

Faculty of Mechanical Engineering Focus Groups

Human Engineering Group (HEG)

<http://heg.ump.edu.my/>

HEG-Introduction

- The Human Engineering Group (HEG) conducts research related to biomechanics, health and safety, bio-compatible materials and processing, ergonomics and biomedical engineering.
- This includes application areas such as the development of medical devices and technology for diverse user groups, including patients, medical doctors and physiotherapists.
- The group believes that the combination of knowledge from a myriad of fields which includes engineering, physiotherapy, rehabilitation and medicine and technology is key in improving medical and healthcare systems, human health and quality of life.

Research Titles

DR. ZAKRI BIN GHAZALLI

zakri@ump.edu.my

No	Title	PG Level	No. of PGs
1	Design rehabilitation device	PhD/MSc	2
2	Ergonomic assessment of assembly process using digital human model	PhD/MSc	2
3	Human comfort of driver seating	PhD/MSc	2
4	Investigation of fatigue among urban area ambulance drive	PhD/MSc	2
5	Design of sport equipment on the basis of hybrid natural fiber	PhD/MSc	2
6	Human comfort of seating	PhD/MSc	2
7	Design for injection moulding of bee nest	PhD/MSc	2

DR. SAIFUL ANWAR BIN CHE GHANI

anwarcg@ump.edu.my

No	Title	PG Level	No. of PGs
1	Thermal Behaviour in Machining with Substitution of Chemical Based Coolant by Using a Closed Internally Cooled Turning Tool	PhD/MSc	2
2	The Study on Force, Surface integrity, Tool life and Chip on Sustainable Machining of Cobalt Chrome Molybdenum using Internally Cooled Turning Tool	PhD/MSc	2
3	Surface integrity and sustainability assessment in eco-friendly high-speed machining of metallic biomaterials	PhD/MSc	2
4	Enhanced Bone Regeneration of Cortical Segmental Bone Defects Using Metallic Metabiomaterial CoCrMo	PhD/MSc	2

DR. WAN SHARUZI BIN WAN HARUN

sharuzi@ump.edu.my

No	Title	PG Level	No. of PGs
1	Study of Magnesium and Its Alloys using metal injection moulding process	PhD/MSc	2
2	Fatigue behavioral Study of 316L Stainless Steel fabricated by metal injection moulding process	PhD/MSc	2
3	Study of Ti6Al4V alloys open cellular structure fabricated by Selective laser melting process	PhD/MSc	2
4	Fatigue behavioral Study of CoCrMo alloys fabricated by metal injection moulding process	PhD/MSc	2
5	Investigation of steel-based matrix composites for metal injection moulding process	PhD/MSc	2

DR. FATIMAH BINTI DZAHARUDIN

fatimahd@ump.edu.my

No	Title	PG Level	No. of PGs
1	Predictive modelling of Acute Kidney Functions in intensive care units	PhD/MSc	2
2	Improving assessment of glomerular filtration rate (GFR) in critically ill patients with acute kidney injury	PhD/MSc	2
3	Numerical analysis on the dynamical behaviour of microbubbles in ultrasonic fields	PhD/MSc	2
4	Effects of microbubble clustering on the chaotic behaviour of microbubbles subjected to ultrasound	PhD/MSc	2

DR. UMMU KULTHUM BINTI JAMALUDIN

ummu85@ump.edu.my

No	Title	PG Level	No. of PGs
1	Investigation on blood glucose levels and cholesterol in terms of diet and human lifestyle using artificial intelligence methods	PhD/MSc	1
2	Feasibility study on continuous glucose monitoring systems	PhD/MSc	1
3	Design of controller for blood glucose - insulin - nutrition control system	PhD/MSc	1
4	Prediction of blood glucose levels and insulin secretion using artificial neural network	PhD/MSc	1
5	Improving diabetes management and monitoring system for T2DM	PhD/MSc	1

DR. DAYANGKU NOORFAZIDAH BINTI AWANG SHRI

noorfazidah@ump.edu.my

No	Title	PG Level	No. of PGs
1	Bio-corrosion properties of bulk nanostructured metal produced by equal channel angular pressing (ECAP)	PhD/MSc	1
2	Development of nano particle reinforced Al-matrix composite consolidated by equal channel angular pressing (ECAP)	PhD/MSc	2
3	Finite element simulation of pure Cu on the effect of ECAP angle to the strain distribution of die	PhD/MSc	2

