

TECHNICAL SESSIONS SCHEDULE

SESSION 1

Time: 1100 – 1300

NO.	ID	TITLE	PRESENTER
1	38	Effect of Mg Doping Concentration on Structural, Morphology, and Optical Properties of Electrodeposited Cu ₂ O Layer	Nur Nisha Najjni Binti Razalli
2	68	Epoxidation of Palm Fatty Acids Distillated by Peracid Mechanism	Mohd Jumain Jalil
3	74	Investigation of physical properties on HA/nGO coating magnesium alloy	Nursyifa Hamir Hamzah
4	47	Khaya senegalensis Solid Fuel Pellet Mechanical Properties with Different Binder Percentages	Ras Izzati Ismail
5	86	Construction of internally stacked Cu ₂ O:CuO layers in Cu ₂ O:CuO/Gr/ZnO heterojunctions for solar cells applications	Marina Marzuki
6	53	The characterization of plastic waste (pw) mixed with polystyrene reinforced concrete for brick pallet	Izzati Abdul Manaf
7	56	Investigation on the effects of plasticity and biodegradability of bioplastics-based tapioca starch with palm oil as plasticizer protective film	Noraini Marsi

SESSION 2

Time: 1100 – 1300

NO.	ID	TITLE	PRESENTER
1	14	Variable Value Stream Mapping and Risk Assessment-Failure Mode and Effect Analysis Modelling for Monte Carlo Simulation	Mohd Shihabudin Ismail
2	41	Ergonomics assessment of production's workstations – a case study in the food manufacturing industry	Nur Nadia Nadirah Yusuf
3	83	Ergonomics issues among operators in composite manual hand layup activities: A systematic literature review	Mohd Zulhaimi Yusof
4	23	Design and Development of Separation Tool for Tablets and Capsules Medicine from Aluminum Pack	Wan Nur Atiqah Wan Draman
5	67	Process layout evaluation in the production of ethanol fuel	Mohd Fahmi Md Salleh
6	36	Application of fuzzy failure mode, effect and criticality analysis (fuzzy FMECA) with extended rule of criticality ranking assessment: a case study in ghee and soap industry	Ali Ahmed Adel
7	100	Investigation and improvement of Boeing aircraft composite panel industrial painting issues by designing smart robotic precision painting system	Muhammad Aniq Syazwan Muhammad Hassan

SESSION 3

Time: 1100 – 1300

NO.	ID	TITLE	PRESENTER
1	11	Developing an empirical model to predict the winding coil temperature for a compact wind turbine	Nor Zaiazmin Yahaya
2	96	Validation of an Experimental Setup to Study the Behaviour of a Free-Falling Particle in Viscous Fluid	Muhammad Sofwan Bin Mohamad
3	46	Design and analysis of a solar integrated agriculture irrigation system for rural farming area	Nursyazwani A Aziz
4	82	Research on Different Types of Cooling System on Ground Mounted Solar Photovoltaic System for Electrical Output Enhancement	Mohd Azimin Elias
5	88	Wake analysis between nested design and cylindrical representation of low current speed vertical tidal turbine	Lakshuman Dass
6	90	The influence of tidal turbine arrangement on the wake interaction in shallow water.	Gisrina Elin Suhri

SESSION 4

Time: 1100 – 1300

NO.	ID	TITLE	PRESENTER
1	9	Tensile properties of hybridised fire retardants in pineapple leaf fibre (PALF) reinforced polymer composites	Nor Hazwani Mamat
2	12	Investigation of banana-based composite fibers on tensile strength and water absorption behavior	Mohd Khairul Efni Norman
3	17	Mechanical and Morphological Analysis of Alkali Activated Fly Ash Geopolymer Fiber Reinforced Polypropylene Composite	Zarul Aiman Adrus
4	20	Characterisation of Biocomposite Film with Napier based Nanocrystalline Cellulose	Sucinda Eh Fo
5	24	Structural and mechanical characterisation of cellulose nanofibers (CNF) from Pennisetum Purpureum reinforced with polylactic acid (PLA)	Revati Radakisnin
6	55	Utilization of Plastic Waste (PW) Reinforced Wood Waste (WW) Composites for Tile Application	Mohamad Mohshein Hashim

