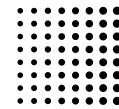


# Physical Session Schedule



## PHYSICAL SESSION 1

TIME: 13:30 – 18:00 WIB

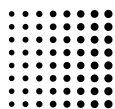
LOCATION: Room 6.02, 6th Floor, Hery Hartanto Building, USAKTI

MODE OF PRESENTATION: PHYSICAL

SESSION CHAIR: DR MAZIAN MOHAMMAD (UTP)

ASSISTANT CHAIR: DR. IR. SENTOT NOVIANTO, S.T., M.T. (USAKTI)

No	Time	Paper ID	Title	Presenter
1	13:30	1571128402	Study Related to Suppression of Out-of-Plane Squeal on Disk Brake System by Using Particle	Junichi Kitamura (Oita University, Japan)
2	13:50	1571128629	Experimental Study of the Suppression of Frictional Self-Exited Vibration by Cast Iron Powder	Kenya Sada (Oita University, Japan)
3	14:10	1571129319	Finite Element Method for Cyclic J-Integral Analysis with Shallow Cracked CT Specimen	Muhamad Safwan Muhamad Azmi (UniMAP, Malaysia)
4	14:30	1571203982	Influence of Multi-Section Infill Density on the Mechanical Properties of PETG 3D-Printed Parts	Mohd Sani Mohamad Hashim (UniMAP, Malaysia)
5	14:50	1571209034	Investigation of Fiber Bragg Grating Performance at Elevated Temperature of Stainless-Steel Tube Using Global Statistical Analysis	Mazian Mohammad (Universiti Teknologi PETRONAS, Malaysia)
6	15:10	1571209958	Integrating Non-Destructive Testing Data into Risk-Based Inspection for Accurate Corrosion Rate Prediction of Heat Exchangers Tube Bundle	Airee Afiq Abd Rahim (Universiti Teknologi PETRONAS, Malaysia)
7	15:30	1571125114	Effects of Air Psychrometric Conditions on the Post-Harvest Shelf Life of MD2 Pineapples Focusing on Freshness and Sweetness	Ahmad Izzat Ahmad Sabandi (UniMAP, Malaysia)
8	15:50	1571145299	Flow Characteristics of 20% Fe <sub>3</sub> O <sub>4</sub> Nanofluid Under Magnetohydrodynamic Actuation in a Vertical Tube	Muhammad Haziq Bin Omar (UniMAP, Malaysia)
9	16:10	1571208779	Formation of Stable Electrolyte Layers Using Absorbent Materials to Improve Sacrificial Anode Protection in Splash Zones	Dody Prayitno (USAKTI, Indonesia)



# Physical Session Schedule

## PHYSICAL SESSION 2

TIME: 13:30 – 18:00 WIB

LOCATION: Room 6.03, 6th Floor, Hery Hartanto Building, USAKTI

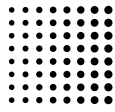
MODE OF PRESENTATION: PHYSICAL

SESSION CHAIR : AP TS DR ING MOHD NAZRI OMAR (UNIMAP)

SESSION CO-CHAIR : IR. ANNISA BHIKUNING, ST, M.ENG., PH.D (USAKTI)

