

**LIST OF FRGS PROJECTS WITH NO GRA APPOINTMENTS FROM 2020 TO 2022**

<b>NO.</b>	<b>PHASE / YEAR</b>	<b>PROJECT LEADER</b>	<b>FACULTY</b>	<b>PROJECT TITLE</b>	<b>EMAIL</b>
1	2022	PROF. MADYA DR. AHMAD KADRI BIN JUNOH	FAKULTI PERNIAGAAN & KOMUNIKASI	Analytical Segmentation on Fusarium Macroconidia Spore in Microscopic Images for Developing Recognition Databases	kadri@unimap.edu.my
2	2022	DR. AMIRUL RIDZUAN BIN ABU BAKAR	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	Mechanistic insights into the roles of enriched polyphenols from harumanis leaves using green extraction technology and bioinformatics approaches for therapeutic discoveries.	amirulridzuan@unimap.edu.my
3	2022	DR. SITI NUR AISHAH BINTI MAT YUSUF	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	Elucidating the kinetic mechanism of encapsulated docetaxel and salinomycin within disulphide nanoparticles for suppressing the progression of colon cancer as an oral drug delivery system.	nuraishahyusuf@unimap.edu.my
4	2022	PROF. DR. ABDULLAH CHIK	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	Modelling Structural, Mechanical, Electronic, Optical, Thermoelectric and Thermodynamic Properties of antiperovskites X <sub>3</sub> AB (X=Ba, Sr, Ca; AB=PN, SiO) Using Density Functional Theory	abdullahchik@unimap.edu.my
5	2022	DR. HOO PENG YONG	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	Enhanced Alkaline Earth Metals Silicate of Rice Husk Ash Origin for Free Fatty Acid Extraction	pengyong@unimap.edu.my
6	2022	PROF. MADYA DR. HO LI NGEE	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	Elucidation of charge transfer mechanisms in 2D zinc oxide/ 2D graphitic carbon nitride S- scheme heterojunction photocatalyst for wastewater treatment and electricity generation	Inho@unimap.edu.my
7	2022	DR. MEOR AHMAD FARIS MEOR AHMAD TAJUDIN	FAKULTI KEJURUTERAAN & TEKNOLOGI MEKANIKAL	Elucidation of Interfacial Bonding Geopolymer - Steel and Polypropylene Hybrid Fibers to the Performance of Reinforcement Concrete	meorfaris@unimap.edu.my
8	2022	DR. NUR IZZATI BINTI MUHAMMAD NADZRI	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	Phase transformations and grain growth towards micromechanical properties of novel titanium (Ti) doped CrCoMnFeNi high entropy alloy (HEA) based thin films	izzatinadzri@unimap.edu.my

