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UMPSA'S CLUSTER OF KNOWLEDGE

UMPSA'S CLUSTER OF KNOWLEDGE





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FOREWORD

This book was published as a reference to researchers, funders, stakeholders. other industries, research agencies as well as communities who are looking for opportunities strategic collaborations with UMPSA for experts. It comprises a comprehensive pool of talent and expertise in all UMPSA niche areas, and we are proud to share our expertise and knowledge with the surrounding community by bringing ideas to impactful knowledge or tools.

We are here to create the next generation of knowledge, who will then apply the technology society's enhancing economic to in development and promote a rich quality life.



DATO' SERI ABDUL RAZAK BIN JAAFAR Chairman of the University Board of Directors Universiti Malaysia Pahang Al-Sultan Abdullah

VICE-CHANCELLOR NOTE

UMPSA proudly houses a diverse group of experts across various fields of engineering and technology, including advanced Technical and Vocational Education and Training (TVET). With 11 distinct clusters of knowledge, we stand ready to collaborate with the community and industry to elevate technology, processes, and tools, driving towards a more impactful future.

Embodying our motto, "Technology for Community," our experts are deeply committed in applying their knowledge for the greater good. This booklet is designed to serve as a strategic resource, showcasing the breadth of expertise within our university that can be harnessed for future collaboration

We envision this as a catalyst for shared knowledge and technological advancement, bridging the gap between UMPSA and the wider community.

We extend our sincere gratitude to the team whose efforts have made this booklet possible, allowing us to share these invaluable resources with all.

PROFESSOR Ts. Dr. AIDA MUSTAPHA **Acting Vice-Chancellor**



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.

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 and latest to Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) in April 2023.

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

https://www.umpsa.edu.my/en/ranking

INTERNATIONAL









QS Stars University Ratings Excellent Award

Teaching Employability Internationalisation Research

Facilities Engineering - Mechanical

Innovation

2025 Quacquarelli Symonds (QS) World University Rankings

Ranked #741-750 in World

Ranked #9 in Malaysia (Public Universities)

Ranked #1 in MTUN

2025 Quacquarelli Symonds (QS) Asia University Rankings

Ranked #159 in Asia

Ranked #39 in South Eastern Asia

Ranked #16 in Malaysia

Ranked #1 in MTUN

published on: 6 November 2024

2024 QS World University Rankings by Subject

Engineering & Technology: Ranked #451-500 in World

Ranked #9 in Malaysia

Engineering – Chemical: Ranked #201-250 in World Ranked #7 in Malaysia

Engineering – Mechanical, Aeronautical &

Manufacturing:

Ranked #301-350 in World Ranked #7 in Malaysia

Chemistry:

Ranked #451-500 in World Ranked #7 in Malaysia Material Science:

Ranked #351-400 in World Ranked #7 in Malaysia

Engineering – Electrical &

Electronic:

Ranked #351-400 in World Ranked #9 in Malaysia

Computer Sciences & Information Systems: Ranked #651-680 in World Ranked #14 in Malaysia

UMPSA RANGKINGS

https://www.umpsa.edu.my/en/ranking

INTERNATIONAL



World University Rankings



World University Rankings Asia



World University Rankings Young



World University Rankings by Subject



2025 Times Higher Education (THE) World University Rankings

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

2024 Times Higher Education (THE) World University Rankings Asia

Ranked #166 in Asia Ranked #8 in Malaysia Ranked #1 in MTUN

2024 Times Higher Education (THE) Young World University Rankings

Ranked #146 in World Ranked #3 in Malaysia Ranked #1 in MTUN

2024 Times Higher Education (THE) World University Rankings by Subject

Business and Economics: Physical Sciences: Ranked #301-400 Ranked #6 in Malaysia Ranked #5 in Malaysia

Computer Science: Engineering: Ranked #501-600 Ranked #5 in Malaysia Ranked #7 in Malaysia

2021/2022 US News and World Report Best Global University Rankings

Ranked #992 in world Ranked #269 in Asia Ranked #8 in Malaysia Ranked #1 in MTUN

UMPSA RANGKINGS

NATIONAL

SUSTAINABILITY



Malaysia Research Assessment (MyRA)

Note:

• UMPSA has maintained its 5stars since 2017 until to date.



2022 MyMohes Ratings

Note:

• UMPSA has maintained its 5stars since 2017 until to date.



VERY COMPETITIVE

Note:

- •For the evaluation, Higher Education Institutions (HEI) achievements are categorized into 2 statuses, namely;Competitive and Viable.
- •Competitive: Excel and meet the evaluation criteria.
- •Good and meet the minimum evaluation criteria.



2023 UI Green Metric World University Ranking

Ranked #68 in World Ranked #1 in MTUN Ranked #4 in Malaysia



https://mygreen.umpsa.edu.my/

2024 Times Higher Education (THE) Impact Rankings

Ranked #201-300 in World Ranked #7 in Malaysia (#6 Public

Universities)

Ranked #1 in MTUNuality Education, #65

SDG1: No Poverty, #5

SDG4: Quality Education, #65

SDG6: Clean Water & Sanitation, #37 SDG7: Affordable Clean Energy, #49

SDG9: Industry, Innovation and

Infrastructure, #301-400

SDG12: Responsible Consumption &

Production, #89

SDG17: Partnership for the Goals, #89



2024 QS World University Rankings Sustainability

Ranked #565 in World Ranked #12 in Malaysia Ranked #1 in MTUN



2022 SEDA Certificate

3 Diamond Rating (out of 5 Diamond)

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 Pahang (Pahang Socioeconomic Report, 2021, Department of Statistics Malaysia), which covers among the fields of mining, agriculture and food security, petrochemicals and construction.

UNIVERSITY NICHE
AREA

Advanced
Process
Engineering &
Automotive

Research
Niche
Area

Chemical
Engineering

Mechanical,
Automotive &
Manufacturing
Engineering



FOUR ADDITIONAL FOCUS AREAS



02

03
Petrochemical



Agriculture and Food Security

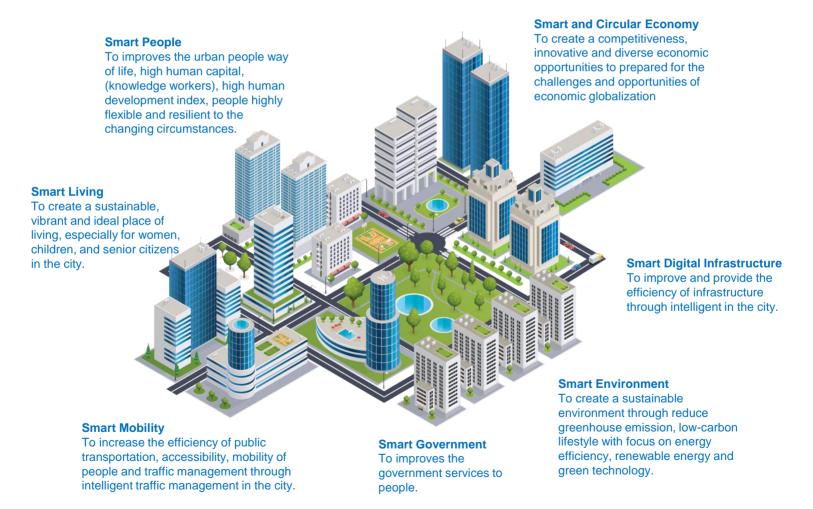
Rare Earth

Construction



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.





Professor Dr. Jose Rajan rjose@umpsa.edu.my 016-9620388 **Development of New Smart Window Materials** UMPSA World's Top 2% Scientist **Faculty of Industrial Sciences and Technology**





Associate Professor Dr. Mohamed Ariff bin Ameedeen mohamedariff@umpsa.edu.my 012-2032400 Prototype Low-Cost IoT Enabled Light Switches with **Smart Device Connectivity Faculty of Computing**





Associate Professor Dr. Yuhani binti Yusof yuhani@umpsa.edu.my 012-2760706 Formulation of Medicinal Cupping Point Algorithm for Diabetic Patient Via Adjacency Matrix Approach **Centre for Mathematical Sciences**

My Profile





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My Profile





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Dr. Siti Zanariah binti Satari zanariah@umpsa.edu.my 019-7699240 Formulation of Clustering-based Procedure for Identifying Multiple Outliers in Univariate Circular Biomedical Data **Centre for Mathematical Sciences**

My Profile





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Dr. Nur Huda binti Ramlan hudaramlan@umpsa.edu.my 014-7399866 Knowledge Transfer on Smart Farming Management Towards Sustainable Agriculture Among Mushroom Grower Community

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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 **Faculty of Industrial Management**





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Distribution Networks



My Profile



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My Profile





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SMART CITY | SMART ENVIRONMENT

Mejar Dr. Imaduddin bin Abidin imaduddin@umpsa.edu.my 013-9284224 Pembangunan Insinerator Quran Pintar (IQP) Faculty of Industrial Management



My Profile

Ts Siti Normaziah binti Ihsan normaziah@umpsa.edu.my 012-5215995 A New Optimal Multi-Agent Pathfinding Algorithm for Emergency Escape Route Simulation Faculty of Computing



My Profile



Gs. Dr. Syarifuddin bin Misbari syarifuddinm@umpsa.edu.my 016-7551917 Smart IoT And Geospatial Approach for Water Quality Monitoring System: Case Study In Galing River, Kuantan Faculty of Civil Engineering Technology

My Profile



khairulanuars@umpsa.edu.my 016-2326302 The potential of cooling effect in residential building using palm oil clinker as drainage layer in green roof system Faculty of Civil Engineering Technology

Dr. Khairul Anuar bin Shahid

My Profile



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Dr. Suliana binti Ab Ghani
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The Development Of An Effect Of Integrated Photovoltaic
And Wind Turbine For Distributed Connected
Faculty of Electrical and Electronics Engineering Technology



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Associate Professor Ts. Dr. Hadi bin Manap
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Development of a Methane Gas Sensing System Using
DOAS Technique for Remote Detection And Monitoring.
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Technology





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Modelling of Hybrid Energy Storage In Microgrid
Environment Under Unbalanced Voltage
Faculty of Electrical and Electronics Engineering Technology

My Profile





Ts. Dr. Mohd Shafie bin Bakar shafie@umpsa.edu.my 019-9850502 Development of Training Kit DC-DC Converter for Power Electronics Field Faculty of Electrical and Electronics Engineering Technology

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SMART CITY | SMART ENVIRONMENT

Associate Professor Ir. Ts. Dr. Normaniha binti Abd Ghani normaniha@umpsa.edu.my 013-9842806

Formulation of New Multiobjective Exponential and Fitness Based Adaptive Sine-Cosine Algorithm for Improving Accuracy and Convergence Speed

Faculty of Electrical and Electronics Engineering Technology



Dr. Syukran Hakim bin Norazman syukran@umpsa.edu.my 013-9735139 Investigation of New Holographic Image Reconstruction Technique for Identifying Hazardous Micro-Particles in Power Tranformer Oil

Faculty of Electrical and Electronics Engineering Technology

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Professor Ir. Ts. Dr. Kamarul Hawari bin Ghazali kamarul@umpsa.edu.my 017-7712224 Crowd Movement Detection for Automated Surveillance Camera System Faculty of Electrical and Electronics Engineering Technology



My Profile

Associate Professor Ts. Dr. Hamzah bin Ahmad hamzah@umpsa.edu.my 019-9306877 An Approach of Student Academic Identification and Classification Using Artificial Intelligence Faculty of Electrical and Electronics Engineering Technology





Associate Professor Dr. Zuraina binti Ali zuraina@umpsa.edu.my 012-9676507 Social Media Influencers (SMIS) and Consumers: An Analysis of Psychological Well-Being and Community Dependability Beliefs Concerning Media Hype Centre for Modern language





Associate Professor Ts. Dr. Adzhar bin Kamaludin adzhar@umpsa.edu.my

A Model For Investigating The Effectiveness of Post-Pandemic Blended Learning In Institutions Of Higher Learning

Faculty of Computing

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IoT Technology – Fisherman's Mobile Technology
Faculty of Computing





Dr. Ruhil Amal binti Azmuddin ruhilamal@umpsa.edu.my 017-2242545 An Investigation of Online Reading Strategies Employed by University Students in a Learning Management System (LMS) Centre for Modern Languages

My Profile





Ts. Aziman bin Abdullah
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A Study and Development of Internet Literacy Self-Learning
Toolkit: Enhancement Using Multi Dialect in Voice-assisted
Instruction

My Profile



Faculty of Computing

Associate Professor Ts. Dr. Suryanti binti Awang suryanti@umpsa.edu.my 016-6663646
Descriptor for Face Pattern Recognition Based on Novel Methods
Faculty of Computing

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Mejar Dr. Imaduddin bin Abidin imaduddin@umpsa.edu.my 013-9284224 Program Peningkatan Profesionalisme Guru-Guru Reka Bentuk dan Teknologi (RBT) Negeri Pahang Faculty of Industrial Management



Ir. Ts. Dr Norizam bin Sulaiman norizam@umpsa.edu.my 012-4596552
Electroencephalogram (EEG) Interaction Mechanism to Evaluate the Microsleep Detection
Faculty Electrical and Electronics Engineering Technology





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Computational Modeling and Simulation of Spine Injuries in Fatal
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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 Centre for Mathematical Sciences

My Profile





Associate Professor Ts. Dr. Mohd Azrul Hisham bin Mohd Adib azrul@umpsa.edu.my 019-9439287
Elucidate The Mechanism of Ergonomic Risk Factors and Impact of Musculoskeletal Symptoms on Cerebral Palsy Kids Patient Quality of Physio-Treadmill (PhyMILL) Treatment
Faculty of Mechanical and Automotive Engineering Technology







Ts. Dr. Nurul Shahida binti Mohd Shalahim shahida@umpsa.edu.my 012-5100420 Development of Sit-to-Stand for Sedentary Workers Faculty of Mechanical and Automotive Engineering Technology

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Ts. Dr. Nasrul Hadi bin Johari
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Elucidation of The Restenosis Mechanism in Peripheral Arterial
Disease Using Fluid-Structure Interaction Modeling
Faculty of Mechanical and Automotive Engineering Technology

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Approximation of Femur and Tibia Measurement Using Artificial
Neural Network Method For Malaysian Adult
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Associate Professor Dr Hafizoah binti Kassim
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Formulation of a New Creative Learning Framework for a
Technology-Infused Language Learning Environment in the 4IR
Context

Centre for Modern Language







Associate Professor Dr Nik Aloesnita binti Nik Mohd Alwi aloesnita@umpsa.edu.my 019-7509953 Examining the Effectiveness of Virtual Reality (VR) Job Interview Simulator to Reduce Anxiety Centre for Modern Language

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Associate Professor Dr Noor Raha binti Mohd Radzuan nraha@umpsa.edu.my 019-5766145 Assessment Practices and Challenges Among Language Lecturers in Implementing Blended Learning in Malaysian Universities Centre for Modern Language

