haron ahmadtarmizi@umpsa.edu.my 019-9000880 Pembangunan Modul Atas Talian Building Information Modelling (BIM) For Contractor Part 1



Associate Professor Dr. Ezrin Hani Binti Sukadarin ezrin@umpsa.edu.my 012-7203230 Behavioral Based Safety In Construction Industry



Ts. Dr. Zahrizan Bin Zakaria zahrizan@umpsa.edu.my 013-6223983 Feasibility Study On The Application Of Building Information Modelling (BIM) As A Tool To Achieve A Sustainable Development For Public Healthcare Facility Project



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Associate Professor Ts. Dr. Muzamir Bin Hasan muzamir@umpsa.edu.my 012-7480820 Feasibility Survey For Utilizing Super Well Point Method For Soft Ground Improvement And Flood Prevention, Malaysia



Associate Professor Dr. Mohd Yuhyi Bin Mohd Tadza dryuhyi@umpsa.edu.my 019-7552500 Transfer Of Energy Efficient Ground Exchanger System For Improving Thermal Comfort Of Building Indoor Environment



Associate Professor Ir. Dr Ngien Su Kong nsukong@umpsa.edu.my 019-8243072 **Development Of GIS-based Flood Inundation** Extent By Incorporating Change Detection And Image Fusion With 2d Numerical Flood Modeler In Kuantan River Basin



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idrisali@umpsa.edu.my 013-9865254 Kajian Penyediaan Pelan Pengurusan Lemabangan Sungai Bersepadu (IRBM), Sungai Kuantan, Pahang Di Bawah Perlaksanaan JPS Malaysia

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Dr. Abdul Syukor Bin Abd. Razak syukor@umpsa.edu.my 016-9211143 **Development Of Domestic Wastewater Treatment Facility** Using Integrated Bioremediation And Phytoremedition Technology For Refurbishment Of Oxidation Pond Process Via Phytogreen UMP



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