9	2022	DR. ASNA RASYIDAH BINTI ABDUL HAMID	FAKULTI KEJURUTERAAN & TEKNOLOGI MEKANIKAL	Elucidation on a method to produce graphene concrete additives from waste materials by using explosive pyrolysis	asnarasyidah@unimap.edu.my
10	2022	DR. KU NURUL FAZIRA BINTI KU AZIR	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRONIK	Enhancement of Food Spoilage Classification for RTE Food Packaging From Dielectric Properties using DNN.	fazira@unimap.edu.my
11	2022	PROF. DR. MOHD YUSOFF MASHORR	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRONIK	Enriching Deep Convolution Neural Network Architecture using Embedded Modelling Approach for Robust Acute Promyelocytic Leukemia Diagnosis.	yusoff@unimap.edu.my
12	2022	PROF. MADYA DR. SHAZMIN ANIZA BINTI ABDUL SHUKOR	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	Modelling of complex environment from unstructured point cloud data integrating deep learning and ontological semantic features for building digital twin	shazmin@unimap.edu.my
13	2022	DR. NURHAKIMAH BINTI MOHD MUKHTAR	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	Optimized Flexible-Frequency Control and Magnetic Materials Selection for Single-switch Multiple-input Multiple-output Converter using Non-linear Behavioural Model	nurhakimah@unimap.edu.my
14	2022	DR. CHANURI CHARIN	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	Hybridizing Opposition based Learning Levy-Particle Swarm Optimization to Improve Maximum Power Point Tracking in Solar Photovoltaic System	chanuri@unimap.edu.my
15	2022	PROF. MADYA DR. MOHD RAFI BIN ADZMAN	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	The control of charge adsorption on metal surfaces to improve corrosion protection reliability	mohdrafi@unimap.edu.my
16	2022	PROF. MADYA IR. DR. MOHD RASHIDI CHE BESON	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRONIK	A Novel Approach of Spectral/Spatial 2-Dimensional Unfixed Weight (2-D UW) Optical Coding Utilizing Adaptive Multicarrier for 6 G Network Accessibility	<a href="mailto:rashidibeson@unimap.edu.my">rashidibeson@unimap.edu.my</a>
17	2022	ENCIK FAZRUL FAIZ BIN ZAKARIA	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRONIK	Network-on-Chip Architecture Investigation for Efficient Training of Deep-Learning on Hybrid Computing Systems	ffaiz@unimap.edu.my
18	2022	DR. LIYANA BINTI AHMAD SOFRI	FAKULTI KEJURUTERAAN & TEKNOLOGI AWAM	Evaluation of Optimized Bio Asphalt Using Spent Molasses Concentrate (SMC) as Partial Replacement of Bitumen for Hot Mix Asphalt Mixture	liyanasofri@unimap.edu.my

19	2022	PROF. MADYA DR. MOHD AZRIK BIN ROSLAN	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	New Efficiency-Focused Droop Control Strategy Using Dynamic Consensus Compensation Loop for Economic Operation of Islanded AC Microgrid	mazrik@unimap.edu.my
20	2022	PROF. MADYA DR. LEONG JENN HWAI	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	Novel Compact Five-Phase Multilevel Inverter with Geometrically Progressive DC Sources and Optimal Switching Angles for High-Efficient Green-Power Conversion	jhleong@unimap.edu.my
21	2022	DR. KAMARULZAMAN BIN KAMARUDIN	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	Hybrid Deep Convolutional Neural Network (DCNN) Architecture with Temperature and Humidity Modelling for Classification of Atmospheric Hazards in Confined Space	<a href="mailto:kamarulzaman@unimap.edu.my">kamarulzaman@unimap.edu.my</a>
22	2022	TS. DR. WOOL CHIN LEONG	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	Optimisation of Lightning Protection System Using New Multi-Objective Political Optimisation Technique on Reliability Indices And Cost Limitation	clwooi@unimap.edu.my
23	2022	DR. NORZILAH BINTI ABDUL HALIF	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	Evaluation of Brownian motion and thermophoresis of thermomagnetic heat convection of multi-walled carbon nanotubes-magnetite in water (MWCNTs-Fe <sub>3</sub> O <sub>4</sub> /H <sub>2</sub> O) nanofluid.	norzilah@unimap.edu.my
24	2022	DR. AHMAD AFIF BIN NAZIB	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	Formulating Internal Grid-Forming Capability for Enhanced Dynamic Performance of Grid-Following Inverters Using State Variables of Resonant Current Controllers	ahmadafif@unimap.edu.my
25	2022	TS. DR. MOHD SOFWAN BIN MOHD RESALI	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	Characterization of hybrid active cooling technique with natural inspired algorithm of floating solar photovoltaic module for low carbon clean generation.	sofwanresali@unimap.edu.my
26	2022	DR. ERNIE BT CHE MID	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	Control Algorithm of Explicit Solution for Active PV Water-Cooling Model Using Multi-Parametric Programming	ernie@unimap.edu.my
27	2022	ENCIK MUHAMMAD AIZAT BIN ABU BAKAR	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	Micro-targets Deep Reinforcement Learning Framework for Path Planning based on Gas Distribution Mapping in Unknown Area	aizatbakar@unimap.edu.my
28	2022	PROF. MADYA DR. SAM SUNG TING	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	Elucidating Antifungal Mechanism Mediated By Chitosan from Edible Mushroom for Substituting Animal Source in Food Coating	stsam@unimap.edu.my