SESSION 5

Time: 1100 – 1300

NO.	ID	TITLE	PRESENTER
1	15	Minimizing warpage and shrinkage of Plastic Car Rear Bumper Fabrication via Simulation Based Optimisation	Uzair Rosli
2	95	Analysis of tailor-rolled blanks having thickness distribution by finite element analysis	Liyana Tajul
3	49	Numerical Evaluation of Aluminium 6026-T9 Fracture Toughness	Amelia Nabilla Zulkifli
4	40	Static and Dynamics Analysis of Bicycle Frame	Wei Hong Tan
5	39	Structural Analysis on the Coil Spring of Motorcycle Suspension System	Wei Hong Tan
6	76	Projection of Stress on Slewing Post for Gangway Using Finite Element Method from Experimental Analysis	Mohd Shukri Yob
7	2	Numerical Analysis of Filtering Circuit for Partial Discharges	Liew Hui Fang

SESSION 6

Time: 1400 – 1600

NO.	ID	TITLE	PRESENTER
1	48	ANALYSIS OF ENERGY ABSORPTION OF ALUMINIUM FOAM FENDERS UNDER AXIAL LOADS	Fauzan Djamaluddin
2	25	Design and Experimental Implementation of a Passive Dynamic Vibration Absorber to Attenuate Broadband Vibration	Chai Chang Sung
3	107	Study on Modal and Harmonic Response Analysis by Modifying Motorcycle Chassis using Finite Element Method	Wong Yau Jye
4	72	Parametric Study of Bio-Inspired Thin-Walled Tubes Impacted under Axial and Oblique Loadings	Amirulamri Samsolbahar
5	18	Low Velocity Impact Behaviour Analysis of Different Fibre Stacking Sequences of Glass Fibre Reinforcement Composite.	Wong Jing Wen
6	57	Dynamic Mechanical Analysis (DMA) of graphene nanoplatelets (GNP)/glass reinforced epoxy composite	Mohammad Asraf Alif Ahmad
7	78	A Comparative Study of the EWMA and Double EWMA Control Schemes	Kok Ming Chan

SESSION 7

Time: 1400 – 1600

NO.	ID	TITLE	PRESENTER
1	4	Fit evaluation of user-centred bicycle helmet design	Helmy Mustafa El Bakri
2	43	Design and Analysis of Various Thermoplastic for Optimized Ankle Foot Orthosis	Shah Fenner Khan
3	50	Analysis and Evaluation of Optimised Lower Limb Prosthetic Device	Shah Fenner Khan
4	93	Design optimization of exhaust manifold's length for Spark Ignition (SI) engine through CFD analysis on low-end rpm using Taguchi's Method	Rishan Murali
5	99	Parametric Investigation on Different Bone densities to Avoid Thermal Necrosis During Bone Drilling Process	Md Ashequl Islam
6	30	Simulation-enabled Design and Analysis of Globe Valve	Nu'Man Al-Basyir Mohd Nuri Al-Amin

SESSION 8

Time: 1400 – 1600

NO.	ID	TITLE	PRESENTER
1	8	Harnessing Tidal Stream Energy in the Shallow Water Environment of Malaysia – An Overview	Muhammad Wafiuddin Abd Rahim
2	103	Analysis of an Arduino based solar tracking system	Azizul Mohamad
3	104	A review of automatic solar tracking systems	Azizul Mohamad
4	26	Aerodynamics Analysis of UniMAP Automotive Racing Team Formula SAE Race Car spoiler via Simulation: Effect of Angle of Attack	Ahmad Wafi
5	27	Aerodynamics Analysis of UniMAP Automotive Racing Team Formula SAE race car spoiler via simulation: Effect of Spoiler Size	Ahmad Wafi Zakaria
6	101	Investigating thermal characteristic of copper alloys valve seat towards engine performance enhancement of MODENAS CT115 through steady-state analysis	Mohamad Azreel Amrey Zainol

SESSION 9

Time: 1400 – 1600

NO.	ID	TITLE	PRESENTER
1	1	Performance of Different Non-Edible Vegetable Oils as Metal Cutting Fluids in Drilling Inconel 718 on Tool Wear and Surface Roughness	Nur Syahilia Syahira Safie
2	60	Microstructural and Physical Properties of Yttria Stabilized Zirconia (YSZ) Prepared by Ceramic Injection Moulding (CIM)	Mahfuzah Zainudin
3	37	Methane Gas Production from different composition of Food Waste and dry Cow Manure	Tengku Roslina Yusof
4	71	Green Catalytic Epoxidation of Waste Cooking Oil by Peracid Mechanism	Intan Suhada Azmi
5	65	An experimental study of tool wear during end milling of carbon fibre reinforced polymer in cutting fluid condition	Najlah Sakinah Shahrudin
6	70	Epoxidation of Palm Fatty Acids Distillated	Mohd Jumain Jalil

