

SYMPOSIUM ON FRONTIER MATERIALS AND INDUSTRIAL APPLICATION 2019
SFMIA2019
PROGRAM SCHEDULE

29TH AUGUST 2019 (THURSDAY)	
07.30 - 08.30	Registration (07.30 am - 08.30 am) Venue: Registration and Fees Payment Counter, Ballroom Dewan Perdana, Level 2, GRAND BLUEWAVE HOTEL SHAH ALAM
08.30 - 09.00	Poster Evaluation Briefing to Panels and Presenters Poster Setup & Booth Setup for all FMIA EKs
09.00 - 09.05	Malaysian National Anthem "Negaraku" and Wawasan Setia UiTM
09.05 -09.10	Doa' Recital Assoc. Prof. Ir. Dr. Ahmad Farid Abidin MC: Ir. Zainal Abidin Kamarul Baharin Venue: Ballroom Dewan Perdana, Level 2, GRAND BLUEWAVE HOTEL SHAH ALAM
09.10 - 09.25	Welcoming Speech YBhg. Prof. Dr. Mohd Nazip Suratman, Deputy Vice-Chancellor (Research and Innovation), Universiti Teknologi MARA (UiTM)
09.25 - 09.40	Speech YBhg Mr Amiruddin Abdul Aziz, Chairman, Indah Water Konsortium (IWK)
09.40 - 10.15	Opening Speech YBhg. Emeritus Prof. Ir. Dr. Mohd Azraai Kassim, Vice Chancellor Universiti Teknologi MARA (UiTM)
10.15 - 10.45	1. Opening ceremony & FMIA Research Highlight Book launching 2. Certificate giving: FMIA EK STAR 2018 3. Certificate giving: Best Paper Award SFMIA2019 Assoc. Prof. Dr. Ahmad Farid Abidin 4. MoU signing between UiTM - IWK 5. Mass photo session
10.45 - 11.15	COFFEE BREAK POSTER PRESENTATION & EVALUATION SESSION BY JUDGES Booth Visit Venue: OPEN PITCHING HALL, Level 2, GRAND BLUEWAVE HOTEL SHAH ALAM

	Parallel Session A2 Chairperson : Dr. Anizah Kalam Co-Chairperson : Nur Ain Mohd Zainuddin Rapporteur : Fadzli (Venue: Room Gasing 2)		Parallel Session A3 Chairperson : Dr. Ahmad Hussein Co-Chairperson : Sharil Khusairi Rapporteur : Shida (Venue: Room Gasing 3)		Parallel Session A4 Chairperson : Dr. Nik Rozlin Nik Masdek Co-Chairperson : Ir. Zainal Abidin Kamarul Bahari Rapporteur : Ilya (Venue: Room Gasing 4)		Parallel Session A5 Chairperson : Dr. Muhad Rozi Mat Nawi Co-Chairperson : Dr. Lim Ying Pei Rapporteur : Ain (Venue: Room Congkak)	
11.30 - 12.00		Dynamic Mechanical Analysis of Polymer and Polymer based Composites Speaker: Dr. Mohammad Jawaid, Universiti Putra Malaysia (UPM)		MTC & Local Technology Development Speaker: Lt. Kol. Ir. Mohammad Juani Sujana (B) TUDM, Marine Technology Company (MTC) Engineering Sdn Bhd		Processing of epoxy-graphene nanocomposites Speaker: Dr. Mohd Shahneel Saharudin, Universiti Kuala Lumpur (UniKL)		Nanotechnology textiles (Nano-textiles): Fabric of the Future Speaker: Dr. Nor Dalila Nor Affandi, UTM
12.00 - 12.10	004	Atmospheric Soda Pulp of Banana Stem Presenter: Nurul Amal Nadhirah Mohamad	014	Effect of Sintering Temperatures on Structural, Magnetic and Microwave Properties of Barium Ferrites/Epoxy Composites Presenter: Nurshahiera Rosdi	020	Compressive Failure Behaviour of Unidirectional and Woven Kevlar/Epoxy Composite Laminates under Various Angles of Fiber Orientation Presenter: Mohamad Mali	029	Calcination Effect On Structural Trasformation of Barium Titanite Ferroelectric Ceramic By Sol-Gel Method Presenter: Ahmad Firdaus Che Omar
12.10 - 12.20	005	Preliminary Design of a Coriolis Acceleration Experimental Device Presenter: Hafizan Hisham	015	Evaluation and Validation on the Reliability and Robustness of Smart Socket Outlet for Hall of Residences Usage Presenter: Mohamad Fauzi Omar	022	Rayleigh Damping Coefficients Measurement of Laminated Rubber Bearing Using Finite Element and Experimental Modal Analysis Presenter: Ahmad Idzwan Yusuf	030	Production of Biofuel (Bio-Ethanol) From Fruitwaste: Banana Peels Presenter: Muhamad Ariff Amir Hamzah