No	Time	Paper ID	Title	Presenter
1	13:30	1571203737	Sintering Temperature Influence on the Structural and Mechanical Properties of Zr/Sm Co Doped Ceria Electrolyte	Norzarul Asri Bin Kamis (UniMAP, Malaysia)
2	13:50	1571206418	Experimental Study on the Effect of FDM Parameters on Snap-Fit Joint Insertion Angle	Surya Yudha Pratidina (Universitas Indonesia, Indonesia)
3	14:10	1571211018	Influence of Surface Treatment on Chemical Bonding in Kenaf Fiber-Reinforced POM Filaments	Muhammad Faris Najmi Zulkifflee (UniMAP, Malaysia)
4	14:30	1571211037	Enhancing Fiber -Matrix Adhesion: Chemical Bonding Effects of Surface Treated PALF in POM Filaments	Nur Sharafina binti Zulkifli (UniMAP, Malaysia)
5	14:50	1571220190	A Mini Review on Polymer - Inorganic Mixed-Matrix Membranes for Low-Temperature CO <sub>2</sub> Capture	Norazreen Samsuri (Universiti Teknologi Malaysia, Malaysia)
6	15:10	1571145227	Magnetic Field Effects on the Distribution and Dynamics of Fe <sub>3</sub> O <sub>4</sub> Nanoparticles in a Horizontally Swirling Tube	Kamarul Aizat Abdul Khalid (UniMAP, Malaysia)
7	15:30	1571143712	Economic Analysis on AP-X Process for Liquefaction of Natural Gas Using DWSIM	Noor Hanif Bin Ismail (UniMAP, Malaysia)
8	15:50	1571208369	The Engine Performance of Blending 2-Ethylhexyl Nitrate and Essential Oils as Additive in Diesel Fuel	Annisa Bhikuning (Universitas Trisakti, Indonesia)
9	16:10	1571160006	Application of Natural Rubber Latex for Enhancing the Quality of Soil-Cement in Road Base Construction	Haruetai Maskong (RMUTI, Thailand)
10	16:30	1571223997	Frictional and Wear Behaviour of Treated Furcraea Foetida Fibre-Reinforced Epoxy Composites (FFRC): Influence of Fibre Orientation and Volume Fraction	Tan Siu Siew (UniMAP, Malaysia)





# Physical Session Schedule

## PHYSICAL SESSION 3

TIME: 13:30 – 18:00 WIB

LOCATION: Room 6.05, 6th Floor, Hery Hartanto Building, USAKTI

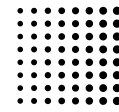
MODE OF PRESENTATION: PHYSICAL

SESSION CHAIR : IR. TONO SUKARNOTO, M.T., IPM (USAKTI)

SESSION CO-CHAIR : DR. SUPRIYADI, M.SI (USAKTI)

No	Time	Paper ID	Title	Presenter
1	13:30	1571147569	Application of Polymeric Die Additively Rapid Fabricated via 3D Printer for Deep Drawing of Thin AA3104 H19 Aluminium Alloy Sheets	Witthaya Daodon (RMUTI, Thailand)
2	13:50	1571157764	Comparative Analysis of Tool Wear and Surface Roughness in Milling CFRP: Coolant Vs Chilled Air Conditions	Aisyah Madinah Mustafa (International Islamic University Malaysia)
3	14:10	1571160337	Plastic Deformation and Deep Drawability of Un-Age-Hardened Ag-Cu-Si Sterling Silver Sheets	Witthaya Daodon (RMUTI, Thailand)
4	14:30	1571183969	A Development of Advanced Fryer Mechanism for Frozen Food Deep Frying System Using DMAIC Approach	Mohd Shihabudin Ismail (UniMAP, Malaysia)
5	14:50	1571205226	Etch Depth Dependence in SOI Large Cross-Section Rib Waveguide	Nurdiani Zamhari (Universiti Malaysia Sarawak, Malaysia)
6	15:10	1571220561	Metaheuristic Design Optimization of Mechanical Components and Cost Analysis Using SAP Finance Modules: A Short Review of Literature and Integration Framework	Nazurah Nasuha Bte Nijar (UTHM, Malaysia)
7	15:30	1571224717	Successive Forging of JSC1180YN Ultra High-Strength Steel Tailored Blanks: Effect of Feed Rate on Geometrical Formability and Transition Zone	Kwong Wei Jun (UniMAP, Malaysia)
8	15:50	1571182270	A Parametric Study on Exhaust Manifold Design for Performance Optimization in a 110cc SI Engine	Muhammad Hussein Akbar Ali (UniMAP, Malaysia)
9	16:10	1571194021	Experimental Study of the Motion and Drag for a Free-Falling Rigid Sphere at Moderate Reynolds Numbers	Mior Firdaus Bin Mior Abd Majid (UniMAP, Malaysia)
10	16:30	1571223854	Improvement of Mechanical Properties of Coffee Waste-Reinforced Biodegradable 3D Printing Filament	Sally Cahyati (USAKTI, Indonesia)

# Physical Session Schedule



## PHYSICAL SESSION 4

TIME: 13:30 – 18:00 WIB

LOCATION: Room 6.15, 6th Floor, Hery Hartanto Building, USAKTI

MODE OF PRESENTATION: PHYSICAL

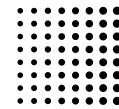
SESSION CHAIR: : AP IR TS DR NASRUL AMRI MOHD AMIN (UNIMAP)