SESSION 10

Time: 1400 – 1600

NO.	ID	TITLE	PRESENTER
1	28	A comparative study on chitosan/gelatin composite films with incorporated Pith and Cortex of Napier Grass.	T.N. Tuan Rohadi
2	29	Swelling Behaviors of Composite film with Alternating Fibre Reinforcement and Aqueous Media.	T.N. Tuan Rohadi
3	31	Effect of sintering temperature on composite hollow fibre membrane derived from hydroxyapatite cow bone and kaolin	Suraya Najieha Kamarudin
4	32	Performance study of hydroxyapatite cow bone based polysulfone mixed matrix membrane: Effect of hydroxyapatite morphology	Siti Nor Suhaida Rasman
5	42	Fracture Energy for Orthogonal Cutting in Unidirectional CFRP at Different Cutting Directions	Amie Norfreeda Amir
6	59	Thermal Conductivity of Copper Matrix Composites Reinforced with Multi-wall Carbon Nanotubes	Nor Shamimi Shaari
7	61	Performance of Composite Sand Cement Brick with Power Saw Wood	Mohd Noor Arib Md Rejab

SESSION 11

Time: 1600 – 1800

NO.	ID	TITLE	PRESENTER
1	10	Effect of Sloped Walking on Ground and Joint Reaction Forces	Noor Arifah Azwani Abdul Yamin
2	19	Mechanical Characterization of Dental Implant Due to Biomechanical Loading	Ishak Ibrahim
3	35	Finite Element Analysis of Proximal Femur Under Static Loading During Sideway Fall	Kah Poh Wong
4	45	Hemodynamic Effect of Thrombosis Formation On Patent Ductus Arteriosus (PDA) Occluder Device	Maizatul Nadwa Che Aziz
5	84	Development of Synthetic Spine for Biomechanical Research: An Overview	Nor Amalina Muhayudin

SESSION 12

Time: 1600 – 1800

NO.	ID	TITLE	PRESENTER
1	52	Conceptual design for smart organic waste recycling system	Wee Choon Tan
2	87	Conceptual design of a solar powered agriculture irrigation system for rural farming	Nursyazwani Abdul Aziz
3	102	Conceptual Design of a Bike Towing Trailer with Smart Towing Trailer	Vil Cherd Teoh
4	75	Semi-Autonomous Trolley Cart	Thean Hin Teoh
5	94	A review on the correlation between exhaust backpressure and the performance of IC engine	Rishan Murali
6	5	Conceptual Design of Gravitational Water Vortex Turbine for Green Energy Generation	Jeremiah Camillus

SESSION 13

Time: 1600 – 1800

NO.	ID	TITLE	PRESENTER
1	16	Influence of inlet velocity and heat flux on the thermal characteristic of various heat sink designs using CFD analysis	Chu Yee Khor
2	79	Flow Physics Study of NACA 0018 Darrieus Hydrokinetic Turbine using Unsteady CFD Simulations	Danesh Mailvaganam
3	105	Performance Analysis of Multi Rotating Savonius Turbines for Exhaust Air Energy Recovery Through CFD Simulations	Kuscera Youngblood
4	58	Numerical Study of Blade Roughness Effect on Cavitation in Centrifugal Pumps	Basel Al-Bishtawi
5	63	A Simulation on Influence of Cooling at Rake Face to Tool Temperature	Muhammad Syamil Zakaria
6	85	A Numerical Investigation of the Effect of Bluff Body Bluntness Factor on the Wake-Vortex Flow Pattern	Lye Foon Lee
7	89	Numerical study on the wake characteristics of the Savonius turbine for shallow water application in Malaysia.	Kumaran Rajendran

SESSION 14

Time: 1600 – 1800

NO.	ID	TITLE	PRESENTER
1	106	Influence of Friction Stir Welding Parameters on Joint Defects, Temperature and Hardness of AA6061-T6 and S27JR Mild Steel FSW Joint	Wan Mohd Syafiq Wan Sulong,
2	91	Effect of Quenching on the Mechanical Properties of Carbon Steel for Hammer Mill	Marthininaidu Vasudiven
3	34	Effect of loading protocol on the mechanical properties of 316L stainless steel	Heng Hau
4	92	Effect of Cold Forging on Wear Resistance of High Carbon Steel for Dolomite Hammer Mill	Marthininaidu Vasudiven
5	73	Failure Analysis of Boron/Epoxy Composite Laminates with Square Cutouts in Various Size under Uniaxial Tension	Muhammad Amir Azhan Zulkifli
6	64	An Experimental Investigation on Surface Quality of CFRP after Milling in Cutting Fluid Environment	Aisyah Madihah Mustafa
7	108	Surface characterization of laser-induced molten area in micro-grooving of silicon by ultraviolet (UV) laser	Nursyamimi Syazwani Abdul Raman