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Dr. Nor Yazi binti Khamis
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Digital Instructional Fluency: Exploring TVET ESL Practitioners'
Sustainable Edutech Requirements for Competency
Advancement
Centre for Modern Language

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Dr. Nur Aqilah binti Othman nuraqilah@umpsa.edu.my 010-2102105 Formulation of Machine Learning Model to Classify Kinematics Data of Human Daily Activities **Faculty of Electrical and Electronics Engineering Technology**

My Profile





Professor Ir. Ts. Dr. Kamarul Hawari bin Ghazali kamarul@umpsa.edu.my 017-7712224 Smart Night Vision System for Detecting Intruders in Restricted Area Using Thermal Imaging Faculty of Electrical and Electronics Engineering Technology







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

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The Network Intrusion Detection System in Cloud Computing
Using Whale Optimisation Algorithm and Artificial Neural
Network
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Associate Professor Dr. Mohd Nizam bin Mohmad Kahar

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Ts. Dr. Lee Khai Loon
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Effectiveness of Monsoonsim Enterprise Resource
Planning (ERP) Business Simulation-Based Learning
In Malaysia Higher Education Institutions
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Investigation on Human Pedestrian Traffic Flow in Kuantan
Airport Using Hybrid Discrete Event Simulation and Agent
Based Simulation
Faculty of Computing



Norasyikin binti Fadilah norasyikin@ump.edu.my 017-7643235 Development of Wireless Embedded Video Processing System For Identification of Traffic Violation In Urban Area Faculty of Electrical and Electronics Engineering Technology

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Ts. Dr. Muhammad Yusri bin Ismail
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Collision Avoidance Mechanism Using Integrated
Communication Architecture for Mitigating Traffic Accident
Faculty of Mechanical and Automotive Engineering Technology

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Prediction of Road Traffic Accidents Using Machine Learning Faculty of Mechanical and Automotive Engineering Technology

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Associate Professor Ts. Dr. Suryanti binti Awang suryanti@umpsa.edu.my 016-6663646
Enhancement of Fingerprint Image Security Based on the Enhanced Watermarking Technique
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Developing a Woman's Retirement Financial Wellness
Index Based on Capacity-Opportunity-WillingnessBiopsychosocial (COWB) Modelogic
Faculty of Industrial Management



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The Development of Data Quality Management
Framework for Malaysian Government Open Data
Platform
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Abbas Saliimi bin Lokman abbas@umpsa.edu.my 014-5140401 Question Answering System : Chatbot Faculty of Computing



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Associate Professor Dr. Lee Chia Kuang chia@umpsa.edu.my 013-7023668 Developing an Integrated Industrialised Building System (lbs) Maturity Model: A Hybrid Model with Riggs's Omax **Faculty of Industrial Management**



Dr. Mohd Nadzeri bin Omar nadzeri@umpsa.edu.my 010-2712511 Prediction of Road Traffic Accidents Using Machine Learning **Faculty of Mechanical and Automotive Engineering Technology**







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Development of Smart Campus Autonomous Vehicle (SCAV)
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An Optimized-Decision-Model Exploiting Deep-Learning
Enabled Vulnerable Point Classification for Vehicular Health
Monitoring System
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Associate Professor Dr. Ahmad Nor Kasruddin bin Nasir kasruddin@umpsa.edu.my 019-3691359
Advancement Research of the Inverted Pendulum Concept Applying to the Robot as a Balancer
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My Profile





Associate Professor Ir. Dr. Akhtar Razul bin Razali akhtar@ump.edu.my 012-7467822 Compliant Control on Pneumatics Gripper Servings for Fragile Object Pick-And-Place **Faculty of Mechanical and Automotive Engineering Technology**



Associate Professor Ts. Dr. Mohd Razali bin Daud mrazali@ump.edu.my 01110776526 Intelligent Traffic Light Control for Emergency Vehicle Using Vision Sensor **Faculty of Electrical and Electronics Engineering Technology**



Ir. Dr. Avib Rosdi bin Zainun avib@ump.edu.mv 019-9894421 Inter-vehicle Communication (IVC) for Intelligent Transportation System (ITS) **Faculty of Electrical and Electronics Engineering Technology**



Ts. Dr. Mohammad Fadhil bin Abas mfadhil@ump.edu.my 019-4246038 The Development and Implementation of Artificial Intelligence (AI) Based Autonomous Mobile Object Finder Faculty of Electrical and Electronics Engineering Technology



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Intelligent Vehicle Monitoring System for Smart Campus
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A Study on the Decision-Making Support in Scheduling and
Vehicle Routing Problems via Trade-off Ranking Method
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The Development of Digital Controller in Rotary Motion System
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Smart Traffic System for Universiti Malaysia Pahang
Pekan Campus
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Vision Based Intelligent Traffic Monitoring System
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New Formulation of Power Dispatch Solution Based on Mothflame Optimiser for Power System Planning and Operation
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Development of Intelligent Monitoring and Control of Urban
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Associate Professor Ts. Dr. Mohd Ashraf bin Ahmad mashraf@umpsa.edu.my 010-4117954

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

Faculty of Electrical and Electronics Engineering Technology



Associate Professor Dr. Mohamed Ariff bin Ameedeen mohamedariff@umpsa.edu.my 012-2032400 A New Priority Rule Cloud Scheduling Technique That Utilizes Gaps to Increase the Efficiency of Jobs Distribution **Faculty of Computing**



Associate Professor Ir. Dr. Hj. Fadhlur Rahman bin Mohd **Romlay** fadhlur@umpsa.edu.my 012-6951441 Indigenous Test Bed for Industry 4.0 Using Visible Light Communication with Industrial Internet of Things **Faculty of Mechanical and Automotive Engineering Technology**



Associate Professor Ts. Dr. Adzhar bin Kamaludin adzhar@umpsa.edu.my 013-9221584 Investigation a Genetic Algorithm Based Strategy for Sequence Covering Array Construction **Faculty of Computing**





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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 Faculty of Electrical and Electronics Engineering Technology





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Associate Professor Ir. Dr Addie Irawan bin Hashim addieirawan@umpsa.edu.my 019-9785276 Development of Real-time Computer-based Multiple Motor Drive System Faculty of Electrical and Electronics Engineering Technology

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Adaptive Controller of Smart Micro Grid in Intentional Islanding
Mode
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Formulation of Microgrid Energy Management of Energy
Internet Using Fuzzy Based Model Predictive Control
Faculty of Electrical and Electronics Engineering Technology

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
Centre for Mathematical Sciences





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) Faculty of Computing

Centre for Mathematical Sciences

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Dr. Abdul Nasir bin Abd. Ghafar
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Development of Monitoring and Control System Using Wireless
IoT Communications for Energy Saving in the Workplace
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Ts. Dr. Ngui Wai Keng
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Monitoring of Rotating Machinery Fault Diagnosis Using
Vibration and Artificial Intelligence Approaches
Faculty of Mechanical and Automotive Engineering
Technology







Ts. Dr. Ahmad Shahrizan bin Abdul Ghani shahrizan@umpsa.edu.my 019-6339803 Automatic Fishcake Slicer Machine with Vision – Based System for Defect Monitoring UMPSA World's Top 2% Scientist Faculty of Manufacturing and Mechatronic Engineering Technology

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Development Of A Student Attendance Using Vicinity RFID
System
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Non- Invasive Preemies Car Seat (PreeCASE) Monitoring Device For Implementation in Automotive Healthcare Industry Faculty of Mechanical and Automotive Engineering Technology







Dr. Sahimel Azwal bin Sulaiman
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RSA Digital Signature Authentication and Verification Using
Cryptographic Keys Generator Based on the Compatible
Actions of Cyclic P-groups
Centre for Mathematical Sciences

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Dr. Mahfuzah binti Mustafa mahfuzah@umpsa.edu.my 013-3614772 Handwash Screening Vision System Faculty of Electrical and Electronics Engineering Technology

My Profile





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Modelling of Inter-cell Radio Interference and Thermal Noise
Floor in 5G Mobile Networks Using Artificial Intelligence
Faculty of Computing

My Profile





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



Ts. Dr. Abdul Sahli bin Fakharudin sahli@umpsa.edu.my 019-3251504 Bluetooth User Driven M-Advertising Using Pull-Based Approach **Faculty of Computing**





Omar bin Aliman omaraliman@umpsa.edu.my 019-3825246 Optimal Sizing of Distributed Generation (Dg) in Distribution Networks **Faculty of Electrical and Electronics Engineering Technology**







Mohd Hisyam bin Mohd Ariff hisyam@umpsa.edu.my 017-2324232 Development of Array Antenna for UHF RFID Reader **Faculty of Electrical and Electronics Engineering Technology**





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Badaruddin bin Muhammad badaruddin@umpsa.edu.my 019-9175116 Integrated Network Security System for Industry Security Faculty of Electrical and Electronics Engineering Technology

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Ts. Dr. Noorhuzaimi @ Karimah binti Mohd Noor nhuzaimi@umpsa.edu.my 013-9844432 Intelligent Surveillance Via CCTV and Drones Faculty of Computing

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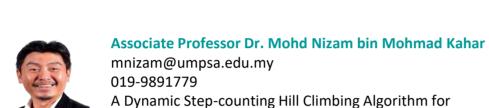
Ts Dr. Kohbalan a/I Moorthy
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Bone Fracture Recognition Using Deep Learning
Method on Plain Radiographs
Faculty of Computing

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Ts Dr Tuty Asmawaty binti Abdul Kadir tuty@umpsa.edu.my 012-9558558 The Development of A Virtual Reality Training Application For Routine Activity in Kaneka (Chemical Loading From Truck To Tank) **Faculty of Computing**







Ts. Dr. Omar bin Jamaludin omar@umpsa.edu.my 012-9526381 Sustainable Assessment for Smart City Kuantan **Faculty of Civil Engineering Technology**



Dr. Aizat bin Alias aizat@umpsa.edu.my 019-7625863 Formulations of cementitious materials composition for 3D concrete print **Faculty of Civil Engineering Technology**



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Dr. Airul Sharizli bin Abdullah sharisli@umpsa.edu.my 013-3517123 Development of a Real Time Wearable System for Monitoring Sprint Running Performance Faculty of Electrical and Electronics Engineering Technology





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Formulation of Discrete Time Sliding Mode Control for Three
Level Boost Converter
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Detection and Classification Algorithm to elucidate Zebrafish Larvae Behavior Using Image Processing

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Formulation of a New Stabilization Control for Second-Order
Nonholonomic and Underactuated systems
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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 **Faculty of Mechanical and Automotive Engineering Technology**





Professor Dr. Abdul Adam bin Abdullah adam@umpsa.edu.my 019-4997020 **Diesel Engines Combustion And Emissions Faculty of Mechanical and Automotive Engineering Technology**





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) **Faculty of Mechanical and Automotive Engineering Technology**



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 Faculty of Mechanical and Automotive Engineering Technology**





Ir. 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 **Faculty of Mechanical and Automotive Engineering Technology**





Associate Professor 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 **Faculty of Mechanical and Automotive Engineering** Technology





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 **Faculty of Mechanical and Automotive Engineering Technology**



Associate Professor Ir. Dr. Addie Irawan bin Hashim addieirawan@umpsa.edu.my 019-9785276 Development Of Surface Vector Model For Enhancement Of Engine Performance And Lower Exhaust Emissions Of A 4 -Cylinder Four Stroke Gasoline Engine **Faculty of and Electronics Engineering Technology Electrical**







Ts. Dr. Mohd Fadzil bin Abdul Rahim mfadzil@umpsa.edu.my 019-9878797 Investigation Of Model-based Calibration Technique On Ecu Maps To Enhance Performance Of Spark Ignition Engine **Faculty of Mechanical and Automotive Engineering** Technology







Professor Ts. Dr. Mohd Rusllim bin Mohamed
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Optimal Energy Management Strategies For Energy Storage
Systems And Future Challenges Of Fuel cell Electric Vehicle
Faculty of and Electronics Engineering Technology Electrical





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

Faculty of and Electronics Engineering Technology Electrical





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 Faculty of and Electronics Engineering Technology Electrical





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 Faculty of Mechanical and Automotive Engineering Technology





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 **Faculty of Mechanical and Automotive Engineering Technology**





Associate Professor Dr. Sudhakar Kumarasamy sudhakar@umpsa.edu.my 0197308925 Energy, Economics And Environmental Assessment Of BIPV+EV Charging In Tropical, Humid Continental And Maritime **Temperate** UMPSA World's Top 2% Scientist **Faculty of Mechanical and Automotive Engineering**





Professor Dr. Abdul Adam bin Abdullah adam@umpsa.edu.my 019-4997020 Development Of Smart Campus Autonomous Vehicle (SCAV) Faculty of Mechanical and Automotive Engineering Technology





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Designing An Add-Ons Kit Toward Autonomous Electric
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Dr. Muhammad Izhar bin Ishak
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Investigation On The Effect Of A Continuous-Transition
Four-Wheel Independent Steering System To The
Maneuverability And Safety For Electric Vehicle
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Ts. Dr. Sheikh Muhammad Hafiz Fahami bin Zainal hafizfahami@umpsa.edu.my 0176101645 Development Of Estimation Feedback Torque With A Control Algorithm For Electric Vehicle In Steering By Wire System **Faculty of Manufacturing and Mechatronic Engineering Technology**





Dr. Ismail bin Mohd Khairuddin ismailkhai@umpsa.edu.my 0197571498 The Formulation Of A Deep Learning Pipeline For The Maneuvering Perception Of An Amphibious Vehicle **Faculty of Manufacturing and Mechatronic Engineering Technology**





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Mxene Nanomaterial As An Alternative Material For Automotive
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Development Of Hybrid Nanolubricants For Automotive Air
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Elucidate The Wear Rate Reduction Mechanism Of Minimum
Quantity Lubrication To Enhance Machinability Using Hybrid
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Mathematical Models Of Magnetohydrodynamic
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Associate Professor Ir. Ts. Dr. Devarajan a/I 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



Faculty of Mechanical and Automotive Engineering Technology



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 **Centre for Mathematical Sciences**





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 Faculty of Manufacturing and Mechatronic Engineering Technology**





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





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 **Faculty of Mechanical and Automotive Engineering Technology**





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 **Faculty of Mechanical and Automotive Engineering Technology**





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 Faculty of Manufacturing and Mechatronic Engineering Technology**





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 **Faculty of Mechanical and Automotive Engineering Technology**





Technology

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 Faculty of Mechanical and Automotive Engineering**





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 **Faculty of Manufacturing and Mechatronic Engineering**







Ir. Dr. Zamri bin Mohamed zamrim@umpsa.edu.my Vehicle Packaging And Architecture, Automotive Ergonomics, Automotive Vibration And Acoustics **Faculty of Mechanical and Automotive Engineering Technology**





Associate Professor Ir. Ts. Dr. Wan Sharuzi bin Wan Harun sharuzi@umpsa.edu.my 0199590039 Evaluation Of Mechanical Properties And Corrosion Behavior Of Wire Arc Additively Manufactured Ss316l For **Exhaust Housing Faculty of Mechanical and Automotive Engineering Technology**