DR. ERNY AFIZA BINTI ALIAS

erny@ump.edu.my

No	Title	PG Level	No. of PGs
1	Experimental study on the enhancement of fuel efficiency and exhaust emission in diesel engine by using micro bubbles mixed fuel	MSc	2
2	Numerical simulation of microbubbles efficiency in drag reduction	MSc	2
3	Experimental study of microbubbles behaviour during ultrasound exposure for drug delivery	MSc	2
4	Simulation of lung recruitment in acute respiratory distress syndrome using CFD	MSc	2

DR. MOHD AZRUL HISHAM BIN MOHD ADIB

azrul@ump.edu.my

No	Title	PG Level	No. of PGs
1	Development of heart simulator for monitoring the blood flow circulation measurement on active and passive patient	PhD/MSc	2
2	Development of Brady-Tachy heart detection for driver with abnormal heart rates during unusual occasion to prevent motor-vehicle accident	PhD/MSc	2
3	Development of cloud integration mechanism for detection of refusal vaccine among post-natal parents	PhD/MSc	2
4	Development of wrist therapy device for patient with post cerebral vascular accident (CVA)	PhD/MSc	2

DR. NURUL SHAHIDA BINTI MOHD SHALAHIM

shahida@ump.edu.my

No	Title	PG Level	No. of PGs
1	Effects of operation type and handle shape of the driver controllers of high-speed train on the drivers' comfort	PhD/MSc	2
2	Quantitative modelling in cognitive ergonomics: predicting signals passed at danger	PhD/MSc	2
3	Optimum design approach based on integrated macro-ergonomics in manufacturing industries	PhD/MSc	2

Advanced Structural Integrity and Vibration Research Group (ASIVR)

<http://asivr.ump.edu.my/index.php/en/>

ASIVR-Introduction

- The Advanced Structural Integrity and Vibration Research Group is a leading research group in vibration & structural integrity area, particularly in the oil and gas sector.
- Our fundamental and applied research projects and specializes in vibration, machine and structural dynamics, material fatigue and integrity will provide you with the latest engineering skills and expertise to solve real life and complex engineering problems.

Research Titles

IR. DR. ZAMRI BIN MOHAMED

zamrim@ump.edu.my

No	Title	PG Level	No. of PGs
1	Combined effect of noise and vibration to car passenger comfort	PhD/MSc	2
2	Study of tuned mass damper for vibration mitigation in support structures	PhD/MSc	2
3	Acoustic absorption modeling of natural fiber by analytical method	PhD/MSc	2

DR. MOHD SHAHRIR BIN MOHD SANI

mshahrir@ump.edu.my

No	Title	PG Level	No. of PGs
1	Nonlinear identification of flexible engineering structure	PhD/MSc	2
2	Nonlinear model updating of plate and beam structures	PhD/MSc	2
3	Rivet joint modelling in structural dynamics	PhD/MSc	2

DR. MOHD HAFIZI BIN ZOHARI

hafizi@ump.edu.my

No	Title	PG Level	No. of PGs
1	Damage assessment of composite structures using FBG sensors	PhD/MSc	2
2	The application of lamb waves for damage assessment in composite structures	PhD/MSc	2

DR. GIGIH PRIYANDOKO

gigih@ump.edu.my

No	Title	PG Level	No. of PGs
1	Investigation of an Adaptive Vibration Absorber at Engine Mount using Magnetorheological Elastomer	PhD/MSc	2
2	Low Frequency Vibration Analysis on Passenger Car Seat	PhD/MSc	2

DR. NGUI WAI KENG

wkngui@ump.edu.my

No	Title	PG Level	No. of PGs
1	Rotating machinery fault diagnosis using artificial intelligence approach	PhD/MSc	2
2	Genetic algorithm parameter optimization for machinery fault diagnosis	PhD/MSc	2

ENCIK MOHD FIRDAUS BIN HASSAN

firdaus@ump.edu.my

No	Title	PG Level	No. of PGs
1	Nonlinear modelling of foil structures of foil-air bearing in the simultaneous solution of rotordynamic problems	PhD/MSc	2
2	Nonlinear analysis of bimorph piezoelectric energy harvester and its application	PhD/MSc	2