29	2022	DR. MOHD NAZRI BIN OMAR	FAKULTI KEJURUTERAAN & TEKNOLOGI MEKANIKAL	Thermodynamic investigation on propane-free mixed-refrigerant integrated with nitrogen expansion on natural gas liquefaction Rankine cycle	nazriomar@unimap.edu.my
30	2022	TS. AHMAD FAIRUZ BIN MANSOR	FAKULTI KEJURUTERAAN & TEKNOLOGI MEKANIKAL	Synergistic Effect of Hexagonal Boron Nitride And Sodium Dodecyl Sulfate on Bio-Based Nano-Lubricant System For Surface Integrity Enhancement in Machining of Stainless Steel 316L	fairuzmansor@unimap.edu.my
31	2021	PROF MADYA TS. DR. AYU WAZIRA AZHARI	FAKULTI TEKNOLOGI KEJURUTERAAN AWAM	Mechanistic Study on The Role of Mixed Cation in Improving The Stability of Tin-Germanium Based Perovskite for Solar Cells	ayuwazira@unimap.edu.my
32	2021	Ts. MOHAMED MYDIN HJ. M. ABDUL KADER	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	A New Deep Learning Architecture in IoT-based Data Analytics for Prediction of Urban Farming Growth-related Traits	mohamedm@unimap.edu.my
33	2021	DR. MOHD ZAMRI HASAN	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	An Estimation of The Orbital Elements in Near Equatorial Orbit for Attitude Determination Using Extended Kalman Filter	zamrihasan@unimap.edu.my
34	2021	DR. AIMI SALIH AH ABDUL NASIR	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	Characterizing Homogeneous X-Ray Imaging Features Using Hybrid Deep Learning Assisted With New Density Peaks Clustering Algorithm for Aiding COVID-19 Diagnosis	aimisalihah@unimap.edu.my
35	2021	DR. MUHAMAD HATTA HUSSAIN	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRIK	Integrated Cat Swarm Optimization-Artificial Neural Network Algorithm in Accurate Miscoordination Characterisation of Directional Overcurrent Relay Model	muhdhatta@unimap.edu.my
36	2021	DR. NORFADILA MAHROM	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRONIK	Formulation of Image Processing Technique on FPGA Using 3D Pipelining Architecture for High Speed Tuberculosis Detection	norfadila@unimap.edu.my
37	2021	DR. HUSNA JAMAL ABDUL NASIR	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRONIK	Enhanced Ant Colony System Algorithm for Rule-Based Data Classification In Smart Aquaculture	husnajamal@unimap.edu.my

38	2021	EN. MOHD SHAIFUL AZIZ RASHID ALI	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRONIK	A Hybrid Novel Quantum Repulsion and Artificial Bee Colony Algorithm for t-way Test Suite Generation	shaifulaziz@unimap.edu.my
39	2021	DR. MOHAMED NASRUN OSMAN	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRONIK	Investigation on The Phase Displacement between The High Scalability and Accuracy of Tunable Metasurface Array Resonator and Terrestrial InSAR for Plastic Debris Detection in River	nasrun@unimap.edu.my
40	2021	DR. MOHAMED ELSHAIKH ELOBAID SAID AHMED	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRONIK	Bio Inspired Mechanism for Improving Network Performances in VANET Networks	elshaikh@unimap.edu.my
41	2021	DR. ANG QIAN YEE	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	Conceptualising The Sensing Behaviour of Molecularly Imprinted Polymer as A Biomimetic Receptor towards Creatinine	qyang@unimap.edu.my
42	2021	PROF. MADYA Ts. DR. NORSURIA MAHMED	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	UV-Vis-NIR-driven Fe <sub>3</sub> O <sub>4</sub> -SiO <sub>2</sub> - AgCl/Ag/Ag <sub>2</sub> S Photocatalyst for Enhancing The Photocatalytic Mechanism	norsuria@unimap.edu.my
43	2021	PROF. MADYA DR. MUHAMMAD ASRI IDRIS	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	Elucidation of Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> -GO Composite Defect Chemistry At Surface-Interface Region to Enhance Li+ Batteries Storage	asri@unimap.edu.my
44	2021	PROF. MADYA DR. MIDHAT NABIL AHMAD SALIMI	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	The Interaction Mechanism of Eggshell Waste as Solid Sorbents for High Temperature Carbon Dioxide (CO <sub>2</sub> ) Capture	nabil@unimap.edu.my
45	2021	DR. MOHD SABRI HUSSIN	FAKULTI KEJURUTERAAN & TEKNOLOGI MEKANIKAL	Elucidations of Fusion Random Sequential Adsorption- Representative Volume Element Algorithm in Photopolymerization Additive Manufacturing Micro- mould	mohdsabri@unimap.edu.my
46	2021	PROF. MADYA Ts. DR. NOORHAFIZA MUHAMMAD	FAKULTI KEJURUTERAAN & TEKNOLOGI MEKANIKAL	Correlation of 3D Printing Process Parameters With Physical Quality, in Vitro Degradation Rate and Cells Response of Bioresorbable Polymer Coronary Stents for Cardiovascular Applications	noorhafiza@unimap.edu.my