Ir. Dr. Mohd Firdaus bin Hassan firdaus@umpsa.edu.my 0199243481 Enhancing Vibration Damping in Carbon Fiber-Reinforced Polymer Composites (CFRPC) Through Nano-Graphene Additives for Automotive Panels **Faculty of Mechanical and Automotive Engineering Technology**







Dr. Aiman bin Mohd Halil aimanmh@umpsa.edu.my 0137654326 Parametric Analysis On Laser Micro Bending Process Of Thin Sheet Metal For Small Components In The Automotive Industry **Faculty of Mechanical and Automotive Engineering**

My Profile





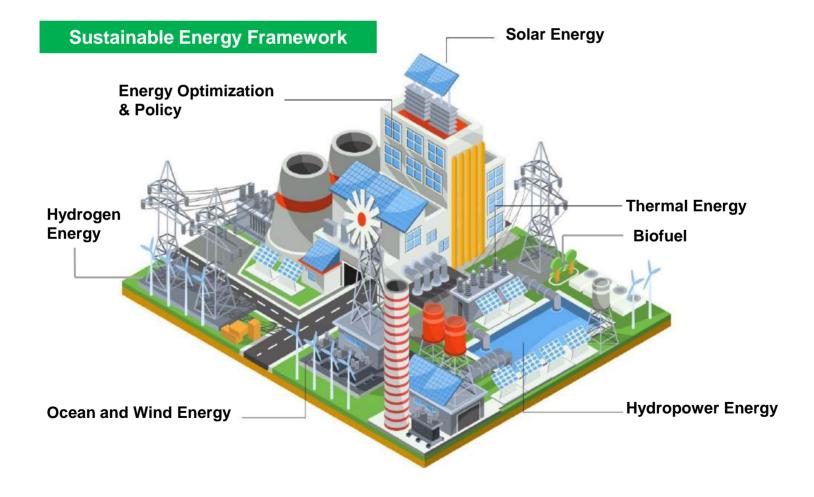
Muhammad Ammar bin Nik Mu'tasim ammar@umpsa.edu.my 0197701612 Modeling And Optimization Of Hybrid Flow Shop Scheduling For Automotive manufacturing **Faculty of Mechanical and Automotive Engineering Technology**





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 Raian rjose@umpsa.edu.my 016-9620388 Flexible Dye-Sensitized Solar Module UMPSA World's Top 2% Scientist Faculty of Industrial Sciences and Technology





Associate Professor Dr. Sudhakar Kumarasamy sudhakar@umpsa.edu.my 019-7308925 Performance Analysis of Floating and Submerged Photovoltaic System UMPSA World's Top 2% Scientist **Faculty of Mechanical and Automotive Engineering Technology**

My Profile



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 **Faculty of Electrical and Electronics Engineering Technology**

Mv Profile

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 Faculty of Industrial Sciences and Technology

Associate Professor Ts. Dr. Saifful Kamaluddin bin

My Profile





Associate Professor Ir. Dr Muhamad Zahim bin Sujod zahim@ump.edu.my 01110988048 Formulate Zero-State Control Algorithm As A New Converter Protection In Large Scale Grid-Connected Photovoltaic System **Faculty of Electrical and Electronics Engineering Technology**



Dr. Norazila binti Jaalam zila@umpsa.edu.my 012-6675421 Inverter Control Optimization Using Grey Wolf Optimizer (Gwo) To Reduce Overshoot Current In The Grid-Connected **PV System Faculty of Electrical and Electronics Engineering Technology**





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 **Faculty of Electrical and Electronics Engineering Technology**

My Profile





Dr. Ahmad Fadzil bin Sharol fadzils@umpsa.edu.my 011-27012032 Solar Thermal Engineering **Faculty of Mechanical and Automotive Engineering Technology**

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





Faculty of Electrical and Electronics Engineering Technology



Technology

Associate Professor Ir. Ts. Dr. Wan Sharuzi bin Wan Harun sharuzi@umpsa.edu.my 019-9590039 Solar Collector With Cotton-based Cnc And Advanced Graphene **Hybrid Nano Fluids Faculty of Mechanical and Automotive Engineering**

My Profile



Ir. Dr. Noor Zaihah binti Jamal zaihah@umpsa.edu.my 010-9324517 Evaluate the New technique in Reducing the Feasibility of Lightning Strikes At a Solar Power Plant **Faculty of Electrical and Electronics Engineering Technology**

My Profile





Ts. Dr. Mohd Shawal bin Jadin mohdshawal@umpsa.edu.my 014-8042693 A New Local Feature Descriptor Based On Directional Structure Map For The Hotspot Detection In A Large-Scale Photovoltaic System **Faculty of Electrical and Electronics Engineering**

My Profile





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 **Faculty of Electrical and Electronics Engineering Technology**







Professor Ir. Ts. Dr. Mahendran a/I Samykano mahendran@umpsa.edu.my 016-6817799 Characterizing Of Mxene For Solar Application UMPSA World's Top 2% Scientist **Faculty of Mechanical and Automotive Engineering Technology**

My Profile





Profesor Madya Dr. Nadzirah binti Mohd Mokhtar nadzirah@umpsa.edu.my 012-6121045 Fabrication and Development of Integrated Solar-Driven Membrane Distillation System **Faculty Of Civil Engineering Technology**

My Profile





Associate professor Ir. Ts. Dr. Faiz bin Mohd Turan faizmt@umpsa.edu.my 0123687238
Systematic Sustainability Assessment (Ssa) Tool For Hydroelectric Project
Faculty of Manufacturing and Mechatronic Engineering Technology





Associate Professor Dr. Mohd Herwan bin Sulaiman
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Optimization And Control Of Small Hydropower Plant
Operation
Faculty of Electrical and Electronics Engineering Technology





Ts. Dr. Ummu Kulthum binti Jamaludin ummu85@umpsa.edu.my 094315381 Development And Optimization Of Screw Blade For Sustainable Micro-Hydroelectric Power Faculty of Mechanical and Automotive Engineering Technology





Dr. Azizuddin bin Abd Aziz
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Pristine Blade Characteristics Concept Emphasizing
Mathematical Model Optimization Of Floating Undershot
Wheel For Picohydropower Generators
Faculty of Mechanical and Automotive Engineering
Technology







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Formulation Of Sustainability Routing Curve Assessment
Model For Hydro-Electric Power Dam Operation Due To The
Climate Change Impact
Faculty of Civil Engineering Technology





Ts. Dr. Wan Ismail bin Ibrahim
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Development Of Portable Pico – Hydrokinetic Energy
Harnessing For River Application
Faculty of Electrical and Electronics Engineering
Technology





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Optimization Of The Flow Characteristic In Various Array
Arrangements Of Multiple Picohydro Power Turbines
Faculty of Mechanical and Automotive Engineering
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My Profile





Professor Ir. Ts. Dr. Mahendran a/I Samykan
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Nanoenhanced Phase Change Materials For Smart Energy
Storage And Management In Buildings
UMPSA World's Top 2% Scientist
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Professor Ts. Dr. Sumaiya binti Zainal Abidin@ Murad sumaiya@umpsa.edu.my 019-5664177
Synthesis, Characterization And Studies On The Thermal Storage Performance Of Encapsulated Phase Change Material Composite Derived From Waste Materials
Faculty of Chemical and Process Engineering Technology





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Thermal Energy Storage Materials
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Professor Ir. Ts. Dr. Kumaran a/l Kadirgama
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Investigation Of Physio-thermal Properties Of Hybrid Graphene
Oxide And Nanofibrillated Cellulose For Automotive Application
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My Profile





Associate Professor Dr. Mohamad Firdaus bin Basrawi mfirdausb@umpsa.edu.my 019-9591819
Development Of Algorithm To Integrate Solar Farm With Micro Gas Turbine Trigeneration
Faculty of Mechanical and Automotive Engineering Technology





Dr. Muhammad Khairul Anuar bin Mohamed
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Mathematical Modelling Of Convective Flow Of Non-newtonian
Hybrid Nanofluid On A Bluff Body: Williamson Model
Centre for Mathematical Sciences





Dr. Nor Atiqah binti Zolpakar
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Effect Of The Geometry Design On The Pressure Drop For
Forced Convection Of Polydimethylsiloxane (Pdms)
Microchannel (Mc) Heat Sink
Faculty of Mechanical and Automotive Engineering





Azim bin Mohd Arshad
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Elucidation Of Bubble Nucleation Properties In Nanofluids For
Flow Boiling Heat Transfer For Cooling Applications
Faculty of Mechanical and Automotive Engineering
Technology





Dr. Zulkhibri bin Ismail @ Mustofa zulkhibri@umpsa.edu.my 013-9303161 Mathematical Modelling on Heat and Mass Transfer of Thermal Magnetohydrodynamics Newtonian and non-Newtonian Fluid: An Analytical Approach **Centre for Mathematical Sciences**



Associate Professor Ts. Dr. Amir bin Abdul Razak amirrazak@umpsa.edu.my 013-3461028 Modelling And Analysis Of Modular Wind Turbine System Faculty of Mechanical and Automotive Engineering Technology







Dr. Suliana binti Ab Ghani
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The Development Of An Effect Of Integrated
Photovoltaic And Wind Turbine For Distributed
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Faculty of Electrical and Electronics Engineering

My Profile





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



Faculty of Mechanical and Automotive Engineering Technology

My Profile



Dr. Amir Izzani bin Mohamed
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Modelling Of Electrical Field Behavior On Wind Turbine
Blade
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Technology





Ts. Dr. Nurizzatul Atikha binti Rahmat izzatulatikha@umpsa.edu.my 0167021405 Boundary Layer Wind Tunnel Experiments On Wake Flow Generated Past A Row Of Quarter Elliptic-wedge Spires With Rough Wall Surfaces **Faculty of Mechanical and Automotive Engineering Technology**







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012-7575476
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 Dato' Ts. Dr. Zularisam bin Ab Wahid

Faculty of Civil Engineering Technology





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 Faculty of Mechanical and Automotive Engineering Technology





Associate Professor Ir. 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 Faculty of Manufacturing and Mechatronic Engineering Technology





Professor Ts. Dr. Sumaiya binti 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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Hydrogen Production Using Gasification
Faculty of Chemical and Process Engineering Technology





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 Faculty of Chemical and Process Engineering Technology





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 Faculty of Civil Engineering Technology





Dr. Kamrul Fakir bin Kamarudin
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Exploration Of Potential Native Microalgae (*Chlaretla* Sp. and *Scenedesrnus* Sp.) As A Nevr Sources Of
HydrogenProduction Through Biomass Fermentation And
Stress Growth Pathway
Faculty of Industrial Sciences and Technology



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
Faculty of Chemical and Process Engineering
Technology



Dr. Sureena binti Abdullah sureena@umpsa.edu.my 013-9862161 Photocatalytic Study Of Rare-Earth Doped Oxides For Hydrogen Production Via Photoreforming Process Faculty of Chemical and Process Engineering Technology





Ts. Dr. Mohd Nasrullah bin Zulkifli mnasrul@umpsa.edu.my 0139746838 Investigation Of Eletrotrophs In Microbial Electrolysis Cell (Mecs) For Hydrogen Production Faculty of Civil Engineering Technology

My Profile





Ts. Dr. Mohd Razali bin Hanipah
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Design And Efficient Performance Appraisal Of Hydrogen
Fueled Automobile Engines Combustion Chamber And
Port Injector
Faculty of Mechanical and Automotive Engineering





Dr. Noor Intan Shafinas binti Muhammad shafinas@umpsa.edu.my 016-3148639 Sustainability Assessment Of Biohydrogen Production From Citrus Waste **Faculty of Civil Engineering Technology**



Associate Professor Ir. Ts. Dr. Devarajan a/I Ramasamy deva@umpsa.edu.my 016-7580946 Analysis Of Piston Liner To Lean Burn Hydrogen Usage In The Engine For Combustion Analysis, Lubrication, And Flame Speed **Analysis Faculty of Mechanical and Automotive Engineering**





Professor Dr. Rizalman bin Mamat
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Performance And Emission Characteristic Of A Diesel
Engine Operating With Biofuel
UMPSA World's Top 2% Scientist
Faculty of Mechanical and Automotive Engineering
Technology





Associate Professor Dr. Sudhakar Kumarasamy
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Advanced Biodiesel Production From Various Bioresources
And Wast Oil Blends
UMPSA World's Top 2% Scientist
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Professor Ts. Dr. Jolius Bin Gimbun
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012-6512908
Solid Catalyst System And Multiple Tubular Reactor
Designing For Biodiesel Production
Faculty of Chemical and Process Engineering
Technology





Professor Ts. Dr. Gaanty Pragas a/l Maniam
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Lipids From Nannochloropsis Sp. And Scenedesmus Sp.
For Lipid To Be Used As Feedstock In Biodiesel
Production
Faculty of Industrial Sciences and Technology

My Profile





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 2L Stirred Tank Bioreactor Faculty of Chemical and Process Engineering Technology





Associate Professor Dr. Wan Mohd Hafizuddin bin Wan Yussof hafizuddin@umpsa.edu.my 019-9851850
Analysis Of Mixing Behaviour In Oscillatory Baffles Reactor

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 Faculty of Chemical and Process Engineering Technology





Professor Ts. Dr. Sumaiya binti Zainal Abidin@ Murad sumaiya@umpsa.edu.my 019-5664177
Investigation On The Performance Of Tubular Flow Reactor On The Esterification Of Highly Acidified Oil Using Heterogeneous Catalyst
Faculty of Chemical and Process Engineering Technology







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 Faculty of Chemical and Process Engineering Technology

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 Faculty of Chemical and Process Engineering Technology**





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 **Faculty of Chemical and Process Engineering Technology**





Ts. Dr. Nur Hidayah binti Mat Yasin hidayahyassin@umpsa.edu.my 019-7391938 Immobilization Of Chlorella Vulgaris For Biomass Recovery And Biodiesel Production **Faculty of Chemical and Process Engineering Technology**





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 **Faculty of Industrial Sciences and Technology**







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 Faculty of Electrical and Electronics Engineering Technology





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 Faculty of Computing





Dr. Wan Norlinda Roshana binti Mohd Nawi roshana@umpsa.edu.my 0129985950 Integrated Planning And Management Model To Regulate CO² Emission Faculty of Industrial Sciences and Technology





Dr. Ahmad Syahiman bin Mohd Shah
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Adaptation Of Sequential Load Switching And Weather
Prediction Algorithm In Preventing Energy Shortage Due To
Unplanned Energy Utilization Of Photovoltaic-Based System
Faculty of Electrical and Electronics Engineering Technology







Muhammad Ammar bin Nik Mu'tasim
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Optimization Of Hybrid Flow Shop Scheduling To Minimizing
Machine Energy
Faculty of Mechanical and Automotive Engineering
Technology