Automotive Engineering Research Group (AERG)

<http://aerg.ump.edu.my/>

AERG-Introduction

- The main objective of the AERG are:
 - to address the need for automotive industries in term of research and development;
 - to contribute to the nation for the collaboration research, consultation and professional works;
 - to increase knowledgeable and competent human capital especially Research Scientists and Engineers (RSE) as well as technical support in the automotive - based industries

Research Titles

DR. NURUL AKMAL BINTI CHE LAH

akmalcl@ump.edu.my

No	Title	PG Level	No. of PGs
1	Synthesis and Characterisation of Silver Nanoparticles	PhD/MSc	2
2	Fabrication of Fibre Loaded with Silver Nanoparticles	PhD/MSc	2
3	Synthesis and Characterisation of Zinc Oxide	PhD/MSc	2

DR. FTWI YOHANESS HAGOS

ftwi@ump.edu.my

No	Title	PG Level	No. of PGs
1	Design, modeling and fabrication of an inline syngas reformer	PhD/MSc	2
2	Investigation of syngas enrichment of CNG Engine	PhD/MSc	2

DR. AHMAD FITRI BIN YUSOP

fitriy@ump.edu.my

No	Title	PG Level	No. of PGs
1	Investigation low portion of alcohol blending on the CI engine performance, combustion and emissions characteristics	PhD/MSc	2
2	Tribology with biodiesel: A study on enhancing biodiesel stability and its fuel properties	PhD/MSc	2
3	Biodiesel influence on tribology characteristics of a diesel engine	PhD/MSc	2

DR. MOHD RAZALI BIN HANIPAH

mohdrazali@ump.edu.my

No	Title	PG Level	No. of PGs
1	Swirl impact in a poppet valve two-stroke engine	PhD/MSc	2
2	Gas exchange performance in free-piston engine generator	PhD/MSc	2
3	Design and performance of a flexure bearing	PhD/MSc	2
4	Characterisation of intake and exhaust valves motion for solenoid valve actuation	PhD/MSc	2

DR. MOHAMAD HEERWAN BIN PEEIE

mheerwan@ump.edu.my

No	Title	PG Level	No. of PGs
1	Investigation on skid control of electric vehicle with regenerative brake timing control	PhD/MSc	2
2	Study on direct yaw moment control by using differential torque distribution	PhD/MSc	2
3	Combination of anti skid control system and direct yaw moment control to improve the safety and stability of electric vehicle	PhD/MSc	2
4	Active control of torque transfer to increase the steer performance of four in-wheels electric vehicle	PhD/MSc	2

DR. DEVARAJAN A/L RAMASAMY

deva@ump.edu.my

No	Title	PG Level	No. of PGs
1	Flame and heat transfer analysis of CNG fuelled engines	PhD/MSc	2
2	Biolubricant testing with organic particle additives	PhD/MSc	2

DR. SUDHAKAR KUMARASAMY

sudhakar@ump.edu.my

No	Title	PG Level	No. of PGs
1	Estimation of Solar PV Energy generation potential : A case study of six different states in Western Malaysia	PhD/MSc	2
2	Estimation of Concentrated Solar Thermal potential : A case study of different states in Eastern Malaysia	PhD/MSc	2
3	Potential of Marine macroalgae for Biofuel production	PhD/MSc	2
4	Development of Lowcost mini solar distillation plant for local use	PhD/MSc	2
5	Exergy Analysis of various sustainable energy sources	PhD/MSc	2

PROF. MADYA DR. ABDUL ADAM BIN ABDULLAH

adam@ump.edu.my

No	Title	PG Level	No. of PGs
1	Analysis of cyclic of variation of diesel engine fuelled with diesel-organic germanium fuel	PhD/MSc	2
2	Evaluation of hybrid nanoparticle – diesel fuel blends on diesel engine performance	PhD/MSc	2
3	Experimental study of diesel engine characteristic using long chain alcohol-diesel fuel	PhD/MSc	2