12.20 - 12.30	006	Analysis and Evaluation of Coriolis Acceleration Experimental Device Presenter: Hafizan Hisham	016	Simulation and Design of Neutral Point Type Buck Converter Presenter: Mohamad Fauzi Omar	023	Magnetic Solid Phase Extraction Using Magnetic Mesoporous Silica for Preconcentration of Organophosphorus Pesticides Presenter: Nurul Husna Zainal Abidin	032	Adsorption of Hydrogen Sulphide by Commercialized Rice Husk Biochar (RHB) & Hydrogel Biochar Composite (RH-HBC) Presenter: Ashadi Azwan Abd Rahman
12.30 - 12.40	010	S-Phase Layer Development on 316LVM Using Low Temperature Hybrid Thermochemical Treatment Process Presenter: Siti Umrah Zainal	016	The Effect of Condenser Plate Material on Single Slope Solar Still Productivity under Malaysian Climate Presenter: Ir. Zainal Abidin Kamarul Baharin	024	Comparison Between Two Heuristic Tuning Methods of PID Control for a 4-DOF Robot Arm Presenter: Dr. Ruhizan Liza Ahmad Shauri	033	Adsorption Kinetics and Equilibrium Isotherms Modeling of H2S on Hydrogel Biochar and Biochar Adsorbent From Rice Husk Presenter: Mohammad Aidil Ali
12.40 - 12.50	012	Damage Assessment Using Acoustic Emission on Concrete Beam Presenter: Dr. Sakhiyah Abdul Kudus	018	Effect of Mordant Types and Methods on the Color Fastness Properties of Silk Fabrics dyed with Brown Seaweeds Presenter: Nabila Talib	026	The Thermal Conductivity of 8 Ytria Stabilized Zirconia and Mullite Thermal Barrier Coating on Medium Carbon Steel Substrate Presenter: Muhammad Syazani Farhan Zaini	034	Wettability Study on the XLPE Nanocomposite with Surface Modified Nanofiller Presenter: Anuaruddin Hanizan
12.50 - 13.00	013	Adsorptive Removal of Cu (II) Ions from Aqueous Solution by Magnetite Nanoparticles from Mill Scale Waste Presenter: Syazana Sulaiman	019	Shaking Table Test on Different Positions of Multiple Tuned Liquid Damper Presenter: Izzul Syazwan Ishak	027	Biomechanical Analysis of Spinal Fusion Cage for Lumbar Vertebrae Presenter: Rusnani Yahya	036	Sound Absorption Coefficient of Different Green Materials Polymer on Noise Reduction Presenter: Farah Liana Md Tahir
13.00 - 13.05	Certificate giving session to all presenters Announcement of the selected Best Presenter by the Chairperson		Certificate giving session to all presenters Announcement of the selected Best Presenter by the Chairperson		Certificate giving session to all presenters Announcement of the selected Best Presenter by the Chairperson		Certificate giving session to all presenters Announcement of the selected Best Presenter by the Chairperson	
13.05 - 14.00	LUNCH BREAK AND SOLAT Venue: Café Hall, Balcony Dewan Perdana, LEVEL 3, GRAND BLUEWAVE HOTEL SHAH ALAM							

	Parallel Session B2 Chairperson : Assoc. Prof. Ya'kub Taib Co-Chairperson : Assoc. Prof. Dr. Dzaraini Kamarun Rapporteur : Fadzli (Venue: Room Gasing 2)		Parallel Session B3 Chairperson : Ts. Ir. Dr. Anizahyati Alisibramulisi Co-Chairperson : Azzah Nazihah Che Abdul Rahim Rapporteur : Shida (Venue: Room Gasing 3)		Parallel Session B4 Chairperson : Dr. Nor Fazihi Adull Manan Co-Chairperson : Dr. Sakhiyah Abdul Kudus Rapporteur : Ilya (Venue: Room Gasing 4)		Parallel Session B5 Chairperson : Dr. Mohd Nor Azmi Ab Patar Co-Chairperson : Dr. Fauziah Jerai Rapporteur : Ain (Venue: Room Congkak)	