Ir. Dr. Noor Zaihah binti Jamal
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010-9324517
Investigation of Barnacles Mating Optimizer (BMO) to Solve
the Overcurrent Relays Coordination Problem in Electrical
Power System
Faculty of Electrical and Electronics Engineering Technology





Ts. Muhammad Ikram bin Mohd Rashid
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019-7978595
Design And Development Of Battery Management System For
18650 Lithium-Ion Battery For Electric Vehicle
Faculty of Electrical and Electronics Engineering Technology





Associate Professor Dr. Mohd Herwan bin Sulaiman
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Optimization And Control Of Small Hydropower Plant
Operation
Faculty of Electrical and Electronics Engineering Technology





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) **Faculty of Electrical and Electronics Engineering Technology**





Ts. Roziah binti Zailan roziahz@umpsa.edu.my 09-4315958 Systematic Optimisation Modelling Of Sustainable Palm Oil Mill Based-Biomass Cogeneration Facility In The Eco-**Industrial Park** Faculty of Civil Engineering Technology **Faculty of Industrial Sciences and Technology**





Ir. Dr. Mohd Firdaus bin Hassan firdaus@umpsa.edu.my 0199243481 A Self-tuning Vibration Energy Harvester **Faculty of Mechanical and Automotive Engineering Technology**





Dr. Mohd Hazwan bin Yusof mohdhazwan@umpsa.edu.my 019-6043573 Enhancement Of High-temperature Compressed Gas Cooling Process Using Vortex Tube Through Geometrical Parameters Modification **Faculty of Mechanical and Automotive Engineering**



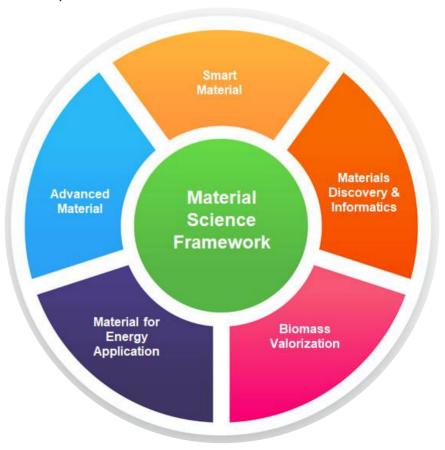


MATERIAL SCIENCES

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, including 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 **Faculty of Industrial Sciences and Technology**





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**

Faculty of Chemical and Process Engineering Technology





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) **Faculty of Industrial Sciences and Technology**



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 **Faculty of Chemical and Process Engineering Technology**

My Profile





Associate Professor Dr. Wan Mohd Hafizuddin bin Wan Yussof hafizuddin@umpsa.edu.my 019-9851850 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 Faculty of Chemical and Process Engineering Technology**

Faculty of Chemical and Process Engineering Technology





Associate Professor Ts. Dr. Mohamad Ashry bin Jusoh ashry@umpsa.edu.my 012-2425164 Carbon Black From Pyrolised Agricultural Wastes As **Electromagnetic Shielding Material Faculty of Industrial Sciences and Technology**



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 **Faculty of Chemical and Process Engineering Technology**





Ts. Dr. Suriyati binti Saleh suriyati@umpsa.edu.my 018-2281611 Development Of Torrefied Pellet From Palm Oil Waste For **Biofuel Production Faculty of Chemical and Process Engineering Technology**





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 **Faculty of Industrial Sciences and Technology**





Ts. Dr. Fatin Zafirah binti Mansur fatinzafirah@umpsa.edu.my 018-2281611 Biomass-Based Carbon Aerogel From Oil Palm Waste Materials For Thermal Insulation Properties **Faculty of Civil Engineering Technology**





Dr. Rasidi bin Roslan rasidi@umpsa.edu.my 013-3104007 Fast And Effective Production Of Nanocellulose From **Biomass Faculty of Industrial Sciences and Technology**





Dr. Mazni binti Ismail mazni@umpsa.edu.my 013-9593067 Utilization Of Food Waste As Biomass Energy Source **Faculty of Chemical and Process Engineering Technology**





Ts. Shahril bin Mohamad shahrilm@umpsa.edu.my 0179485598 Production Of Ferulic Acid From Banana Stem Waste **Faculty of Chemical and Process Engineering Technology**





Assosiate Professor Dr. Sudhakar Kumarasamy sudhakar@umpsa.edu.my 019-7308925 Sustainable Assessment of Biofuel Production From Marine Macroalgae UMPSA World's Top 2% Scientist **Faculty of Mechanical and Automotive Engineering Technology**





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 **Faculty of Industrial Sciences and Technology**





Professor Ts. Dr. Kamal bin Yusoh kamal@umpsa.edu.my 019-9339541 Surface Modification Of Graphene Nanofillers Through Controlled Radical Polymerization To Improve The Interaction In Polylactic Acid (PLA) -Graphene Nanocomposites **Faculty of Chemical and Process Engineering Technology**





Professor Ts. Dr. Gaanty Pragas a/I Maniam gaanty@umpsa.edu.my 016-4110236 Industrial Waste-Adsorbents for Removing Steryl Glucosides in Palm-Based Biodiesel **Faculty of Industrial Sciences and Technology**





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 **Faculty of Industrial Sciences and Technology**







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



Faculty of Chemical and Process Engineering Technology



Associate Professor Dr. Fatmawati binti Adam fatmawati@umpsa.edu.my Mechanism And Molecular Interaction Of Carrageenan In The Crosslinking Of Cellulose Nanocrystals Biocomposite **Faculty of Chemical and Process Engineering Technology**





Ts. 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



Faculty of Industrial Sciences and Technology



Ts. Dr. Siti Noor Hidayah binti Mustapha snhidayah@umpsa.edu.my 018-6682884 Characterization And Optimization Of Hydrophobicity And Thermo-physical Properties Of Fluorinated Palm Oil-based Polyurethane **Faculty of Industrial Sciences and Technology**







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
Faculty of Mechanical and Automotive Engineering
Technology

Faculty of Industrial Sciences and Technology





Dr. Rodziah binti Nazlan
rodziah@umpsa.edu.my
012-2394504
Materials Formulation And Processing Design For Magnetic
Ferrites Cores
Faculty of Industrial Sciences and Technology





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
Faculty of Manufacturing and Mechatronic Engineering
Technology







Ts. 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 **Faculty of Industrial Sciences and Technology**



Dr. Wan Norfazilah binti Wan Ismail norfazilah@umpsa.edu.my Antimicrobials Encapsulated Nanoparticles For Socks To **Prevent Bromodosis Faculty of Industrial Sciences and Technology**





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 **Faculty of Industrial Sciences and Technology**





Associate Professor Ts. Dr. Khairunisa binti Muthusamy khairunisa@umpsa.edu.my 017-8426549 Elucidation of Kinetic Reactivity Parameters of Chemically Treated Spent Garnet Powder In Seashell Ash Blended Cement Environment **Faculty of Civil Engineering Technology**





Ts. 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 **Faculty of Industrial Sciences and Technology**



Dr. Wan Norfazilah binti Wan Ismail norfazilah@umpsa.edu.my Antimicrobials Encapsulated Nanoparticles For Socks To **Prevent Bromodosis Faculty of Industrial Sciences and Technology**





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 **Faculty of Industrial Sciences and Technology**





Associate Professor Ts. Dr. Khairunisa binti Muthusamy khairunisa@umpsa.edu.my 017-8426549 Elucidation of Kinetic Reactivity Parameters of Chemically Treated Spent Garnet Powder In Seashell Ash Blended Cement Environment **Faculty of Civil Engineering Technology**





Ts. Dr. Nur Farhayu binti Ariffin farhayu@umpsa.edu.my 013-7003769 Investigation on The Materials Characteristic, Mix Design, Fresh and Hardened Properties of Lightweight Concrete Using Coal Bottom Ash



Faculty of Civil Engineering Technology



Ts. Dr. Rahimah binti Embong rahimahe@umpsa.edu.my 019-5704657 The Early-Hydration Mechanism And Kinetic Reactions Of Blended Cement Containing Biochar-Palm Kernel Shell (B-Pks) And Pre-Hydrated Slurry Faculty of Civil Engineering Technology





Dr. Aizat bin Alias aizat@umpsa.edu.my 019-7625863 Formulations of cementitious materials composition for 3D concrete print **Faculty of Civil Engineering Technology**



Dr. Khairul Anuar bin Shahid khairulanuars@umpsa.edu.my 016-2326302 Coal Bottom Ash Concrete: Mechanical Properties And Cracking Mechanism Of Concrete Subjected To Cyclic Load Test **Faculty of Civil Engineering Technology**





Associate Professor Ir. Ts. Dr. Devarajan a/l Ramasamy deva@umpsa.edu.my 016-7580946 Investigation Of MXene/Gr As Additive Lubricant For Piston Ring-cylinder Liner Material **Faculty of Mechanical and Automotive Engineering Technology**





Associate Professor Ts. Dr. Mohd Azrul Hisham bin Mohd Adib azrul@umpsa.edu.my 019-9439287 Development of the Functional Heart Model using Soft Materials for CardioVASS Device **Faculty of Mechanical and Automotive Engineering Technology**





Ts. Dr. Ros Azlinawati binti Ramli azlinawati@umpsa.edu.my 014-9664254 The Role Of Reactive Functionalities And Crosslinking Mechanism Toward Multiple Hydrogen Bonding Of Hydrogel Reinforced By Cellulose Nanocrystal **Faculty of Industrial Sciences and Technology**





Ts. Dr. Nurjannah binti Salim njannah@umpsa.edu.my 012-5077116 Mechanical And Thermal Properties Studies Of Hybrid Durian Skin Fiber (DSF) And Palm Kernel Shell Fiber (PKS) Based Polyester Composite For Hot Water Pipes Application **Faculty of Industrial Sciences and Technology**







ChM. Ts. Dr. Yuen Mei Lian yuenm@umpsa.edu.my 012-3520297 Synthesis and Application of Nanoparticle in Wastewater Treatment

Faculty Of Industrial Sciences And Technology





Associate Professor Dr. Azrina binti Abd Aziz azrinaaziz@umpsa.edu.my 010-3932711 Machine Learning Modelling and Prediction of Photocatalytic Co² Reduction Reactivity and Mechanism from MXenes Quantum Dots-Graphitic Carbon Nitride Photocatalyst **Faculty of Civil Engineering Technology**





Associate Professor Dr. Doh Shu Ing dohsi@umpsa.edu.my 019-8129298 Elucidation of Concrete Sleeper Using Steel Slag for Railway Application. **Faculty of Civil Engineering Technology**





Ts. Dr. Youventharan a/I Duraisamy youventharan@umpsa.edu.my 012-2293579 The Performance Of Rail Track Ballast Incorporating Waste Materials In Reducing Damages Faculty Of Civil Engineering Technology





Ts. Dr. Nurmunira binti Muhamma@atan muniramuhammad@umpsa.edu.my 018-9009926 Development Of Gypsum Soil Additive For Stabilization Of Problematic Soil In East Coast Malaysia **Faculty Of Civil Engineering Technology**





Associate Professor Ts. Dr. Khairil Azman bin Masri khairilazman@umpsa.edu.my 011-19346422 Microstructure Interaction Mechanism On Blending Process Of Nanomaterial With Asphalt Binder That Governs The Morphology Rheology, And Mechanical Properties Of Nanomodified Cold Mix Asphalt Mixture





Associate Professor Dr. Januar Parlaungan Siregar januar@umpsa.edu.my 011-27009237 The Incorporation Of Natural Fibers And Fillers Reinforced **Polymer Composites Faculty of Mechanical and Automotive Engineering Technology**

Faculty Of Civil Engineering Technology





Ir. Dr. Mohd Rashidi bin Maarof mrashidi@umpsa.edu.my 013-3203462 Ni-Resist materials for elevated temperature application **Faculty of Mechanical and Automotive Engineering Technology**







Ts. Dr. Luqman Hakim bin Ahmad Shah lugmanhakim@umpsa.edu.my 010-7776292 Elucidation Of Intermetallic Compound Formation Mechanism In Aluminium-magnesium Dissimilar Friction Stir Welding **Faculty of Mechanical and Automotive Engineering Technology**





Technology

Ts. Dr. Mas Ayu binti Hassan masszee@umpsa.edu.my 012-8070525 Synthesis And Characterization Of Hydroxyapatite/ Magnesium Coating Performances On Co-Cr-Mo Alloy For Implant Screw Application **Faculty of Manufacturing and Mechatronic Engineering**





Dr. Nur Zalikha binti Khalil nurzalikhak@umpsa.edu.my 010-4046249 Synergistic Strengthening Mechanism In Adhesive Joining With Hybrid Nanoparticles **Faculty of Mechanical and Automotive Engineering** Technology



My Profile



Dr. Mohd Shamil bin Shaari shamil@umpsa.edu.my 011-14608525 Computational Approach on Predicting Coalescences Embedded Cracks for AlSi10Mg Metallic Additive Manufacturing Materials **Faculty of Mechanical and Automotive Engineering Technology**







Technology

Dr. Aiman bin Mohd Halil aimanmh@umpsa.edu.my 0137654326 Development Of Super-Hydrophobic And Superhydrophilic Surfaces On Ti Alloy And Ss Using Laser Surface Texturing Technique **Faculty of Mechanical and Automotive Engineering**





Profesor Madya Ir. Dr Asnul Hadi bin Ahmad asnul@umpsa.edu.my 09-4316224 Explication Of Semisolid Metal Billet Microstructure By Nucleatio Development Approach Using Grain Refining Mechanisms For **Automotive Part Components Faculty of Mechanical and Automotive Engineering Technology**





Ts. Rosdi bin Daud rosdidaud@umpsa.edu.my 012-9776525 Parameter Optimisation of Cannulated Pedicle Screw and Osteoporosis Bones Fixation through Finite Element Method **Faculty of Mechanical and Automotive Engineering** Technology





Ts. Dr. Nurhafizah binti Abu Talip @ Yusof hafizahs@umpsa.edu.my 019-4141308 Elucidation of Morphological Structure and Elemental Composition for Novel Dielectric Material Formulation Based on Ananas Cosmosus Cellulose Fiber Faculty of Electrical & Electronics Engineering Technology







Dr. Noor Zirwatul Ahlam binti Naharuddin zirwatul@umpsa.edu.my 017-6189865 Green Synthesis of Gold Nanoparticles using Edible Mushroom Extract for Passive Mode Locked Fiber Laser Faculty of Electrical and Electronics Engineering Technology





Dr. Mohamad Shaiful bin Abdul karim mshaiful@umpsa.edu.my 011-10564155 Formulation of a Novel Environmental Friendly Microwave Material Based on Ananas Comosus Waste as a Platform of Biomedical Application for Liver Cancer Treatment Faculty of Electrical and Electronics Engineering Technology

My Profile



Dr. Syamimi Mardiah binti Shaharum syamimimardiah@umpsa.edu.my 017-3573575 Development of Substrate Integrated Waveguide Horn Antenna With Optimum Scattering and Dielectric Parameters for Material Characterization.