DR. MUHAMMAD IZHAR BIN ISHAK

mizhar@ump.edu.my

No	Title	PG Level	No. of PGs
1	Effect of weight distribution on steer characteristic of an electric vehicle	PhD/MSc	2
2	investigation of yaw moment of an in-wheel electric vehicle with passive rear wheel steering	PhD/MSc	2
3	study on improving the mobility of electric vehicle with four in-wheel motors and mecanum wheels	PhD/MSc	2

DR. MUHAMMAD BIN MAT NOOR

muhamad@ump.edu.my

No	Title	PG Level	No. of PGs
1	Study of Nano Fuel Blend for Homogeneous Charge Compression Engine	PhD/MSc	2
2	The Effect of EGR on a Homogeneous Charge Compression Ignition Engine Fueled with Nano Fuels	PhD/MSc	2
3	Study of the Furnace Flame using Natural Gas and Biogas as a Fuel	PhD/MSc	2

ASSOC. PROF. KUMARAN KADIRGAMA

kumaran@ump.edu.my

No	Title	PG Level	No. of PGs
1	Evaluate the hybrid nanoparticel for tribology performance	PhD/MSc	2
2	Evaluate the hybrid nanoparticle for machining of hard materials	PhD/MSc	2
3	Exergy analysis in machining with non metal nanoparticle	PhD/MSc	2

Energy Sustainable Focus Group (ESFG)

<http://esfg.ump.edu.my/>

ESFG-Introduction

- The Energy Sustainable Research (ESFG) aims at producing quality research, products and services in energy sustainability.
- The group is committed to identifying potential areas for renewable energy (RE) and energy efficient (EE) initiatives in all sectors.

Research Titles

DR. AZRI BIN ALIAS

azribalias@ump.edu.my

No	Title	PG Level	No. of PGs
1	Numerical simulation on heat transfer in automotive exhaust thermo electric generator	PhD/MSc	2
2	Experimental evaluation of automotive exhaust thermo electric generator	PhD/MSc	2
3	Application of fluidized bed drying for food processing product	PhD/MSc	2

DR. AHMED NURYE OUMER

nurye@ump.edu.my

No	Title	PG Level	No. of PGs
1	Thermal-Hydraulic Performance Enhancement using Novel Low Cost, Light Weight Polymer Composite Heat Exchangers	PhD/MSc	2
2	Investigation of Thermal-hydraulic Performance of Various Fluids at Supercritical Pressure	PhD/MSc	2
3	Characterization of the Thermo-physical Properties of Hybrid Fluids for Enhanced Oil Recovery	PhD/MSc	2

DR. THAMIR KHALIL IBRAHIM

thamir@ump.edu.my

No	Title	PG Level	No. of PGs
1	Optimum heat transfer by mixed convection from perforated-finned heat sinks	PhD/MSc	2
2	Optimum performance of Multi-generation system	PhD/MSc	2

DR. MOHD AZRI HIZAMI BIN RASID

mahizami@ump.edu.my

No	Title	PG Level	No. of PGs
1	DC Motor Wear and Fatigue Monitoring via Thermal Assesment	PhD/MSc	2
2	Performance and Cost Comparison of Different Motor for Steer by Wire	PhD/MSc	2

DR. DAING MOHAMAD NAFIZ BIN DAING IDRIS

daingnafiz@ump.edu.my

No	Title	PG Level	No. of PGs
1	Smart supers with monitoring system for honey bee colony	PhD/MSc	2
2	Stingless bee colony monitoring system	PhD/MSc	2
3	Auxilliary burner for solar dryer	PhD/MSc	2
4	Tooth bending strength of thin-rimmed spur and helical gears	PhD/MSc	2
5	Wear performances of PLA based plastic gear	PhD/MSc	2

DR. MOHD HAZWAN BIN YUSOF

mohdhazwan@ump.edu.my

No	Title	PG Level	No. of PGs
1	Study of vortex tube cooling device on waistcoat for high temperature environmental usage	PhD/MSc	2
2	Enhanced cooling performance of vortex tube cooling device through geometrical parameters optimization	PhD/MSc	2
3	Auxilliary burner for solar dryer	PhD/MSc	2
4	Tooth bending strength of thin-rimmed spur and helical gears	PhD/MSc	2
5	Wear performances of PLA based plastic gear	PhD/MSc	2

Manufacturing Focus Group (MFG)

<http://mfg.ump.edu.my>

MFG-Introduction

- The Manufacturing Focus Group (MFG) conduct activities related to the area of manufacturing process.
- The main objective of this group is to enhance manufacturing productivity as well as minimizing the environmental impact of manufacturing.
- Research areas undertaken includes joining and welding, machining, sheet metal forming, casting, non-traditional processing and powder metallurgy.