14.00 - 14.10	007	The Improvement of Wear Characteristics on 316L Stainless Steel by Dual Surface Treatment Method Presenter: Assoc. Prof. Ir. Dr. Bulan Abdullah	140	Flexural properties of chopped kenaf and carbon fibre reinforced polymer composites embedded with carbon nanotubes Presenter: Ummu Raihanah Hashim	130	Quantifying the Tensile Properties of Hevea brasiliensis – Silicone Biocomposite using Neo – Hookean Model Presenter: Noorainol Faiz Noor Haris	078	Physicochemical Properties of Enzymatically Synthesised Medium-Chain Triacylglycerols-based Enhancer Cream Presenter: Salizatul Ilyana Ibrahim
14.10 - 14.20	039	The Effect of Slat Opening on Vortex Shedding Behind A Circular Cylinder Presenter: Dr. Ahmad Hussein Abdul Hamid	038	Effects of Mesoporous Silica Addition on Electrochemical Properties of Carbon Electrode Presenter: Dr. Mohammad Noor Jalil	066	Pineapple Leaf Fibers (PALF)/ Polyethylene Terephthalate (PET) Electrospun Nanofibers: Effect of Ratio on Chemical & Morphological Properties Presenter: Fatimah Muyassarrah Abdul Aziz	079	An IoT-Based Ovitrap System Applied for Aedes Mosquito Surveillance Presenter: Ismaliza Isa
14.20 - 14.30	103	Collection Efficiency Enhancement of Cyclone Filtration System Presenter: Dr. Ahmad Hussein bin Abdul Hamid	041	QR Code Supported GIS Web System for University Facility Damage Report Presenter: Muhammad Faiz Osman Zaini	067	Modelling of Average Pore Size and Porosity of Porous Polycaprolactone/Hydroxyapatite (PCL/HA) Composite Blends Presenter: Suffiyana Akhbar	080	Embryogenic Callus Induction of Aquilaira malaccensis Lam. and Aquilaria subintegra Ding Hou Presenter: Nur Izzati Azizhan
14.30 - 14.40	055	Properties of Particleboard in Correlation with Mat Weight and Press Factor Presenter: Assoc. Prof. Dr. Wan Mohd Nazri Wan Abdul Rahman	043	Water Loss Meter Tracking GIS Mobile Application Presenter: Muhammad Faiz Osman Zaini	068	The Accuracy Of Datria System In Improving Order Picking Process Presenter: Muhammad Akmal Asyraf Adian	084	Effect of Zn-doping on the Structural, Optical, and Humidity Sensing Properties of Sol-Gel Synthesized NIO Thin Film Presenter: Nor Fadzleen Qistina Mohd Fahmi Visuvanathan
14.40 - 14.50	056	Flexural influence on Screw Withdrawal Behaviour of Selected Commercial Particleboard Presenter: Nur Wafa Amalina Amali	044	Effect of Shroud Hole on the Force Characteristics of a Circular Cylinder Presenter: Mohamad Faiz Osrin	069	Effect of Photoelectrochemical Electrolyte Additives on the Photoconversion Efficiency of Tungsten Trioxide Loaded Titania Nanotubes Prepared Via Electrodeposition Presenter: Dr. Lim Ying Chin	085	USPs on Damage Reduction of Concrete Railway Sleepers Presenter: Ts. Ir. Dr. Renga Rao Krishnamoorthy
14.50 - 15.00	057	Screw Withdrawal Properties of Kelampayan and Sesendok Glue-Laminated Timber Presenter: Assoc. Prof. Dr. Nor Yuziah Mohd Yunus	047	Development of 3D Printed Symbrachydactyly Prosthetic Hand Presenter: Mohammad Azeeb Mazlan	070	Photocatalytic Activity of Modified TiO2 for Methyl Orange Removal Presenter: Dr Lim Ying Pei	086	Screening and Isolation of Effective Microbes for Decomposition Process Among Different of Organic Wastes Presenter: Muhammad Nuruddin Mohd Nor
15.00 - 15.10	074	Adaptive Neuro-Fuzzy Inference System Prediction Method for Percentage Fatalities of Jet Fire Incident in Methanol Production Plant Presenter: Ir. Dr. Zulkifli Abdul Rashid	048	Splat Behaviour under Substrate Temperature of 675K via Coupling Simulation Presenter: Dr. Mohd Hafiz Mohd Noh	071	Role of Synthesized Soil for Minimizing Heavy Metal Penetration into the Plant's Cell in Phytoremediation Process Presenter: Assoc. Prof. Dr. Noor Fitrah Abu Bakar	087	Influence of Location and Thickness Variations on Guided Waves in Defective Carbon/Epoxy Plate Presenter: Noorfaten Asyikin Ibrahim