ASSISTANT CHAIR: DR. RAHMI MAULIDYA, S.T., M.T(USAKTI)

No	Time	Paper ID	Title	Presenter
1	13:30	1571178385	Patient-Specific CFD Analysis of Carotid Artery Haemodynamics: Impact of Anatomical Variations on Atherosclerotic Risk	Shah Mohammed Abdul Khader (Manipal Institute of Technology, India)
2	13:50	1571195962	J-Integral Evaluation of Shielding and Amplification in Double-Edge Cracks of Alveolar Bone	Noor Alia Md Zain (UniMAP, Malaysia)
3	14:10	1571198313	Biomechanical Analysis of Pauwels Type III Femoral Neck Fracture with Screw Implant Under Quasi Static Loading	Darmahssilan Subramaniam (UniMAP, Malaysia)
4	14:30	1571200090	Three-Screw Cannulated Configurations for Pauwels Type III Femoral Neck Fractures: A Review	Darmahssilan Subramaniam (UniMAP, Malaysia)
5	14:50	1571201080	Effect of Thoracic Spine Deformities on the Corrective Forces of Implant Rod-Screw Under Scoliosis Surgery: A Finite Element Analysis	Kavita Gunasekaran (UniMAP, Malaysia)
6	15:10	1571204021	Biomechanical Analysis and Fracture Risk Predictions of the Proximal Femur During Falls Under Impact and Quasi-Static Conditions	Darmahssilan Subramaniam (UniMAP, Malaysia)
7	15:30	1571145485	Enhancement on the Integrated Phase Change Cold Storage System with Conducting Crossed Fins for Seafood Storage Application: A Parametric Study	Muhammad Syahir Ahmad Fouzi (UniMAP, Malaysia)
8	15:50	1571203796	Hybrid Infrared Thermometer-Thermocouple Framework for Optimized Thermal Monitoring of Blade-Type Batteries Under Varying C-Rates	Mohd Syawal Abd Kadir (Universiti Teknologi Malaysia, Malaysia)
9	16:10	1571208162	Thermodynamic and Exergy Assessment of Temperature-Induced Performance Losses in Silicon Photovoltaic Panels Under Tropical Conditions	Mohd Syawal Abd Kadir (Universiti Teknologi Malaysia, Malaysia)
10	16:30	1571204701	A Parametric Study of Phase Change Thermal Energy Storage Integrated with Y-Shaped Fins for Ice Cream Industry Using Computational Fluid Dynamics Simulation	Muhamad Izzat Zuhair Abdul Halim (UniMAP, Malaysia)



# Virtual Session Schedule



## VIRTUAL SESSION I

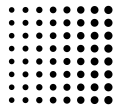
TIME: 13:30 – 16:30 WIB (14:30 – 17:30 MYT)

MODE OF PRESENTATION: ONLINE SESSION

SESSION CHAIR: AP TS DR TAN WEI HONG

ASSISTANT CHAIR: DR AHMAD SYAYUTHI ABDUL RAHMAN

No	Time WIB (MYT)	Paper ID	Title	Presenter
1	13:30 (14:30)	1571193587	Design of High-Speed Permanent Magnet Synchronous Motor for Vacuum Cleaner Application Using Finite Element Analysis	Mohd Rezal Mohamed (UniKL MSI, Malaysia)
2	13:50 (14:50)	1571195845	Experimental Investigation of Bending Failure in Aircraft Sandwich Panels	Muhammad Amirul Akmal Bin Mohd Zaidi (UniMAP, Malaysia)
3	14:10 (15:10)	1571195850	The Effect of Machining Parameters on Hardness and Surface Quality in Polyamide 6	Muhammad Raif Amin Norzamri (UniMAP, Malaysia)
4	14:30 (15:30)	1571201517	Acoustical Analysis on Silica Aerogel-Based Material	Nafiizuddin Mohammad Zamri (UniMAP, Malaysia)
5	14:50 (15:50)	1571209923	Development of Dynamic User Interface (UI) with Machine Vision and Automation Functionality for an Automation Testbed	Nor Syah Farah Atirah Binti Che Ibrahim (UniMAP, Malaysia)
6	15:10 (16:10)	1571208315	Experimental Characterization of the Transmission Ratio in V-Belt CVT	Vincenzo La Battaglia (Università degli Studi Roma Tre, Italy)
7	15:30 (16:30)	1571219751	Mechanical and Thermal Performance of Autoclaved Aerated Concrete - Crushed Coconut Shell (AAC-CCS) for Lightweight Panel	Nur Eilyana Izzatie Binti Noor Azman (UTHM, Malaysia)
8	15:50 (16:50)	1571220054	Performance of Recycled Rubber on the Density and Fire Resistance of Autoclaved Aerated Concrete (AAC-RR)	Siti Zulaiqha Wajdi Mohd Farid Wajdi (UTHM, Malaysia)
9	16:10 (17:10)	1571224661	Investigation of Variation in Strain Localization During FE Simulation of Hole-Flanging Process	Tan Chin Joo (Universiti Malaya, Malaysia)