Research Titles

IR. DR. MOHD RASHIDI BIN MAAROF

mrashidi@ump.edu.my

No	Title	PG Level	No. of PGs
1	effect of high manganese alloy on ni-resist alloy solidification	PhD/MSc	2
2	Effect of degassing agent on nickel aluminum bronze solidification	PhD/MSc	2

IR. DR. AKHTAR RAZUL BIN RAZALI

akhtar@ump.edu.my

No	Title	PG Level	No. of PGs
1	Winding heat characteristic in a coreless ironless generator	PhD/MSc	2
2	Force controlled solenoid for micro forming application	PhD/MSc	2

PROF. MADYA DR. MAHADZIR BIN ISHAK @ MUHAMMAD

mahadzir@ump.edu.my

No	Title	PG Level	No. of PGs
1	Design of FSW tools for dissimilar Al Alloys	PhD/MSc	2
2	Study of dissimilar welding of Al and Mg Alloys using FSW	PhD/MSc	2
3	Laser welding of Advanced High Strength Steel	PhD/MSc	2
4	Welding of thin sheet Mg Alloys using Fiber laser	PhD/MSc	2
5	Laser welding of duplex and Stainless steel	PhD/MSc	2
6	Fabrication of micro groove on Titanium Alloys by Fiber laser	PhD/MSc	2
7	Heat treated of WElded Boron steel	PhD/MSc	2
8	Developement of Friction Stir Wleding machine	PhD/MSc	2
9	Laser welding of Tailor-welded blank	PhD/MSc	2

DR. MOHD FADZIL FAISAE B AB. RASHID

ffaisae@ump.edu.my

No	Title	PG Level	No. of PGs
1	Optimization of Manufacturing Layout for Productivity Improvement	PhD/MSc	2
2	Optimization of Assembly Sequence Planning Problem	PhD/MSc	2
3	Development of Scheduling System for Vehicle Service Center	PhD/MSc	2
4	A Study of Production Scheduling System in Manufacturing Industry	PhD/MSc	2
5	Optimization of Machining Toolpath	PhD/MSc	2

DR. NUR ZALIKHA BINTI KHALIL

nurzalikhak@ump.edu.my

No	Title	PG Level	No. of PGs
1	Adhesion Properties of Aluminum alloy Joints by Nano reinforced Adhesive	PhD/MSc	2
2	Failure behavior of adhesive bonded Aluminum joints by Nanoreinforced Adhesive	PhD/MSc	2
3	Interface adhesion of composite joint by nanoreinforced adhesive	PhD/MSc	2

DR. FADHLUR RAHMAN BIN MOHD ROMLAY

fadhlur@ump.edu.my

No	Title	PG Level	No. of PGs
1	Modelling of sheet metal forming for IBS trust structure using finite element method	PhD/MSc	2
2	Development of Tailor Welded Blank Jig System for CNC Laser Machine	PhD/MSc	2
3	Development of CNC forming machine for IBS construction structure	PhD/MSc	2

DR. AIMAN BIN MOHD HALIL

aimanmh@ump.edu.my

No	Title	PG Level	No. of PGs
1	Investigation of Active Filler Metal Brazing Parameters on the Formation of Reaction Layer between Alumina Ceramic and Metal (Cu and Ni) Joining	PhD/MSc	2
2	Effect of Cu-based Filler Composition on the Intermediate Metal Compound Formation and Joint Mechanical Properties of Cu Brazing	PhD/MSc	2
3	Investigation of Fillers on Welding Properties between Aluminium Alloy and Magnesium Alloy Weld by Metal Inert Gas (MIG) Welding	PhD/MSc	2

DR. AHMAD NASSER BIN MOHD ROSE

nasser@ump.edu.my

No	Title	PG Level	No. of PGs
1	Development of kitting methodology towards lean manufacturing implementation	PhD/MSc	2