15.10 - 15.20	101	Quantitative Risk Assessment For Two-Step Process Route of Methanol Production Plant Using Recycled CO ₂ With HYSYS Presenter: Ir. Dr. Zulkifli Abdul Rashid	062	Effect of Torsional Element Towards High-Speed Rotating Shaft's Critical Speed at Different Boundary Conditions Presenter: Dr. Ahmad Khushairy Makhtar	073	Prediction of Volatile Organic Compounds (VOCs) From Decomposition of Local Household Food Waste Using the Artificial Neural Network Presenter: Nur Ain Mohd Zainuddin	088	Structural and Optical Properties of Sm ³⁺ Doped B-site Ba _{0.5} Rb _{0.5} LaTeO ₆ Double Perovskites Presenter: Dr. Zakiah Mohamed
15.20 - 15.30	129	The Effect of The Jute Fabric Reinforced Vinyl Ester Composite Treated with Ammonium Polyphosphate on The Physical, Flammability and Thermal Properties Presenter: Khairul Naseem Mohd Rodzi	063	The Processing of Epoxy/1 wt%-graphene Nanocomposites: Effects of Ethanol on Flexural Properties Presenter: Dr. Mohd Shahneel Saharudin	075	Empirical Study of Damage Gear Using Operational Modal Analysis Presenter: Muhamad Azhan Anuar	090	Finite Element Investigation on the Effectiveness of Different Insoles on Plantar Pressure Distribution Presenter: Nur Faiqa Ismail
15.30 - 15.40	098	The Use of Plant-Based Surfactant in Removal of Oil from Oily Sludge via Thermochemical Cleaning Method Presenter: Dr. Siti Wahidah Puasa	064	Rheological Properties of Cassava Starch Film Forming Solution with Kaffir Lime Oil Presenter: Norasmah Mohammed Manshor	076	Impact Strength of HDPE Composites Roofing Panel from Natural Fibre Presenter: Nurul Atiqah Mohd Ayob	091	Determination of Joint Load of Human Lower Limb by Using 2D Inverse Dynamics Modelling Presenter: Dr. Mohd Afzan Mohd Anuar
15.40 - 15.45	Certificate giving session to all presenters Announcement of the selected Best Presenter by the Chairperson		Certificate giving session to all presenters Announcement of the selected Best Presenter by the Chairperson		Certificate giving session to all presenters Announcement of the selected Best Presenter by the Chairperson		Certificate giving session to all presenters Announcement of the selected Best Presenter by the Chairperson	
15.30 - 16.00	COFFEE BREAK POSTER AWARD GIVING CEREMONY Venue: OPEN PITCHING HALL, Level 2, GRAND BLUEWAVE HOTEL SHAH ALAM							

	Parallel Session C2 Chairperson : Assoc. Prof. Dr. Wan Mohd Nazri Wan Abdul Rahman Co-Chairperson : Dr. Ismaliza Isa Rapporteur : Fadzli (Venue: Room Gasing 2)		Parallel Session C3 Chairperson : Dr. Siti Noor Suzila Maqsood ul Haque Co-Chairperson : Suffiyana Akhbar Rapporteur : Shida (Venue: Room Gasing 3)		Parallel Session C4 Chairperson : Assoc. Prof. Ir. Dr. Bulan Abdullah Co-Chairperson : Dr Lim Ying Chin Rapporteur : Ilya (Venue: Room Gasing 4)		Parallel Session C5 Chairperson : Dr. Mohd Afzan Mohd Anuar Co-Chairperson : Muhammad Azhan Anuar Rapporteur : Ain (Venue: Room Congkak)	
16.00 - 16.10	061	Release of Ammonium-N (NH4+) and Nitrate-N (NO3-) by Different Leguminous Cover Crops (LCCs) Planted in Peat Soils Presenter: Dr. Nur Qursyha Boll Kassim	100	The Effects of Intrinsic Parameters on the Formation of Electrospun Polycaprolactone Fibre Presenter: Nur Aqilah Ibrahim	111	Electrospun Nitrogen-doped TiO2 Nanofibrous Thin Film for Photovoltaic Application Presenter: Mohamed Hassan Hussain	119	Comparative Study of Thermal Properties Between Nanocrystalline Cellulose (NCC) and Cellulose Nanowhisker (CNW) Presenter: Lau Kia Kian