47	2021	DR. ASMAWI SANUDDIN	FAKULTI KEJURUTERAAN & TEKNOLOGI MEKANIKAL	Whole-body Vibration Analysis Using Full-vehicle Dynamics Model for Flexible Frame of Lightweight Passenger Vehicle	asmawi@unimap.edu.my
48	2021	Ir. MOHD SHIHABUDIN ISMAIL	FAKULTI KEJURUTERAAN & TEKNOLOGI MEKANIKAL	Dispersion Behavior of Conductive Fillers in Different Nano Cellulosic Fibres for Superior Thermal Conductivity and Efficient Electromagnetic Interference Shielding of Hybrid Polyester Composites	mohdshihabudin@unimap.edu.my
49	2020	DR. NUR SUHAILI BINTI MOHD YATIM	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	Low biofouling membrane distillation for wastewater treatment: Fundamental insight on the antibacterial properties of chitosan	nursuhaili@unimap.edu.my
50	2020	ENCIK AHMAD MUZAMMIL BIN ROSLAN	FAKULTI KEJURUTERAAN & TEKNOLOGI MEKANIKAL	Biomechanical Modeling of Paediatric Femoral Fracture based on Traumatic Infant Abuse Loading History	ahmadmuzammil@unimap.edu.my
51	2020	DR. BILIANA BINTI BIDIN	FAKULTI PERNIAGAAN & KOMUNIKASI	Modelling the onset of convection in the unsteady thermal boundary layer in a semi-infinite layered porous medium.	biliana@unimap.edu.my
52	2020	PROF. MADYA DR. MOHAMMAD NUZAIHAN BIN MD NOR	INEE	Elucidation of Surface Modification and Interaction of Retinol Binding Protein 4 (RBP4) with Gold Nanoparticles-Decorated Silicon Nanowires for Continuous Monitoring of Diabetes Mellitus (DM)	m.nuzaihan@unimap.edu.my
53	2020	DR. SHUHAIZAR BIN DAUD	FAKULTI KEJURUTERAAN & TEKNOLOGI ELEKTRONIK	Power Analysis and Optimization on Microcontroller-based IoT devices through Adaptive Sleep Strategy and Power Gating Technique	shuhaizar@unimap.edu.my
54	2020	DR. NUR FARHANA BINTI HAYAZI	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	Plastic Straining Mechanism in Recycled 7075 Aluminium Alloy with Rare Earths Addition	farhanahayazi@unimap.edu.my
55	2020	DR. NORAZIANA BINTI PARIMIN	FAKULTI KEJURUTERAAN & TEKNOLOGI KIMIA	Short-circuit diffusion mechanism of Ni-based alloys on high temperature isothermal oxidation.	noraziana@unimap.edu.my