Faculty of Electrical and Electronics Engineering Technology

My Profile



Professor Ir. Ts. Dr. Kumaran a/I Kadirgama

Kumaran@umpsa.edu.my 012-6325043

Elucidate The Interaction Mechanism Of Supercapacitor/Batteries On Activated Carbon Dot Mxene

Composite As Electrode Material For High-efficiency Energy Storage

UMPSA World's Top 2% Scientist

Faculty of Mechanical and Automotive Engineering Technology







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 **Faculty Of Industrial Sciences And Technology**





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 Faculty of Mechanical and Automotive Engineering Technology





Professor Dr. Jose Rajan rjose@umpsa.edu.my 016-9620388 A Development Of Ceramic Reinforced Porous Carbon-based High-performance Electrode Paste For Supercapacitor **Application** UMPSA World's Top 2% Scientist **Faculty Of Industrial Sciences And Technology**





Professor Ir. Ts. Dr. Mahendran a/I Samykano mahendran@umpsa.edu.my 016-6817799 Crystalline Surface Modification Evaluation Of Salt Hydrate Phase Change Material For Improved Thermal & Chemical Stability Utilizing Nanoparticles And Nucleation Agent UMPSA World's Top 2% Scientist



Faculty of Mechanical and Automotive Engineering Technology



ChM Dr. Izan Izwan bin Misnon iezwan@umpsa.edu.my 013-9221487 UMPCAP: Supercapacitor From Local Activated Carbon UMPSA World's Top 2% Scientist (2023) **Faculty Of Industrial Sciences And Technology**





Associate Professor Ts. Dr. Muhamad bin Mat Noor muhamad@umpsa.edu.my 013-9841610 Enhancing Thermal Energy Storage Of Pvt System Using Modified Carbon-based Nano Phase Change Materials For Rural **Applications**

Faculty of Mechanical and Automotive Engineering

Technology





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 **Faculty Of Industrial Sciences And Technology**





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 Faculty of Chemical and Process Engineering Technology**





Associate Professor Ts. Dr. Saifful Kamaluddin bin Muzakir @ Lokman saifful@umpsa.edu.my 019-2763844 Unraveling The Correlation Between Multiple Exciton

Generation In Germanium And Photovoltaic Conversion Efficiency

Faculty Of Industrial Sciences And Technology



Dr. Noor Yahida binti Yahya nooryahida@umpsa.edu.my 017-7695911 Mechanism Studies Of Iron-rich Based Biochar Properties In Sequestering Product Inhibition For Anaerobic Digestion Stability Of Food Waste **Faculty of Civil Engineering Technology**





My Profile





Associate Professor Dr. Syarifah Nur Agida binti Syed Ahmad aqida@umpsa.edu.my 0175807746 Atomic Diffusion In Superhydrophobic Laser Modified Glass Surface For Light Transmission Properties **Faculty of Mechanical and Automotive Engineering Technology**





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 Faculty of Chemical and Process Engineering Technology



My Profile



Dr. Rasidi bin Roslan rasidi@umpsa.edu.my 013-3104007 Development Of UV-curable Lignin-based Coating Aerosol Prototype With Cellulose Nanocrystal As Self-healing Accelerator For Automotive Application **Faculty Of Industrial Sciences And Technology**

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 **Faculty of Mechanical and Automotive Engineering Technology**







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 **Faculty of Manufacturing and Mechatronic Engineering Technology**





Ts. Dr. Shamsul bin Zakaria shamsulzakaria@umpsa.edu.my 012-2934375 **Evaluation Of Electromechanical Properties Of Stretch** Sensor From Dielectric Elastomer **Faculty Of Industrial Sciences And Technology**





Associate Professor Dr. Ramadhansyah Putra Jaya ramadhansyah@umpsa.edu.my 012-3994214 A Novel of Hybrid Asphalt as Modified Binder And Mixture UMPSA World's Top 2% Scientist Faculty Of Civil Engineering Technology

My Profile





Associate Professor Ts. Dr. Khairil Azman bin Masri khairilazman@umpsa.edu.my 011-19346422 Pilot Study Of Cold Mix Asphalt **Faculty Of Civil Engineering Technology**

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 **Faculty Of Computing**





Professor Dr. Jose Rajan rjose@umpsa.edu.my 016-9620388 Materials 4.0 @ ASEAN UMPSA World's Top 2% Scientist **Faculty Of Industrial Sciences And Technology**





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 **Faculty of Chemical and Process Engineering Technology**



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 **Faculty Of Computing**







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 **Faculty of Chemical and Process Engineering Technology**





Ts. Dr. Noorhuzaimi @ Karimah binti Mohd Noor nhuzaimi@ump.edu.my 013-9844432 A Machine Learning Based Keyphrase Extraction Technique From Academic Literature For Implementing Material 4.0 @ **ASEAN Faculty Of Computing**





Dr. Khairiah binti Mohd Mokhtar khairiahmm@umpsa.edu.my 017-6806917 Ignition Sensitivity And Explosion Characteristics of Palm Kernel Shell **Faculty of Industrial Sciences and Technology**



My Profile



Associate Professor Dr. Nadzirah binti Mohd Mokhtar nadzirah@umpsa.edu.my 012-6121045 Surface Modification of PVDF/clay Nanocomposite Membrane using Teflon AF2400 Super Hydrophobic Coating Solution for Membrane Distillation Application **Faculty Of Civil Engineering Technology**





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

Faculty of Industrial Sciences and Technology





Dr. Lee Chin Mei lcmei@umpsa.edu.my 019-7443648 Structure-function Elucidation Of Indigenous Microbial Consortium In Rice Straw Degradation Via Integrated Analysis Of Metagenomic **Faculty of Industrial Sciences and Technology**





Ts. Dr. Hajar Fauzan bin Ahmad fauzanahmad@umpsa.edu.my 013-8160272 Elucidating The Role Of The Gut Mycobiome And Metabolomes As Putative Markers For The Prediction Of Colorectal Cancer Pathogenesis Faculty of Industrial Sciences and Technology





Ts. 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 **Faculty of Industrial Sciences and Technology**





Dr. Shariza binti Jamek sharizaj@umpsa.edu.my 0196993107 Analysis Of Microbial Communities And Diversity In Malaysian Fermented Foods Using Metagenomic Approach **Faculty of Industrial Sciences and Technology**





Dr Noor Suhana binti Adzahar nsuhana@umpsa.edu.my 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 **Faculty of Industrial Sciences and Technology**





Mohd Hairul bin Ab Rahim mhairul@umpsa.edu.my 012-3220874 Molecular Characterization Of Fragrance-Related Transcripts In Benzenoid/Phenylpropanoid Pathway Of Vanda Mimi Palmer (Fragrant-Orchid) **Faculty of Industrial Sciences and Technology**





Associate Professor Ts. 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 **Faculty of Chemical and Process Engineering Technology**





Ts. Dr. Nasratun binti Masngut nasratun@umpsa.edu.my 012-3041935 Growth Kinetic And Microbial Dynamics Between Indigenous Microbes For Acetic Acid Production **Faculty of Chemical and Process Engineering Technology**

My Profile





Dr. Nazira binti Mahmud nazira@umpsa.edu.my 013-4270056 Elucidation Of The Effect Of Biosurfactant In Sequential Fungal And Hydrothermal Pre-treatment Of Lignocellulosic Waste For Sugar Recovery **Faculty of Industrial Sciences and Technology**

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 **Faculty of Industrial Sciences and Technology**





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





Associate Professor Dr. Hazrulrizawati bt Abd Hamid hazrulrizawati@umpsa.edu.my 019-7778603 Fermentation Mechanism Study Of Rambutan (Nephelium Lappaceum) And Pulasan (Nephelium Mutabile) **Faculty of Industrial Sciences and Technology**





Associate Professor Dr. Tan Suat Hian tshian@umpsa.edu.my 018-2779888 Pro-Golive: Mixed Starter Inoculum Powder **Faculty of Industrial Sciences and Technology**





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 **Faculty of Industrial Sciences and Technology**





Dr. Nurul 'Azyyati binti Sabri azyyatis@umpsa.edu.my 012-6554163 Evaluation Of Antibiotics And Antibiotic Resistance Genes In Wastewater Treatment Plant **Faculty of Industrial Sciences and Technology**





Ts. Dr. Nasratun binti Masngut nasratun@umpsa.edu.my 012-3041935 Profile study of microbial acetic acid production from pineapple peel waste **Faculty of Chemical and Process Engineering Technology**







Dr. Lee Chin Mei Icmei@umpsa.edu.my 019-7443648 Isolation Of Cellulolytic Microorganisms For Rice Straw Degradation **Faculty of Industrial Sciences and Technology**





Ts. Dr. Nurmunira binti Muhammad @ Atan muniramuhammad@umpsa.edu.my 018-9009926 Deciphering Peat Soil Stabilization: Mg-rich Synthetic Gypsum Application Facilitating Microbially Induced Calcium Carbonate Precipitation (MICP) **Faculty of Civil Engineering Technology**





Associate Professor Dr. Tan Suat Hian tshian@umpsa.edu.my 018-2779888 Mass Propagation On Pisang Lang And Pisang Tanduk **Faculty of Industrial Sciences and Technology**





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 **Faculty of Industrial Sciences and Technology**





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 **Faculty of Industrial Sciences and Technology**







Ts. Muhammad Adam Lee bin Abdullah adamlee@umpsa.edu.my 019-4995477 Investigation Of The Roles Of Cutaneous Papillomaviruses Oncoproteins In Cellular Transformation **Faculty of Industrial Sciences and Technology**





Dr. Ahmad Mahfuz bin Gazali mahfuz@umpsa.edu.my 013-6399697 Culture of human immunological cells Human Type 1 diabetes **Faculty of Industrial Sciences and Technology**



Associate Professor Dr. Abdul Syukor bin Abd. Razak syukor@umpsa.edu.my 016-9211143 Oil Palm Mesocrap (OPM) and Empty Fruit Bunch (EFB) Mixture as a Raw Material of Artificial Bait to Control Subterranean Termites **Faculty of Civil Engineering Technology**



My Profile



Dr. Rosdiyana bt Samad rosdiyana@umpsa.edu.my 017-2828008 Development of a Machine Vision System for Oil Palm Fruits Grading

Faculty of Electrical and Electronics Engineering Technology

My Profile





Dr. Nor Adila binti Mhd Omar nadila@umpsa.edu.my 012-5754767 Evaluation of nutritive and non-nutritive sweeteners ratio intake on inflammation and gut microbiota in a rat model. **Faculty of Industrial Sciences and Technology**

My Profile





Professor Datin Ts. Dr. Mimi Sakinah binti Abdul Munaim mimi@umpsa.edu.my 019-9221475 Novel Formulation Of Anti-Tyrosinase Face Serum Using A Novel Plant Extract

My Profile



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 **Faculty of Industrial Sciences and Technology**





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 Faculty of Industrial Sciences and Technology**





Dr. Shariza binti Jamek sharizaj@umpsa.edu.my 019-6993107 Kinetic Studies On Transfructosylation By Fos-Producing Enzymes Isolated From Fruit Plantation **Faculty of Industrial Sciences and Technology**





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

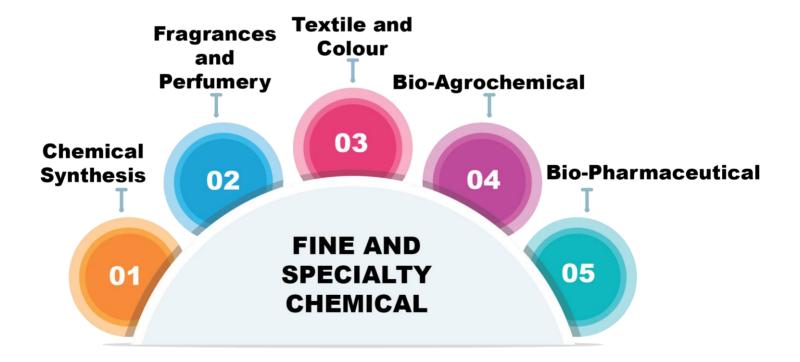




FINE AND SPECIALTY CHEMICAL

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 pharmaceuticals. agrochemicals. electronics. automotive. cosmetics and construction. Five components are listed under fine and specialty chemicals focus areas at UMP. 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 **Faculty of Industrial Sciences and Technology**





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 **Faculty of Chemical and Process Engineering Technology**



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 Faculty of Chemical and Process Engineering Technology





Associate Professor Dr. Nurul Aini binti Mohamed Razali ainirazali@umpsa.edu.my 019-7828204 Synthesis And Characterization Of Metal Supported Sba-15 Nanacatalyst For Conversion Of Carbon Dioxide To **Fine Chemicals Faculty of Chemical and Process Engineering Technology**







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 **Faculty of Chemical and Process Engineering Technology**





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 Faculty of Chemical and Process Engineering Technology





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 Faculty of Industrial Sciences and Technology





Associate Professor Ts. Dr. Nurul Aini binti Mohd Azman ainiazman@umpsa.edu.my 013-3330766 Characterization Of Semi-refined Carrageenan (SRC) Based Film Incorporated With A- Tocopherol **Faculty of Chemical and Process Engineering Technology**





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 **Faculty of Industrial Sciences and Technology**





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 **Faculty of Chemical and Process Engineering Technology**





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





Dr. Siti Umairah binti Mokhtar umairah@umpsa.edu.my 016-7025031 Synthesis and development of natural deep eutectic solvents (NADES) as green extraction solvents for medicinal plant **Faculty of Industrial Sciences and Technology**







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**





Associate Professor Ir. Dr Norazwina binti Zainol azwina@umpsa.edu.my 019-2719331 Essential Oil Production From Patchouli (Pogostemon) Cablin And Waste Recovery **Faculty of Chemical and Process Engineering Technology**





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 **Faculty of Industrial Sciences and Technology**

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 **Faculty of Mechanical and Automotive Engineering Technology**





Associate Professor Dr. Muhammad Sharfi bin Najib sharfi@umpsa.edu.my 019-3894833 A Method Of Determining Grade Of Agarwood At Ambient **Temperature Faculty of Electrical and Electronics Engineering Technology**





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 **Faculty of Industrial Sciences and Technology**





Associate Professor Dr. Hazrulrizawati binti Abd Hamid hazrulrizawati@umpsa.edu.my 019-7778603 Production Of Aroma Compounds By Degradation Of Carotenoid From Crude Oil **Faculty of Industrial Sciences and Technology**





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 **Faculty of Chemical and Process Engineering Technology**





Dr. Mohd Fadhlizil Fasihi bin Mohd Aluwi fasihi@umpsa.edu.my 012-9661942 Evaluation Of In Silico And Chemopreventive Effects On Breast Cancer Cell Lines Of Novel Flavonoid Hybrid Of Usnic Acid Derivatives **Faculty of Industrial Sciences and Technology**





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 **Faculty of Chemical and Process Engineering Technology**