DR. ASNUL HADI BIN AHMAD

asnul@ump.edu.my

No	Title	PG Level	No. of PGs
1	Thixoforming of wrought aluminium alloy for automotive components	PhD/MSc	2
2	Rheological behaviour of semisolid metal component during forming operation	PhD/MSc	2
3	Design and development of high temperature viscometer	PhD/MSc	2
4	Effect of temporal thermal field on semisolid metal feedstock behaviour	PhD/MSc	2
5	Study of material flowability produced via semisolid metal processing method	PhD/MSc	2

DR. SITI RABIATULL AISHA BINTI IDRIS

rabiattull@ump.edu.my

No	Title	PG Level	No. of PGs
1	Enhancement on Solder Joint Strength Using Porous Copper	PhD/MSc	2
2	A Study on Intermetallic Compound Formation at The Solder Joint Using Microwave and Furnace	PhD/MSc	2
3	Interfacial Reaction between Green Solder and Copper Using Tube Furnace	PhD/MSc	2

DR. MAS AYU BINTI HASSAN

masszee@ump.edu.my

No	Title	PG Level	No. of PGs
1	In-vitro biocompatibility study on Ti–Mo–Nb–Zr alloys for biomedical applications	PhD/MSc	2
2	Design and analyze new modeling of design thread for dental implant	PhD/MSc	2
3	Effect of carbon content on the mechanical properties and biocompatibility of Co-Cr-Mo alloys	PhD/MSc	2

ENCIK ROSDI BIN DAUD

rosdidaud@ump.edu.my

No	Title	PG Level	No. of PGs
1	Enhanced the fixation between cannulated pedicle screw and osteoporosis bones through parameter optimisation to avoid loosening	PhD/MSc	2
2	Application of an interface failure model to predict fatigue crack growth in an ankle implant	PhD/MSc	2
3	Application of an interface failure model to predict fatigue crack growth in a knee implant	PhD/MSc	2

IR. DR. HAJI NIK MOHD ZUKI BIN NIK MOHAMED

nikzuki@ump.edu.my

No	Title	PG Level	No. of PGs
1	Front End Module Design Optimisation in Reducing Components for Automotive Model	PhD/MSc	2
2	Integrated ergonomics in manufacturing environment's material handling process	PhD/MSc	2
3	Embedded ergonomics in stamping die polishing process	PhD/MSc	2

Structural and Material Degradation Focus Group (SMD)

<http://smd.ump.edu.my/index.php/en/>

SMD-Introduction

- Consists of mechanical and materials engineers who share common interest in structural materials and its degradation.
- The current research focus are corrosion investigation and protection of metals alloys, failure analysis, and production of natural fibre composites

Research Titles

DR. JULIAWATI BINTI ALIAS

juliawati@ump.edu.my

No	Title	PG Level	No. of PGs
1	A study on formulation of aluminium and zinc to produce magnesium alloy by powder metallurgy for automotive applications	PhD/MSc	2
2	Effect of precipitation hardening treatment on the microstructure and corrosion behaviour of magnesium based alloys	PhD/MSc	2
3	Investigation of friction stir welding on the corrosion behaviour of magnesium based alloys	PhD/MSc	2

DR. AHMAD SYAHRIZAN BIN SULAIMAN

syahrizan@ump.edu.my

No	Title	PG Level	No. of PGs
1	Fitness-For-Service: Assesment of Crack-Like Flaws	PhD/MSc	2
2	Stress Classification of Pressurised Equipments: A New Approach	PhD/MSc	2

DR. YULI PANCA ASMARA

ypanca@ump.edu.my

No	Title	PG Level	No. of PGs
1	Develop green corrosion inhibitor for oil and gas conditions.	PhD/MSc	2
2	Volatile green corrosion inhibitor for protecting atmospheric corrosion	PhD/MSc	2
3	Corrosion predicting model for oil and gas industries	PhD/MSc	2

DR. DANDI BACHTIAR

dandi@ump.edu.my

No	Title	PG Level	No. of PGs
1	Fatigue behavior of sugar palm fibre reinforced polylactic acid composites	PhD/MSc	2
2	Degradation study of sugar palm fibre reinforced polypropylene composites	PhD/MSc	2
3	Development of new hybrid sugar palm-pineapple leaf fibre reinforced PLA composites for outdoor applications	PhD/MSc	2