16.10 - 16.20	065	Effect of Chitosan-Starch Enriched with Turmeric Sessential Oil Coating on Physical Quality of Strawberry Presenter: Noorsuhana Mohd Yusof	102	Characterization of Mussel Inspired Surface Modified and Metal Chelated Polymer Membrane Presenter: Azzah Nazihah Che Abdul Rahim	112	Characterization of Powdered Rhizophora Mucronata Bark Tannins Extractives using Different Drying Method Presenter: Ahmad Hafizan Muhammad Muhayyidin	120	Polymerization of Lactide to Polylactic Acid by Using Homogenous and Heterogenous Catalysts Presenter: Dr. Norliza Ibrahim
16.20 - 16.30	093	Highly Porous NiO Nanoflower-based Humidity Sensor Grown on Seedless Glass Substrate via One-Step Simplistic Immersion Method Presenter: Norfararyanti Parimon	104	Characteristic and Bio-Degradation of Micro-plastic in Batch Culture Presenter: Nur Aliah Ahmad Tamizi	114	Verification Test of High Flap Macrofluidic Air Flow Sensor in Wind Tunnel Presenter: Mohamad Dzulhelmy Amari	126	Flexural and Izod Impact Properties of Sugarcane Powder Reinforced Epoxy Composite Presenter: Siti Norazlini Abd Aziz
16.30 - 16.40	094	Inherent Safety in Offshore Drilling Operations Presenter: Siti Rafidah Ab Rashid	106	Knotty Tear Phenomena and Effect of Maturation Time on Knotty Tear in Filled Natural Rubber Latex Films Presenter: Siti Aisyah Jarkasi	115	The Effect of the Ultrasound Transmission Across Solid-Nanocomposite Materials Presenter: Najibah Ab Latif	132	In Vitro Mutation of Capsicum annum L. var. Kulai by Gamma Radiation Presenter: Aisyah Athirah Hasim
16.40 - 16.50	095	Blooming of Compounding Ingredients in Natural Rubber Compounds Presenter: Ummu Qani'ah Yasin	108	Optimization of Resistance Spot Welding Parameters (Single Response) by using Taguchi Method Presenter: Anuar Pawan	117	Effect of Natural Fiber (NF) Mix on Mechanical Strength of NF Plastic Composites (NFPC) Presenter: Assoc. Prof. Dr. Dzaraini Kamarun	113	Cost-Effective Vision based Obstacle Avoidance System integrated Multi Array Ultrasonic sensor for Smart Wheelchair Presenter: Dr. Mohd Nor Azmi Ab Patar
16.50 - 17.00	097	Preliminary Result of Development of Monitoring System Using the Internet of Things for Industrial Revolution 4.0 Presenter: Siti Aisyah Jaafar	109	Removal of Ammonia-Nitrogen and Phosphate in Leachate using a Mixed of Algae and Bacteria Culture Presenter: Dr. Norhafezah Kasmuri	118	Thermo-Gravimetric Analysis of Various Ratio of Blended Phenolic and Epoxy Composites Presenter: Dr. Mohammad Asim	125	Pressure Distribution and Mechanical Characteristic of the Prosthetic Socket using Finite Element Analysis Presenter: Dr. Mohd Nor Azmi Ab Patar
17.00 - 17.10	099	Design and Analysis of a New Humanoid Robot Torso Presenter: Nur Zaheerah Ishak	110	Permanent Deformation of Hot Mix Asphalt (HMA) using Simple Performance Dynamic Modulus Test Presenter: Ts. Dr. Ekarizan Shaffie	134	The Effects of Dimethicone Crosspolymer on Porous Silicone and Biomaterial Presenter: Nur Nabila Mohd Nazali		
17.20 - 17.30	Certificate giving session to all presenters Announcement of the selected Best Presenter by the Chairperson		Certificate giving session to all presenters Announcement of the selected Best Presenter by the Chairperson		Certificate giving session to all presenters Announcement of the selected Best Presenter by the Chairperson		Certificate giving session to all presenters Announcement of the selected Best Presenter by the Chairperson	
17.30	ADJOURN							