Associate Professor Ts. Dr. Siti Kholijah binti Abdul Mudalip Kholijah@umpsa.edu.my 012-5662739 Crystallization Of Pharmaceutical Compound Faculty of Chemical and Process Engineering Technology





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 **Faculty of Mechanical and Automotive Engineering Technology**





Associate Professor Dr. Fatmawati binti Adam fatma@umpsa.edu.my 012-6377745 Polymorphism Of Pharmaceutical Compound: 2,6-Dihydroxybenzoic Acid Case Study **Faculty of Chemical and Process Engineering Technology**





Associate Professor Dr Hazrulrizawati bt Abd Hamid hazrulrizawati@umpsa.edu.my 019-7778603 Identification Of Encapsulated Phenolic Compounds From Selected Malaysian Plants By A Combination Of Metabolite **Profiling And Chemometrics** Faculty of Industrial Sciences and Technology

My Profile



Associate Professor Dr. Nina Suhaity binti Azmi 012-7980497 nina@umpsa.edu.my Kleva Showcase Farm **Faculty of Industrial Sciences and Technology**





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 Faculty of Chemical and Process Engineering Technology**





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) **Faculty of Chemical and Process Engineering Technology**





Dr. Siti Hajar Noor binti Shaarani hajarnoor@umpsa.edu.my 017-5174452 Isolation And Characterization Of Biodegradable Genes From Municipal Solid Waste **Faculty of Chemical and Process Engineering Technology**





Waste

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



Faculty of Chemical and Process Engineering Technology



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)



Faculty of Chemical and Process Engineering Technology



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 Faculty of Industrial Sciences and Technology**



Dr. Amiril Sahab bin Abdul Sani amiril@umpsa.edu.my 013-7719973 Elucidating The Chip Formation Processes of Aisi 316l Stainless Steel Using a Quick-Stop Device During Near-Dry Machining With Modified Palm Oil-Based Metalworking Fluids Faculty of Manufacturing and Mechatronic Engineering **Technology**





Dr. Wan Norfazilah binti Wan Ismail norfazilah@umpsa.edu.my 013-7318645 Synthesis and Fabrication of Antibacterial Nanoparticles on Fabric to Prevent Odour **Faculty of Industrial Sciences and Technology**

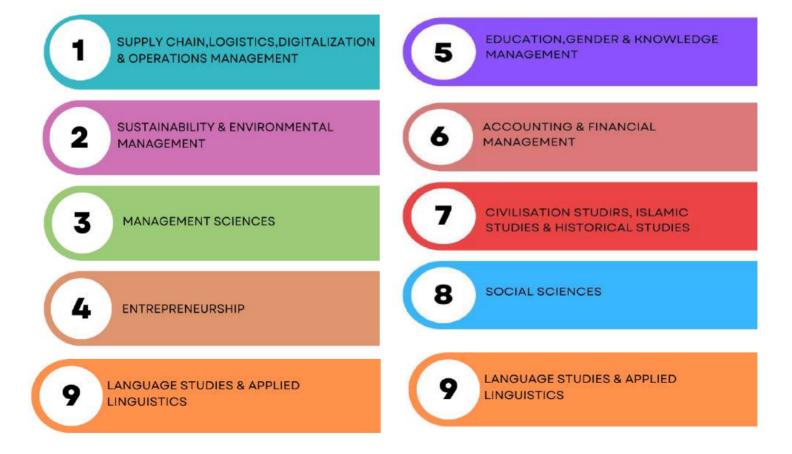






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Professor Dr. Yudi Fernando vudi@umpsa.edu.my 019-5718008 2RELOGCARCHAIN Using Blockchain Technology For Carbon Footprint Tracking And Monitoring UMPSA World's Top 2% Scientist **Faculty of Industrial Management**





Associate Professor Dr. Cheng Jack Kie jackkie@umpsa.edu.my 012-2666053 A Hybrid Simulation Model to Evaluate the Performance of Lean Manufacturing Implementation **Faculty of Industrial Management**





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 **Faculty of Computing**





Ir. Ts. Dr. Hj. Saffuan bin Wan Ahmad saffuan@umpsa.edu.my 0137481984 Investigating the Root Causes of Effective Enforcement of the Erosion and Sediment Control Plan in Construction **Projects Faculty of Civil Engineering Technology**







Associate Professor Dr. Fazeeda bt. Mohamad fazeedamohamad@umpsa.edu.my 013-7031224 Logistics-related Knowledge Process Capabilities In Malaysian Courier Service Industries. **Faculty of Industrial Management**





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 **Faculty of Civil Engineering Technology**





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



Associate Professor Ts. Dr. Abdul Rahimi bin Abdul Rahman arahimirahman@umpsa.edu.my 011-14246854 The Development Trade-Level Productivity Measuring **Tool For Building Construction Projects Faculty of Civil Engineering Technology**





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Associate Professor 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

Faculty of Industrial Management



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



Dr. 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 **Faculty of Manufacturing and Mechatronic Engineering Technology**

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Professor Dr. Yudi Fernando yudi@umpsa.edu.my 019-5718008 Interventions To Enhance Fishermen Value Chain Towards Sustainability In Kuala Pahang UMPSA World's Top 2% Scientist **Faculty of Industrial Management**





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My Profile



Ts. Dr. Mohammad Adam bin Adman adamadman@umpsa.edu.my 019-3490190 Geospatial Analysis Of Indoor Environment Quality And Sick Building Syndrome Among Work-From-Home Workers **Faculty of Civil Engineering Technology**

My Profile





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

My Profile



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My Profile



Associate Professor Dr. Cheng Jack Kie jackkie@umpsa.edu.my 012-2666053 Development of a System Dynamic Model to Assess the Effectiveness of Intervention Strategies in Responding to COVID-19 Pandemic in Malaysia. **Faculty of Industrial Management**

My Profile





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Wan Khairul Anuar bin Wan Abd Manan anuar@umpsa.edu.my 019-9811069 The Effect Of Entrepreneurship Addiction On MentalHealth Among Habitual Entrepreneurs **Faculty of Industrial Management**

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Centre of Mathematical Sciences







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. **Faculty of Industrial Management**

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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 **Centre for Modern Languages**

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Associate Professor Dr. Puteri Fadzline binti Muhamad **Tamyez** fadzline@umpsa.edu.my 012-6138147 Formulation Of Slow Learners Cognitive Development Model Through Playground Equipment Design **Faculty of Industrial Management**

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Associate Professor Dr. Nik Hafizoah binti 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 **Centre For Modern Languages**

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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 **Centre For Human Sciences**

My Profile





Associate Professor Dr. Cheng Jack Kie jackkie@umpsa.edu.my 012-2666053 A New System Dynamics Model to Assess the Interconnectivity and Interrelationship Between Different Knowledge Areas in Project Management Body of Knowledge. **Faculty of Industrial Management**



Ts. Dr. Lee Khai Loon leekhailoon@umpsa.edu.my 012-4731081 A Cross Industry and Education Study for Professional Development in Malaysia. **Faculty of Industrial Management**





Dr. Wan Norfazilah binti Wan Ismail norfazilah@umpsa.edu.my 012-4731081 Assessing the Effectiveness of Laboratory Quality Management Learning Through a Board Game-Based Approach. **Faculty of Industrial Sciences and Technology**





Dr. Khairiah binti Mohd Mokhtar khairiahmm@umpsa.edu.my 017-6806917 Nurturing chemical safety management for laboratory personnel. **Faculty of Industrial Sciences and Technology**







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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? **Faculty of Industrial Management**





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. **Faculty of Industrial Management**





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 **Faculty of Industrial Management**

My Profile



Dr. Noraina Mazuin binti Sapuan noraina@umpsa.edu.my 010-6550312 The Integration Of Digital Financial Capabilities And FINTECH Among Micro-Entrepreneur In The East Coast Malaysia. **Faculty of Industrial Management**

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.

Centre for Human Sciences





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 **Centre for Human Sciences**







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 Centre for Human Sciences

My Profile





Dr. Mohamad Hilmi bin Mat Said hilmi@umpsa.edu.my 013-928774 Kajian Keabsahan Batu Nisan Permatang Pasir Bukti Kedatangan Terawal Islam. **Centre for Human Sciences**

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My Profile





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My Profile





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Dr. Hasnah binti Hussiin hasnah@umpsa.edu.my 018-3936064 Negeri Sabah : Isu-Isu Mengenai Kedudukan Dan Kedaulatan Dalam Persekutuan Malaysia Centre For Human Sciences







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 and Civilization Centre for Human Sciences**

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My Profile





Dr. Anita binti Abdul Rani anita@umpsa.edu.my 019-9875627 Kajian Tinjauan Kefahaman Akidah Ahli Sunnah Wal Jamaah Dalam Kalangan Mahasiswa Institusi Pengajian Tinggi (IPT) Di Negeri Pahang **Centre For Human Sciences**

My Profile



Dr. Asar bin Abdul Karim asar@umpsa.edu.my 013-9231974 Modul Pendigitilan Jāwī Dan Transliterasi Bahasa Arab Di Kalangan Pelajar Dan Pensyarah UNIPSAS. **Centre For Human Sciences**

My Profile





Associate Professor Dr. Rashidi bin Abbas rashidi@umpsa.edu.my 019-6562783 Kajian Pencapaian Pembelajaran Tahfiz Dan Hubungan Dengan Kemudahan Infrastruktur Maahad Tahfiz Di Negeri Pahang Centre For Human Sciences







Dr. Mohd Suhardi bin Mat Jusoh suhardi@umpsa.edu.my 012-9520530 Pemerkasaan Program Pengimarahan Masjid Negeri Pulau Pinang Dalam Pembangunan Islam Kontemporari Centre For Human Sciences

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Professor Dr. Muhammad Nubli bin Abdul Wahab nubli@umpsa.edu.mv 012-9683117 Pembangunan Dan Pengujian Program Latihan Pemulihan Dadah Berbantukan Latihan Spiritual Islam Dan Biofeedback Untuk Pengukuhan Kepulihan Orang Kena Pengawasan (OKP) **Centre For Human Sciences**





Professor Dr. Hasan bin Ahmad hasanahmad@umpsa.edu.my 019-9550139 Pembangunan 'Mental Model' Bagi Pengukuran Wasatiyah Dan Extremism Dalam Kalangan Umat Islam Di Malavsia. Centre For Human Sciences





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Faculty of Industrial Management



Dr. Mohamad Reeduan bin Mustapha reeduan@umpsa.edu.my 019-9522678 IR 4.0 Adoption: Challenges And Drivers Of Implementation For Micro And Small Enterprises (MSES) In Southeast Asia **Faculty of Industrial Management**

My Profile





Dr. Ruhil Amal binti Azmuddin ruhilamal@umpsa.edu.my 017-2242545 Impact of Health Literacy and Clinical Intervention on Periodontal Status of Patients with and at Risk of Diabetes Mellitus.





Centre For Modern Languages



Ahmad bin Ibrahim ahmadbi@umpsa.edu.my 09-4316669 Keunikan Zapin Dan Pantun Warisan Pahang. **Centre For Human Sciences**

My Profile



Dr. Ahmad Muhaimin bin Mohamad amuhaimin@umpsa.edu.my 019-9679043 Pembangunan Kerangka Kerja Program Sokongan Psikologi Dalam Talian (PSPDT). Centre For Human Sciences

My Profile





Dr. Mohd Rahimi bin Ramli rahimiramli@umpsa.edu.my 017-9061934 Pengaruh Sosialisasi Politik Terhadap Orientasi Dan Tingkah Laku Politik Mahasiswa Di Universiti Awam. **Centre For Human Sciences**

My Profile





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Dr. Munira binti Abdul Razak munira@umpsa.edu.my 012-3880277 Dasar & Pelan Tindakan Wanita Pahang 2022-2026 **Centre For Human Sciences**





Dr. Anita binti Abdul Rani anita@umpsa.edu.my 019-9875627 Hubungan Antara Kebersyukuran Dan Kesejahteraan Subjektif Pelajar B40 Di IPT Malaysia Melalui Perantara Ketahanan Diri **Centre For Human Sciences**

My Profile





Ahmad Fazullah bin Mohd Zainal Abdidin fazullah@umpsa.edu.my 0183610203 Emosi Manusia Dalam Menghadapi Situasi Tertentu Kehidupan: Analisis Tematik Dan Wacana Kritis Dari Sudut Psikologi Islam Dan Retorik Al-Quran **Centre For Human Sciences**

My Profile





Haslinda @ Robita binti Hashim haslinda@umpsa.edu.my 0122949091 Development And Validation Of Resilient Student Leadership Model For Malaysian University Students Centre For Human Sciences







Dr. Hadijah binti Ahmad hadijah@umpsa.edu.my 010-4327141 Institutional Transformation: A Leadership Perspectives From A High-Ranking Leader In The Private Higher Education Institution **Centre For Human Sciences**

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Dr. Fatmawati binti Latada fatma@umpsa.edu.my 019-2286379 Employing Project Oriented Problem Based Learning Module To Enhance Level Of Self-Esteem And Motivation To Transfer Training Among Institutionalized Orphans Around Kuantan **Centre For Human Sciences**

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Dr. Hasmadi bin Hassan hasmadi@umpsa.edu.my 012-7950285 Kesediaan E-Pembelajaran Dari Aspek Sikap, Literasi, Fasiliti Dan Akses Teknologi Dalam Kalangan Pelajar-Pelajar Sekolah Di Negeri Pahang **Centre For Human Sciences**







Ts. Dr. Azizan bin Ramli azizanramli@umpsa.edu.my 019-9881726 Program Latihan Penyelaras Dan Pembangunan Sistem Asas Keselamatan Dan Kesihatan Pekerjaan Di Sekolah-Sekolah Aliran Agama Di Negeri Pahang. **Faculty of Industrial Sciences and Technology**

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My Profile





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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.