DR. JANUAR PARLAUNGAN SIREGAR

januar@ump.edu.my

No	Title	PG Level	No. of PGs
1	Water absorption behavior and mechanical properties of hybrid jute-ramie composites	PhD/MSc	2
2	Effect of soaking time and concentration of NaOH solution on mechanical properties of pineapple leaf fibre (PALF) - epoxy composites	PhD/MSc	2
3	Study of mechanical and thermal properties of short coir fibre reinforced polyester composites	PhD/MSc	2
4	Investigation on the influence of fibre parameters on mechanical properties of buri palm fibre composites	PhD/MSc	2

DR. SALWANI BINTI MOHD SALLEH

salwani@ump.edu.my

No	Title	PG Level	No. of PGs
1	Crash behavior of foam-filled column	PhD/MSc	2
2	Computationally optimised design of a foam-filled column	PhD/MSc	2
3	Effect of trigger mechanism on initial peak force of tubular structure	PhD/MSc	2
4	Prediction of deformation pattern for tubular structure	PhD/MSc	2

DR. RAMLI JUNID

ramli@ump.edu.my

No	Title	PG Level	No. of PGs
1	Hybrid Nanoreinforcement Graphene Nanoplatelets/Carbon Nanotubes for Epoxy Resin	PhD/MSc	2
2	Functionalisation of Graphene Nanoplatelets to the Interface of matrix-reinforcement	PhD/MSc	2
3	Additional nanoreinforcement for multiscale composite of epoxy/fiber glass structure	PhD/MSc	2
4	Poly(lactic acid) (PLA) reinforced Calcium Carbonate (CaCO ₃) biocomposites for biomedical applications	PhD/MSc	2

DR. MAHENDRAN A/L SAMYKANO

mahendran@ump.edu.my

No	Title	PG Level	No. of PGs
1	Synthesis and characterization of Cobalt Nanowires and Nanoparticles	PhD/MSc	2
2	Synthesis and characterization of Copper Oxide Nanowires and Nanoparticles	PhD/MSc	2
3	Investigation of processing influence on crystallographic behavior of Metal Nanowires	PhD/MSc	2
4	Investigation of processing influence on crystallographic behavior of Metal Oxide Nanowires	PhD/MSc	2
5	LAMMPS Modelling of 1D Nanostructure: Mechanical and Structural Properties	PhD/MSc	2
6	LAMMPS Modelling of Smart Nanostructure: Mechanical and Structural Properties	PhD/MSc	2

DR. MOHD RUZAIMI BIN MAT REJAB

ruzaimi@ump.edu.my

No	Title	PG Level	No. of PGs
1	Compressive-Shear Response of Self Reinforced Polypropylene Honeycomb Structure	PhD/MSc	2
2	Development of Composite based Additive Manufacturing	PhD/MSc	2
3	Assessment of Composite Waste Disposal and Recycling in Aerospace Industries	PhD/MSc	2
4	Structural performance of periodic cellular metal sandwich structures	PhD/MSc	2
5	Strong and light-weight materials made of reinforced honeycomb sandwich structures	PhD/MSc	2
6	Experimental and Numerical prediction of Impact Damage and Residual Strength of Foam-core Sandwich Structures	PhD/MSc	2
7	Geometrically nonlinear analysis of Sandwich Structures	PhD/MSc	2
8	Failure analysis of corroded pipelines reinforced with Composite Repair Systems	PhD/MSc	2
9	Dynamical behaviour of Fibre Metal Laminates via Free Vibration Method	PhD/MSc	2

DR. MOHD AKRAMIN MOHD ROMLAY

akramin@ump.edu.my

No	Title	PG Level	No. of PGs
1	Bootstrap Analysis of Surface Crack for fatigue lifetime and confidence intervals.	PhD/MSc	2
2	Analysis of Fatigue Crack Growth Model for Surface-crack.	PhD/MSc	2
3	Initial Flaws Size Model for Fatigue Life Prediction Based on Crack Growth Analysis.	PhD/MSc	2