# Virtual Session Schedule

## VIRTUAL SESSION 2

TIME: 13:30 – 16:30 WIB (14:30 – 17:30 MYT)

MODE OF PRESENTATION: ONLINE SESSION

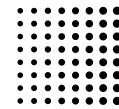
SESSION CHAIR : TS DR NOR ZAI AZMIN YAHAYA

SESSION CO-CHAIR : TS DR ROZIE NANI BINTI AHMAD

No	Time WIB (MYT)	Paper ID	Title	Presenter
1	13:30 (14:30)	1571158642	Finite Element Analysis of Rubber Mat for Elderly Fall Detection	Pitinun. Vasantasanant (RMUTI, Thailand)
2	13:50 (14:50)	1571182807	Assessment of Radioactive Leakage and Radiation Exposure Levels in Laboratory Environments	Siti Amira Othman (UTHM, Malaysia)
3	14:10 (15:10)	1571220120	Effect of Implant Diameter on Stress Distribution for Titanium and Zirconia Implants by Using Finite Element Analysis (FEA)	Nurul Najwa Mansor (UniMAP, Malaysia)
4	14:30 (15:30)	1571122971	Effect of Decelerating Paddy Flow in a Drying Chamber Powered by Infrared Radiation	Nuttapong Wongbubpa (RMUTI, Thailand)
5	14:50 (15:50)	1571159727	Investigation of Peanut Kernel Drying Using a Hybrid Solar-Infrared Drying System	Siwakorn Srithanyakorn (RMUTI, Thailand)
6	15:10 (16:10)	1571190082	Smart Prediction of Thermal Damage During Bone Drilling: A Comparative Study of Machine Learning Models	Md Ashequl Islam (UniMAP, Malaysia)
7	15:30 (16:30)	1571199305	Thermal Comfort and Air Quality Study of a Dormitory Room in a University in Northern Malaysia - a Case Study	Suhaila Hussain (UniMAP, Malaysia)
8	15:50 (16:50)	1571208386	Sustainable Design of Clean Water Distribution Systems for Facilities: A Case Study of Restaurants in Toll Road Rest Areas	Achmad Mico Wahono (USAKTI, Indonesia)



# Virtual Session Schedule



## **VIRTUAL SESSION 3**

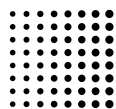
TIME: 13:30 – 16:30 WIB (14:30 – 17:30 MYT)