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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. **Centre For Modern Languages**



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My Profile





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My Profile





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Developing a CEFR-informed English Language Competency Framework for Preschool Educators in the East Coast Economic Region







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Centre For Modern Languages



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Dr Mohamad Musab Azmat Ali mmusab@umpsa.edu.my 019-2064047 Developing a Module on the Awareness of Reproductive Health and HIV/ AIDS among Students of Higher Learning Institution Centre For Modern Languages

My Profile





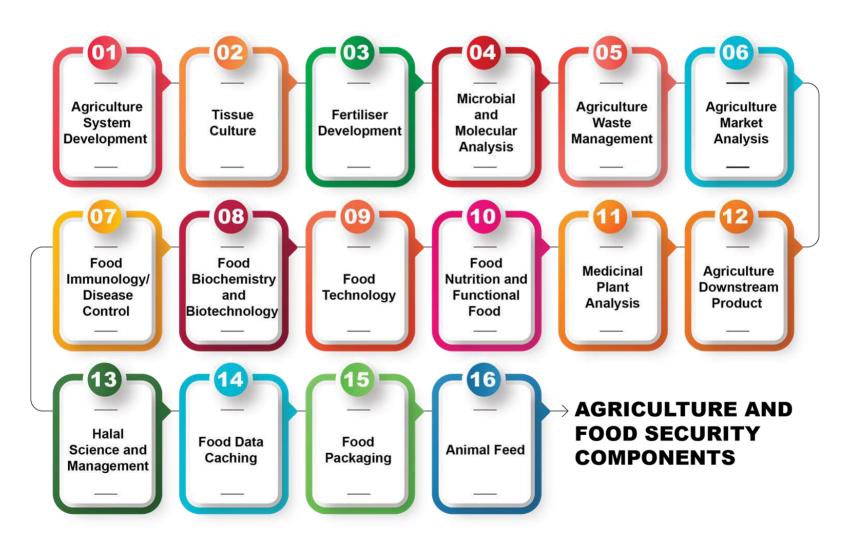
Dr Umi Kalson binti Masrom umikalsom@umpsa.edu.my 019-9899074 Enhancing Learning Experience with Interactive Content: Designing Job Application Skill Enhancement Activities Using Moodle H5P

Centre For Modern Languages



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 UMP 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 Potential Groundwater Assessment for Agriculture Field Irrigation Using Geo-Electrical Resistivity Method **Faculty of Civil Engineering Technology**





Associate Professor Ir. Dr. Ngien Su Kong nsukong@umpsa.edu.my 019-8243072 Formulation of a Baseline for Incorporation of Sewage Treatment Plant Effluent in Aquaponics System **Faculty of Civil Engineering Technology**





Associate Professor Ts. Dr. Roshahliza binti M Ramli roshahliza@umpsa.edu.my 012-2492703 IoT-Powered Solar Irrigation System for Oil-Palm Prenursery **Faculty of Electrical and Electronics Engineering Technology**





Dr. Nor Hanuni binti Ramli @ Said drhanuni@umpsa.edu.my 012-3024184 UMP Model Farm: Fertigation Economic Driven **Faculty of Chemical and Process Engineering Technology**





Dr. Erny Afiza binti Alias erny@umpsa.edu.my 011-10202303 Microbubbles Generator for Agriculture **Faculty of Mechanical and Automotive Engineering Technology**





Ts. Dr. Mohamed Reza Zalani bin Mohamed Suffian mdreza@umpsa.edu.my 0135424268 Automated Lock and Unlock System Device of Fruit Refrigerator for Grocery Sales **Faculty of Mechanical and Automotive Engineering Technology**





Ts. Dr. Rohana binti Abdul Karim rohanaak@umpsa.edu.my 013-9300982 Non-Destructive Test of Pineapple Maturity Using Vision System **Faculty of Electrical and Electronics Engineering Technology**







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 **Faculty of Mechanical and Automotive Engineering Technology**

My Profile





faizaljamlos@umpsa.edu.my 012-7001248 E-Lobster: Smart Water Quality System With Stream Data Analytics For Fresh Water Lobster Commercial Farming **Faculty of Electrical and Electronics Engineering Technology**

Professor Ir. Dr Mohd Faizal bin Jamlos







Associate Professor Ts. Dr. Roshahliza binti M Ramli roshahliza@umpsa.edu.my 012-2492703 Development Of Solar Operated Portable Water Pump For **Agriculture Activities Faculty of Electrical and Electronics Engineering Technology**

My Profile





Associate Professor Dr. Tan Suat Hian tshian@umpsa.edu.my 018-2779888 Mass Propagation on Pisang Lang and Pisang Tanduk **Faculty of Industrial Sciences and Technology**







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 **Faculty of Chemical and Process Engineering Technology**

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 + **Faculty of Industrial Sciences and Technology**





Ts. Dr. Ros Azlinawati binti Ramli azlinawati@umpsa.edu.my 014-9664254 Scaling Up Production Of Biodegradable Hydrogel/NPK In 50L Pilot Reactor For Agriculture Applications **Faculty of Industrial Sciences and Technology**





Dr. Noormazlinah binti Ahmad mazlinah@umpsa.edu.my 013-9832041 Hydroponics And Aquaponics with Aiot in Qatar (Haiat) **Faculty of Chemical and Process Engineering Technology**





Associate Professor 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 Faculty of Chemical and Process Engineering Technology**





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 **Faculty of Industrial Sciences and Technology**





Dr. Lee Chin Mei Icmei@umpsa.edu.my 019-7443648 Metagenomics Analysis of Microbial Community in a Palm Oil Mill Biogas Plant **Faculty of Industrial Sciences and Technology**





Dr. Siti Hajar Noor binti Shaarani hajarnoor@umpsa.edu.my 017-5174452 Transcriptome Profiling of Stevia Rebaudiana MS007 Revealed Genes Involved in Flower Development **Faculty of Chemical and Process Engineering Technology**

My Profile

Ts. 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. **Faculty of Industrial Sciences and Technology**







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) **Faculty of Civil Engineering Technology**





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





Ts. Dr. Nurzety Aqtar binti Ahmad Azuan aqtar@umpsa.edu.my 012-2840027 A Noble Knowledge Management Framework For Agriculture Industries In Malaysia **Faculty of Computing**





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







Associate Professor Dr. Aizi Nor Mazila binti Ramli aizinor@umpsa.edu.my 016-9210232 Ananaspro: Green Detergent From Pineapple **Byproducts Faculty of Industrial Sciences and Technology**





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 Faculty of Chemical and Process Engineering Technology





Professor Dr. Saiful Nizam bin Tajuddin saifulnizam@umpsa.edu.my 019-9894742 Development Of Cocoa Leaves As Potential Source Of Health Beverage (Green Tea) **Faculty of Industrial Sciences and Technology**

My Profile



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 Faculty of Chemical and Process Engineering Technology

Associate Professor Ts. Dr. Mior Ahmad Khushairi bin Mohd





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 **Faculty of Chemical and Process Engineering Technology**

My Profile





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 **Faculty of Chemical and Process Engineering Technology**

My Profile





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** Faculty of Chemical and Process Engineering Technology





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 **Faculty of Chemical and Process Engineering Technology**





Associate Professor Dr. Hazrulrizawati binti Abd Hamid hazrulrizawati@umpsa.edu.my 019-7778603 Formulation Of Microemulsion Containing C.Nutans Extract For Topical Antifungal Therapy Faculty of Industrial Sciences and Technology

My Profile



Associate Professor 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 Faculty of Chemical and Process Engineering Technology





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 Faculty of Industrial Sciences and Technology





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 **Faculty of Industrial Management**





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) Faculty of Chemical and Process Engineering Technology





Dr. Mohd Amir Shahlan bin Mohd Aspar amirs@umpsa.edu.my 0129940045 Identification on the Factors That Contribute to the Presence of Antibacterial Properties in Malaysian Kelulut, Tualang and Accia Honey Againts Wound Infectious Bacteria Faculty of Electrical and Electronics Engineering Technology







Dr. Siti Umairah binti Mokhtar umairah@umpsa.edu.my 016-7025031 Chemical profiling of ziziphus mauritiana leaves extract and study the structure characterization of new active compounds with its pharmacological activities **Faculty of Industrial Sciences and Technology**







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 **Faculty of Industrial Sciences and Technology**





Dr. Nazikussabah binti 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) **Faculty of Industrial Sciences and Technology**





Dr. Nor Adila binti Mhd Omar nadila@umpsa.edu.my 012-5754767 Bioactive compounds of plants carbohydrate quality and immunomodulatory **Faculty of Industrial Sciences and Technology**





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 **Faculty of Industrial Sciences and Technology**





AGRICULTURE AND FOOD SECURITY | FOOD NUTRITION AND FUNCTIONAL FOOD (FOOD SECURITY)



Associate Professor Dr. Hazrulrizawati binti Abd Hamid hazrulrizawati@umpsa.edu.my 019-7778603 Elucidating The Potential Citrus Peel Waste As Nutritional-Enriched Functional Food Ingredient, Physicochemical And Shelf-Life Characterization **Faculty of Industrial Sciences and Technology**





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 **Faculty of Mechanical and Automotive Engineering Technology**





Ts. Dr. Rohana binti Abdul Karim rohanaak@umpsa.edu.my 013-9300982 Development of Colour Measuring Instrument for Canned Pineapple using Image Processing Technique **Faculty of Electrical and Electronics Engineering Technology**





Associate Professor Dr. Mohamad Firdaus bin Basrawi mfirdausb@umpsa.edu.my 019-9591819 A Study On Distributor Design For Swirling Fluidized Bed Drying Of Stingless Bees Pot-Pollen **Faculty of Mechanical and Automotive Engineering Technology**





Dr. Mohd Azraai bin Mohd Razman mohdazraai@umpsa.edu.my 017-6454151 The Formulation Of Deep Learning For The Classification Of Fish Growth Detection **Faculty of Manufacturing and Mechatronic Engineering Technology**







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) byproducts

Faculty of Industrial Sciences and Technology





Dr. Shariza binti Jamek sharizaj@umpsa.edu.my 019-6993107 Metagenomic Analysis for Assessing Microbial Communities and Diversity in Malaysian traditional Prebiotic Fermented Foods **Faculty of Industrial Sciences and Technology**





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 Faculty of Industrial Sciences and Technology

Mv Profile





Dr. Rozaimi bin Abu Samah rozaimi@umpsa.edu.my 013-7745183 Production of Pineapple Vinegar from Pineapple Fruits and Microbes Inhibitor from Pineapple Leaves **Faculty of Chemical and Process Engineering Technology**







Dr. Ahmad Mahfuz bin Gazali mahfuz@umpsa.edu.my 013-6399697 Investigation Disease Related to White Shrimp (Fenielopnaeus Vannamei) Aquaculture Industry **Faculty of Industrial Sciences and Technology**







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. **Centre for Mathematical Sciences**

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 **Centre for Mathematical Sciences**

My Profile





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 Faculty of Industrial Sciences and Technology**





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 **Faculty of Chemical and Process Engineering Technology**





Associate Professor Dr. Fatmawati binti Adam fatmawati@umpsa.edu.my Developing CMSS Application in Pharmaceutical as Halal Binder, Thickener and Soft/Hard Capsule **Faculty of Chemical and Process Engineering Technology**





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 Faculty of Industrial Sciences and Technology**



Dr. Noor Suhana binti Adzahar nsuhana@umpsa.edu.my 019-4495477 Development of Microbiological Testing Procedure for **Edible Gelatine Faculty of Industrial Sciences and Technology**





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





Dr. Hong Pui Khoon hongp@umpsa.edu.my 017-9642839 Extraction of Halal Gelatin from Bovine Bones **Faculty of Industrial Sciences and Technology**





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





Dr. Mohamad Hilmi bin Mat Said hilmi@umpsa.edu.my 013-9287274 Membangunkan Kit Maklumat Halalan Tayyiba (Developing Information Kit) **Centre for Human Sciences**





Dr. Mazita binti Mokhtar mazita@umpsa.edu.my 019-9121068 Organizational Innovativeness Among Model of Success SMEs in Malaysia Halal Industry **Faculty of Industrial Management**



Mv Profile





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 **Centre for Human Sciences**





Dr. Tuan Sidek bin Tuan Muda sidek@umpsa.edu.my 013-3374911 Magasid Syariah And Halal Studies **Centre for Human Sciences**





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





Ts. Dr. Rozlina binti Mohamed rozlina@umpsa.edu.my 019-9422871 Food Chain on Database and Ontology (Food Traceability) **Faculty of Computing**





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**



Associate Professor Ts. 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 **Faculty of Chemical and Process Engineering Technology**





Dr. Sureena binti Abdullah sureena@umpsa.edu.my 013-9862161 Formulation of Food Packaging from Palm Oil Waste Cellulose **Faculty of Chemical and Process Engineering Technology**





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





Dr. Nor Hanuni binti Ramli @ Said drhanuni@umpsa.edu.my 012-3024184 The effect of Protein Composition on the Properties of Fish Pellet **Faculty of Chemical and Process Engineering Technology**





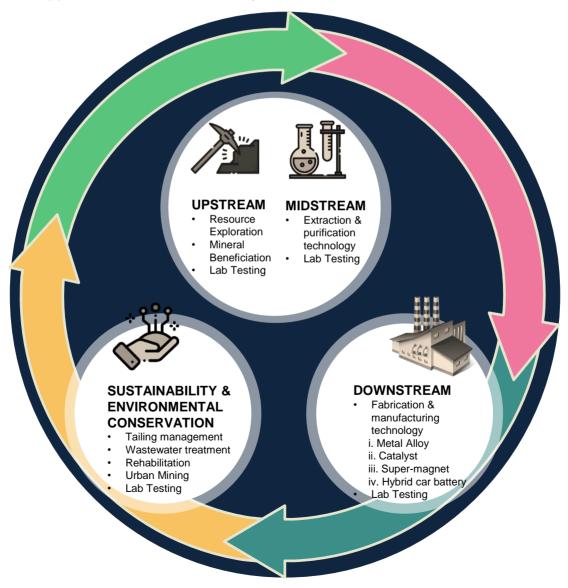
Ts. Dr. Shalyda binti Md Shaarani@Md Nawi shalyda@umpsa.edu.my 019-4817883 Elucidation Of In-Vitro Poultry Feed Digestion Kinetics Through Enzymatic Hydrolysis Using Local Pineapple Enzymes **Faculty of Chemical and Process Engineering Technology**





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.