MODE OF PRESENTATION: ONLINE SESSION

SESSION CHAIR: DR MUHAMMAD SOFWAN MOHAMAD

ASSISTANT CHAIR: PROF. MADYA DR. MUHAMAD SAIFULDIN BIN ABDUL MANAN

No	Time WIB (MYT)	Paper ID	Title	Presenter
1	13:30 (14:30)	1571143186	Layout Redesign with Combination Method in Palm Oil Industry	Yudi Daeng Polewangi (UniMAP, Malaysia)
2	13:50 (14:50)	1571178725	An Empirical Study on the Shape of Edible Bird Nests: Investigating the Impact of Cleaning Processes on Morphological Changes	Syaza Abdul Rahim (UiTM, Malaysia)
3	14:10 (15:10)	1571194152	Design and Optimization of Motorcycle Swingarm by Using Finite Element Analysis (FEA)	Khairul Shahril bin Shaffee (UniKL MSI, Malaysia)
4	14:30 (15:30)	1571194611	Investigating Failure Mechanisms and Repair of Burn-Through Defects in 5-Inch Schedule 120 Welded Pipes	Mohd Shahrizan Yusoff (UniKL MSI, Malaysia)
5	14:50 (15:50)	1571194970	Assessing the Efficiency of Quality Techniques in Identifying Component Failure in the Electronics Manufacturing Services (EMS) Industry	Mohd Norzaimi Che Ani (UniKL MSI, Malaysia)
6	15:10 (16:10)	1571204860	Risk Assessment of Materials Management System (MMS) in Electronics Manufacturing Services (EMS) Industry	Mohd Norzaimi Che Ani (UniKL MSI, Malaysia)
7	15:30 (16:30)	1571205258	Multi-Depth Image Acquisition and Edge-Based Image Processing in Inspecting Wires on Wire-Bonded Electronic Packaging	Hanif Imran Bin Danial Aman (USM, Malaysia)
8	15:50 (16:50)	1571159654	Design and Development of an Automatic Temperature Control System for a Charcoal-Briquette Beef Roasting Oven Using PLC	Pornsawan Tongbai (RMUTI, Thailand)



# Virtual Session Schedule

## VIRTUAL SESSION 4

TIME: 13:30 – 16:30 WIB (14:30 – 17:30 MYT)

MODE OF PRESENTATION: ONLINE SESSION

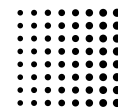
SESSION CHAIR : AP DR ISHAK IBRAHIM

SESSION CO-CHAIR : DR WAN MOHD SYAFIQ WAN SULONG

z	Time WIB (MYT)	Paper ID	Title	Presenter
1	13:30 (14:30)	1571158112	Thermal Properties of Carbon-Fiber-Reinforced Epoxy Composites Fabricated from Commercial Carbon Fiber Mats	Supattra Singnisai (RMUTI, Thailand)
2	13:50 (14:50)	1571158714	Phase Stability and Crystal Structure Evolution in Lead-Free Ferroelectric Ceramics via Ba(Zr <sub>0.5</sub> Ti <sub>0.5</sub> )O <sub>3</sub> Addition and B-Site Mn Doping	Sujitra Unruan (RMUTI, Thailand)
3	14:10 (15:10)	1571192293	Barrel Temperature Effect on Warpage, Cycle Time and Weight of Injection Molded High-Density Polyethylene	Mohd Hazri Omar (UniMAP, Malaysia)
4	14:30 (15:30)	1571194280	Mechanical Characterization and Process Optimization of Coir-Epoxy Composites via Taguchi L9 and Signal-to-Noise Analysis	Mohamad Sazali Said (UniKL MSI, Malaysia)
5	14:50 (15:50)	1571199811	FTIR and XRD Microscopic Characterization of Alkali-Treated Fucra Feotida Fiber and Their Polymer Composites at Varying Fibers Loading	Mohd Shahril Bin Shariff (UniMAP, Malaysia)
6	15:10 (16:10)	1571203600	Investigation on Tensile Strength of Epoxy Composite Reinforced with Cyperus Odoratus Sedge Fibers	Khor Jian Yong (UniMAP, Malaysia)
7	15:30 (16:30)	1571207661	Damage Characterization and Flexural After Impact Properties of CFRP Composite	Maslinda Abu Bakar (UniMAP, Malaysia)
8	15:50 (16:50)	1571208151	Influence of Welding Parameters on Hybrid Stacked Friction Stir Welding Joints of Aluminium Alloy 6061-T6 Plates	Wan Mohd Syafiq Wan Sulong (UniMAP, Malaysia)
9	16:10 (17:10)	1571208612	Eco-Friendly Synthesis Routes to UiO-66-NH <sub>2</sub> for Carbon Capture: Structural and Adsorption Insight	Fayza Yulia (Universitas Pertamina, Indonesia)



# Virtual Session Schedule



## VIRTUAL SESSION 5

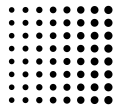
TIME: 13:30 – 16:30 WIB (14:30 – 17:30 MYT)

MODE OF PRESENTATION: ONLINE SESSION

SESSION CHAIR: AP TS DR ANAS ABDUL RAHMAN

ASSISTANT CHAIR: DR NURUL NAJWA BINTI MANSOR

No	Time WIB (MYT)	Paper ID	Title	Presenter
1	13:30 (14:30)	1571160094	Enhancing Solar Dryer Efficiency Using Organic Phase Change Materials for Thermal Energy Storage	Siwakorn Srithanyakorn (RMUTI, Thailand)
2	13:50 (14:50)	1571193628	The Impact of Porous Media Arrangement on Combustion Performance: A Study of Single and Double-Layer Burner Configurations	Ahmad Kamal Ismail (UniKL MSI, Malaysia)
3	14:10 (15:10)	1571193647	Comparative Analysis of Concentrated Solar Power and Radiative Cooling Thermoelectric Generator	Ahmad Kamal Ismail (UniKL MSI, Malaysia)
4	14:30 (15:30)	1571193713	Performance of Heat Sink for Energy Harvesting from Vehicle Radiator	Mohamad Shukri Bin Mohd Zain (UniKL MSI, Malaysia)
5	14:50 (15:50)	1571197514	Mechanical and Combustion Performance of Raw and Torrefied Neem and Almond Briquettes Using Organic Binders for Sustainable Bioenergy	Surajo Namadi (USM, Malaysia)
6	15:10 (16:10)	1571197679	Adapting AI-Based Medical Imaging Pipelines for Intelligent Fault Detection in Sustainable Energy Infrastructure	Gurnoor Dang (Stanford University, USA)
7	15:30 (16:30)	1571197766	Sustainable Bioenergy from Palm Oil Mill Effluent via Environmental Recycling System: Enhancing Energy Density and Structural Integrity for Gasification Applications	Monday Augustine Agge (USM, Malaysia)
8	15:50 (16:50)	1571199560	Rise Time Analysis of Partial Discharge Signal in Medium Voltage Cable Insulation	Mohd Haswandi Bin Hashim (UniMAP, Malaysia)



# Virtual Session Schedule

## VIRTUAL SESSION 6

TIME: 13:30 – 16:30 WIB (14:30 – 17:30 MYT)

MODE OF PRESENTATION: ONLINE SESSION

SESSION CHAIR : DR. MUHAMMAD HASNULHADI BIN MOHAMMAD JAAFAR

SESSION CO-CHAIR : AP DR MOHD ZAKIMI ZAKARIA

No	Time WIB (MYT)	Paper ID	Title	Presenter
1	13:30 (14:30)	1571216327	The Effect of 3D Printing Technique and Performance Improvement of Thermal Conductivity of Heat Sinks for Small-Scale Electronic Devices: A Review	Azizul Mohamad (UniMAP, Malaysia)
2	13:50 (14:50)	1571201749	Parametric Study on a Phase Change Thermal Energy Storage Integrated with Longitudinal Fins for Low Temperature Storage Application Using CFD	Nasser Salem Zainallah Al Kharraz (UniMAP, Malaysia)
3	14:10 (15:10)	1571205894	Enhancing the Performance of Photovoltaic Power Tracking System with a Fuzzy Logic Controller	Muhammad Irwanto (Universitas Prima Indonesia, Indonesia)
4	14:30 (15:30)	1571209919	A Study on the Impact of Ceramic Membrane Emulsification to the Physicochemical and Spraying Characteristics of Emulsified Biofuel	Saiful Bahri Abdul Jamil (USM, Malaysia)
5	14:50 (15:50)	1571210655	A Comprehensive Review of Combustion Characteristics in Gasoline Engines Fueled with Mixed or Blended Fuels	Madarif Prawibowo (USAKTI, Indonesia)
6	15:10 (16:10)	1571212636	Theoretical Studies and Analysis on Value of Mechanical and Electromagnetic Damping for Power Output Optimization of Vibration Energy Harvester	Muhammad Zaki Bin Abdul Rahim (UniMAP, Malaysia)
7	15:30 (16:30)	1571216292	Hybrid Renewable Energy Systems (HRES) in the ASEAN Region: A Review of the Present Situation, Challenges, and Future Directions	Azizul Mohamad (UniMAP, Malaysia)
8	15:50 (16:50)	1571223950	Design and Development of a Rotary Dryer-Based Palletizing Machine with Multi-Purpose Drying and Cooling	Ikhwani Uzair Bin Zubair (UniMAP, Malaysia)