Associate Professor Dr. Mohd Fakhrurrazi bin Ishak fakhrurrazi@umpsa.edu.my 019-7177574 loration And Modelling To Determine Potential Ore Body On Secondary Deposit **Faculty of Civil Engineering Technology**





Associate Professor Dr. Mazrul Nizam bin Abu Seman mazrul@umpsa.edu.my019-6241335 Concentration Of Rare Earth Elements From A Simulated Tin Tailing Via Thin Film Composite Forward Osmosis Membrane Faculty of Chemical and Process Engineering Technology





Professor Ts. Dr. Sumaiya binti Zainal Abidin@Murad sumaiya@umpsa.edu.my 019-5664177 Studies On Isotherm, Kinetic And Mechanism Of Rare Earth Elements (REE) Adsorption On Polymeric Resin Supported Ionic Liquid (PSIL)





Associate Professor Ts. Dr. Mohd Yusri bin Mohd Yunus yusri@umpsa.edu.my 017-8121977 Extraction Of Erbium And Ruthenium From Leaching Concentrate Faculty of Chemical and Process Engineering Technology







Dr. Wan Hanisah binti Wan Ibrahim anisah@umpsa.edu.my 019-9782800 Modelling And Simulation Of Separation Sequence Of Rare **Earth Elements Faculty of Chemical and Process Engineering Technology**





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 **Faculty of Chemical and Process Engineering Technology**





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 **Faculty of Industrial Sciences and Technology**





Professor ChM. 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 **Faculty of Industrial Sciences and Technology**





Dr. Rodziah binti Nazlan rodziah@umpsa.edu.my 012-2394504 Intensive Exploratory of Microwave, Electrical and Magnetic Properties of Magnetic Garnet Type Ferrites for Development of High-Frequency Antenna Applications **Faculty of Industrial Sciences and Technology**





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 **Faculty of Chemical and Process Engineering Technology**







Professor Ts. Dr. Gaanty Pragas a/I Maniam gaanty@umpsa.edu.my 016-4110236 The Effect Of Alkali And Rare Earth Metals Loading On Waste Deoiled-Spent Bleaching Clay As A Catalyst In Transesterification Reaction **Faculty of Industrial Sciences and Technology**



Ts. Dr. Muhammad Hafiz bin Mazwir muhammadhafiz@umpsa.edu.my 016-2185851 Light Rare Earth Oxide Nanoparticles As Flux Pinning Centers To Enhance Critical Current Density In Ag-Sheathed Bi-2223 Superconductor Tapes **Faculty of Industrial Sciences and Technology**





Dr. Sureena binti Abdullah sureena@umpsa.edu.my 013-9862161 Photocatalytic Study Of Rare-Earth Doped Oxides For Hydrogen Production Via Photoreforming Process Faculty of Chemical and Process Engineering Technology

My Profile





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 **Faculty of Chemical and Process Engineering Technology**





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. Faculty of Civil Engineering Technology





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 Faculty of Civil Engineering Technology**





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 Plant (LAMP) Faculty of Chemical and Process Engineering Technology





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. **Faculty of Civil Engineering Technology**





Ts. Dr. Abdul Halim bin Abdul Razik abdhalim@umpsa.edu.my 018-9114275 Development Of Optimal Supply Chain Model For Malaysian Rare Earth Resources **Faculty of Chemical and Process Engineering Technology**





Dr. Mohd Aizudin bin Abd Aziz maizudin@umpsa.edu.my 017-6142443 Investigation On Formulation Components Of Deployable Grease From Industrial Waste Oil And Red Gypsum **Faculty of Chemical and Process Engineering Technology**





muniramuhammad@umpsa.edu.my 018-9009926 The Sustainable Application of Gypsum and Demolished Concrete Waste in the Peat Soil Stabilization of East Coast Malaysia **Faculty of Civil Engineering Technology**

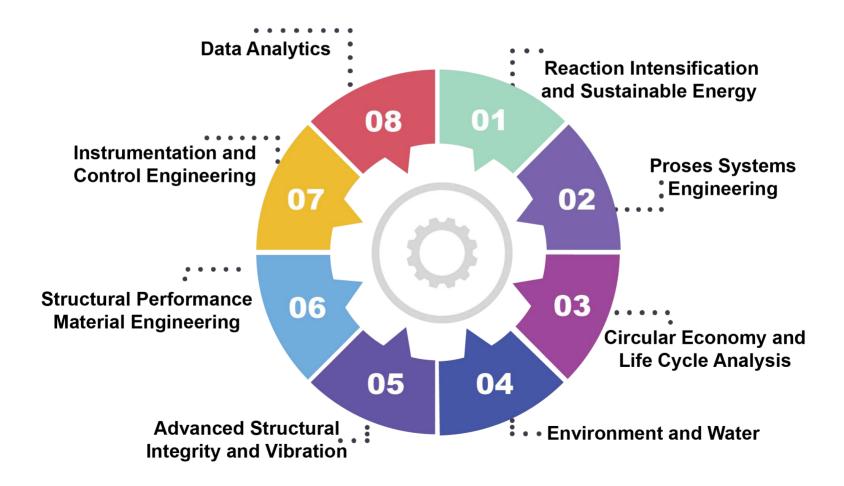
Ts. Dr. Nurmunira binti Muhammad @ Atan





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 UMP 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





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 **Faculty of Chemical and Process Engineering Technology**





Associate Professor Ts. Dr. Rohayu binti Jusoh rohayu@umpsa.edu.my 013-9094187 Photodegradation Of Dibenzothiophene Using Modified Fibrous Silica (Kcc-1) Catalyst **Faculty of Chemical and Process Engineering Technology**





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 **Faculty of Chemical and Process Engineering Technology**





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 **Faculty of Chemical and Process Engineering Technology**





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 Faculty of Chemical and Process Engineering Technology**

Faculty of Chemical and Process Engineering Technology





Ts. Dr. Suriyati binti Saleh suriyati@umpsa.edu.my 018-2281611 Development Of Torrefied Pellet From Palm Oil Waste For **Biofuel Production Faculty of Chemical and Process Engineering Technology**







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 Faculty of Chemical and Process Engineering Technology**





fadzilali@umpsa.edu.my 013-3838312 Design Of A Deepwater Gas Pipelines Centrifuge Separator For Hydrate Formation Removal From Natural Gas Stream **Faculty of Manufacturing and Mechatronic Engineering Technology**

Ir. Ts. Dr. Mohd Fadzil Ali bin Ahmad





Dr. Abdul Halim bin Abdul Razik abdhalim@umpsa.edu.my 018-9114275 Process Analysis, Modification And Improvement Of A Small-Scale LNG Plant **Faculty of Chemical and Process Engineering Technology**





Dr. Nadiya binti Hj. Abd. Halim nadiya@umpsa.edu.my 013-3372008 Quantitative Risk Assessment In Blending Unit Operation For V-Blender **Faculty of Chemical and Process Engineering Technology**

My Profile





Associate Professor Ts. Dr. Liang Yong Yeow yongyeow.liang@umpsa.edu.my 017-9539725 Mechanism of Interaction Between Concentration Polarisation and Biofouling For High – Permeance Membrane **Faculty of Chemical and Process Engineering Technology**





Ahmad Basirul Subha bin Alias subha@umpsa.edu.my 0199811474 Optical-based Method in Bolted Joint Pre-tensioning Analysis and Efficiency **Faculty of Mechanical and Automotive Engineering Technology**

My Profile





Professor Dr. Yudi Fernando yudi@umpsa.edu.my 019-5718008 Determinations Of Low Carbon Supply Chain Practices To Achieve Low Carbon Performance In Manufacturing Industry UMPSA World's Top 2% Scientist **Faculty of Industrial Management**





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 **Faculty of Industrial Management**





Dr. Nazira binti Mahmud nazira@umpsa.edu.my 013-4270056 **Environmental Lifecycle Assessment Faculty of Industrial Sciences and Technology**

My Profile





Dr. Noor Intan Shafinas binti Muhammad shafinas@umpsa.edu.my 016-3148639 **Techno Economic Analysis Faculty of Civil Engineering Technology**

My Profile





Associate Professor Ir. Dr. Norazwina binti Zainol azwina@umpsa.edu.my 019-2719331 Catalytic Wet Air Oxidation (CWAO) Of Phenol At Atmospheric Pressure **Faculty of Chemical and Process Engineering Technology**



My Profile



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Ts. Dr. Azizan bin Ramli azizanramli@umpsa.edu.my 019-9881726 Air Pollution Assessment On Particulate Matter Dispersion At Mega Construction Site **Faculty of Industrial Sciences and Technology**





Ts. Dr. Zulkifly bin Jemaat zulkifly@umpsa.edu.my 019-7261616 Bioremediation Of Amine Contaminated Wastewater Using Indigenous Bacteria **Faculty of Chemical and Process Engineering Technology**





Dr. Nurlin binti Abu Samah nurlin@umpsa.edu.my 017-286 1679 Development Of Ion Imprinted Polymer For The Arsenic Species Removal From Bauxite Mine-Impacted River Water And Sediments In Pahang Terrestrial, Malaysia **Faculty of Industrial Sciences and Technology**





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Dr. Che Ku Eddy Nizwan bin Che Ku Husin eddy@umpsa.edu.my 012-2907831 **Development Of Composite Smart Structures Faculty of Mechanical and Automotive Engineering Technology**





Dr. Nurazima binti Ismail nurazima@umpsa.edu.my 0192965358 Damage Detection On Aluminum Plate Using Fiber Optic Sensors For Structural Health Monitoring **Faculty of Mechanical and Automotive Engineering Technology**

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Professor Ts. Dr. Mohd Ruzaimi bin Mat Rejab ruzaimi@umpsa.edu.my 011-12509742 Ballistic Impact Modelling Of Truss-core Sandwich Structure Incorporating Carbon Fiber Reinforced Plastic Composite And Lightweight Aluminum Alloy **Faculty of Mechanical and Automotive Engineering Technology**





Dr. Norhaida binti Ab. Razak norhaida@umpsa.edu.my 019-2832475 Low Cycle Fatigue Behaviour Of High Tempature Material **Faculty of Mechanical and Automotive Engineering Technology**



Technology

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Dr. Mohd Akramin bin Mohd Romlay akramin@umpsa.edu.my 013-5715729 Fracture Mechanics, Probabilistic Analysis, FEM, Fatigue **Analysis Faculty of Mechanical and Automotive Engineering**





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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 **Faculty of Electrical and Electronics Engineering Technology**





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Dr. Ismayuzri bin Ishak ismayuzri@umpsa.edu.my 013-8504311 Development Of A Universal Gas Detector Bump Test Station For Oil And Gas Industry **Faculty of Manufacturing and Mechatronic Engineering Technology**

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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 **Faculty of Electrical and Electronics Engineering Technology**





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Associate Professor Dr. Norhayati binti Rosli norhayati@umpsa.edu.my 0199544531 Risksmart_learning System's Training Module For Petrochemical Industries In Gebeng And Kemaman: A Collaboration With Basf And Kaneka Sdn. Bhd. **Centre For Mathematical Sciences**







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 UMP focus areas that covers several components including Strengthen Quality and Safety, Embrace a Built Environment, Improve Construction Productivity, Strengthen Infrastructure Sustainable 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 **Faculty of Civil Engineering Technology**





Associate Professor Dr. Ezrin Hani binti Sukadarin ezrin@umpsa.edu.my 012-7203230 Behavioral Based Safety In Construction Industry **Faculty of Industrial Sciences and Technology**





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**



Ir. Ts. Dr. Nurhidayah binti Azmy hidayahba@umpsa.edu.my 019-2746575 Construction Quality Assessment (CQA) Mobile **Application Faculty of Civil Engineering Technology**





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 **Faculty of Industrial Management**





Associate Professor Ts. Dr. Abdul Rahimi bin **Abdul Rahman** arahimirahman@umpsa.edu.my 011-14246854 Development Of An Integrated Decision Support Tool For Green, Well, And Universal Building Design: The Case Of Well Building **Faculty of Civil Engineering Technology**





Ts. Dr. Lee Yong Siang leeys@umpsa.edu.my 017-4070272 Safety and Health Factors For Construction Sites Of High-Rise Building Project In Malaysia **Faculty of Civil Engineering Technology**

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Associate Professor Dr. Ramadhansyah Putra Jaya ramadhansyah@umpsa.edu.my 012-3994214 Development Of Porous Concrete Drainage Cover Slab From Waste Material **Faculty of Civil Engineering Technology UMPSA World's Top 2% Scientist**







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Associate Professor Ir. Dr Ngien Su Kong nsukong@umpsa.edu.my 019-8243072 Evaluation of Flow Characteristics in Sewerage Systems **Faculty of Civil Engineering Technology**

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Associate Professor Dr. Doh Shu Ing dohsi@umpsa.edu.my 019-8129298 Elucidation Of Blended Cement Using Industrial Waste **Faculty of Civil Engineering Technology**





Associate Professor Ir. Dr Muhamad Zahim bin Sujod zahim@umpsa.edu.my 011-10988048 Consultation To Conduct A Feasibility Study On The Solar Rooftop Project At The UMP Holding Complex **Faculty of Electrical and Electronics Engineering**

My Profile





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Associate Professor Dr. Mohd Fakhrurrazi bin Ishak fakhrurrazi@umpsa.edu.my 019-7177574 Application Of Digital Surface Model To Investigate The Potential Slope Hazard **Faculty of Civil Engineering Technology**





Associate Professor Ts. Dr. Edriyana binti A.Aziz edriyana@umpsa.edu.my 017-9853673 Penyediaan Pelan Pengurusan Lembangan Sungai Bersepadu Sungai Muda, kedah/Pulau Pinang (Seksyen Pemodelan & Kualiti Air





Associate Professor Dr. Mohamad Idris bin Ali idrisali@umpsa.edu.my 013-9865254 Kajian Penyediaan Pelan Pengurusan Lembangan Sungai Bersepadu (IRBM), Sungai Kuantan, Pahang Di Bawah Perlaksanaan JPS Malaysia Faculty of Civil Engineering Technology





Associate Professor Ir. Dr Chin Siew Choo scchin@umpsa.edu.my 016-9098687 Elucidation On The Effect Of External Strengthening Technique By Bamboo Fiber Composite To The Mechanical Properties And Durability Of RC Beams With Openings In The **Shear Zones** Faculty of Civil Engineering Technology





Assosiate Professor Ir. Dr. Fadzil bin Mat Yahaya fadzil@umpsa.edu.my 019-9897778 A Study Of Potential Aerated Wall Block By Using By Product Of Palm Oil Fuel Ash (POFA) **Faculty of Civil Engineering Technology**







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Associate Professor 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 UMPSA

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Faculty of Civil Engineering Technology



Ts. Dr. Nurul Nadrah Aqilah binti Tukimat nadrah@umpsa.edu.my 012-9815977 Forecasting The Future Flow Characteristics Of Pahang River Basin With Climate Change Adaptation" Faculty of Civil Engineering Technology

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Associate Professor Dr. Muhammad Ashraf bin Fauri @ Fauzi ashrafauzi@umpsa.edu.my 013-3005169 Elucidating The Determinants Of House Owners To Green Retrofit: Consumer Adaptation Of Green Building Based On TPB And Motivation-opportunity-ability Theory **Faculty of Industrial Management**





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Dr. Jacqueline Isabella anak Gisen isabella@umpsa.edu.my 011-25567114 Formulation Of A Hybrid Salinity And Hydrological Model For Sustainable Water Resources In The Kuantan River Basin





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Dr. Khairul Anuar bin Shahid khairulanuars@umpsa.edu.my 016-2326302 The potential use of palm oil clinker as drainage layer in green roof system.





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Ts. Norhaiza binti Ghazali nhaiza@umpsa.edu.my 016-4454104 Effect Of Fly Ash As Partial Cement Replacement On Properties Of High Strength Palm Oil Clinker Lightweight Aggregate Concrete **Faculty of Civil Engineering Technology**

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Dr. Mohd Irwan bin Adiyanto mirwan@umpsa.edu.my 017-5316653 Seismic Vulnerability Of Residential Buildings In Low-to moderate Seismic Region Faculty of Civil Engineering Technology

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Ts. Dr. Youventharan a/I Duraisamy youventharan@umpsa.edu.my 012-2293579 Interaction Mechanism Of Bio-inspired Soil Anchorage System To Enhance Bonding Between Residual Soil Matrix And Strengthen Slope Stability In Tropical Region **Faculty of Civil Engineering Technology**





Shairul Rohaziawati binti Samat shairul@umpsa.edu.my 012-6020335 Development Of Low Flow Frequency Curves For Rivers In Pahang Using Probability Distribution **Faculty of Civil Engineering Technology**





Technology

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Faculty of Industrial Management



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