

**AUN/SEED-Net Regional Conference Towards Carbon Neutrality in Association with
The 7th Clean Energy and Technology International Conference (CEAT 2025)**

Parallel Session Schedule

Day 1: 1st October 2025 (Wednesday)			
Session 1A 2:00 pm – 3:40 pm	Session 1B 2:00 pm – 3:40 pm	Session 1C 2:00 pm – 3:40 pm	Session 1D 2:00 pm – 3:40 pm
3:40 pm - 4:00 pm	<i>Coffee Tea Break and Networking</i>		
Session 2A 4:00 pm – 5:40 pm	Session 2B 4:00 pm – 5:40 pm	Session 2C 4:00 pm – 5:40 pm	Session 2D 4:00 pm – 5:40 pm
Day 2: 2nd October 2025 (Thursday)			
Session 3A 9:00 am– 10:40 am	Session 3B 9:00 am– 10:40 am	Session 3C 9:00 am– 10:40 am	Session 3D 9:00 am– 10:40 am
10:40 am - 11:00 am	<i>Coffee, Tea Break and Networking</i>		
Session 4A 11:00 am – 12:40 pm	Session 4B 11:00 am – 12:40 pm	Session 4C 11:00 am – 12:40 pm	Session 4D 11:00 am – 12:40 pm
12:40 pm – 2:00 pm	<i>Lunch</i>		
Session 5A 2:00 pm – 4:20 pm	Session 5B 2:00 pm – 4:20 pm	Session 5C 2:00 pm – 4:20 pm	Session 5D 2:00 pm – 4:20 pm
4:20 pm - 4:40 pm	<i>Coffee Tea Break and Networking</i>		

Topic: Renewable Energy

Parallel Session	Paper ID	Title	Author (s)
Day 1 1st October 2025 Session 1A 2:00 pm – 3:40 pm	25	Biomethane Production from Durian Shell: A Synergistic Inoculum and Buffer Approach	Nurul Nadhirah Amalina, Mei Yin Ong, Amir Izzuddin, Mei Yin Ong , Saifuddin Nomanbhay
	13	Electrochemical analyses of eight electrogenic bacteria in microbial fuel cells: Insights into their electron transfer mechanisms	Abdul Azeez Sirajudeen , Mohamad Suffian Mohamad Annuar, Shaliza Ibrahim, Wasuu Abibu, mohd arif dar, Siti Rohana Majid
	14	Impacts of POME dilution on current generation, COD removal efficiency, cyclic voltammetry profiles, and internal resistance in microbial fuel cells	Abdul Azeez Sirajudeen , Mohamad Suffian Mohamad Annuar, Shaliza Ibrahim, Siti Rohana Majid
	32	Effects of torrefaction pre-treatment on bio-coke properties	Norain Abdullah , Tamio Ida
	35	Improving the Efficiency of Terthiophene Cyanoacrylic Acid Based Dye-Sensitized Solar Cells for Water Photosplitting Using Substituents	Thomas Daniel

Topic: Electric Vehicle Technology, Energy Policy and Carbon Management

Parallel Session	Paper ID	Title	Author (s)
Day 1 1st October 2025 Session 1B 2:00 pm – 3:40 pm	7	Advancing Malaysia’s Electric Vehicle Ecosystem: A Critical Analysis of Current Policy Issues and a Strategic Roadmap to Address Societal and Environmental Challenges	Kogila Balakrishnan , Hamid Moradlou, Thirunaukarasu Subramaniam, Marini Nur Shabarnum, Zakiah Syamra Suhaimi
	8	Precision-Driven State of Energy Prediction for Electric Vehicles Using Random Forest and Evolutionary Algorithms	Zeba Bakhtiyar Anjum, Mohd Owais Khan, Sheeraz Kirmani
	104	End-Of-Life Vehicle (ELV) Management Promoting Remanufacturing Within a Circular Economy Framework to Control Carbon Emission	Nurismahani Ngadiman , Muhamad Zameri Mat Saman, Nor Hasrul Akhmal Ngadiman, Nor Hayati Zakuan and Falah Abu
	139	Sensitivity Analysis of Future Load Profile Nomination (FLPN) Accuracy and Participation in PV-BESS-EV Microgrid Dispatch	Jeric Cesar Enriquez , Abdul Aziz Mabaning
	124	Pathways Towards Low-Carbon and Climate Resilient for Public Transport: A Case Study of Northern Bangkok Metropolitan Region, Thailand	Sutinee Choomanee , Vilas Nitivattananon, Kampanart Silva, Kunnawee Kanitpong, Jai Govind Singh

Topic: Energy Efficiency, Conservation and Sustainability, Energy Policy and Carbon Management

Parallel Session	Paper ID	Title	Author (s)
<p align="center">Day 1 1st October 2025</p> <p align="center">Session 1C 2:00 pm – 3:40 pm</p>	150	Biopolymer Electrolytes as a promising material for Energy storage applications	Achhhe Lal Saroj
	1	Design optimization of rings in polymer insulators with Quad bundle conductor	Archana C, Usha K , Pritha K
	3	Potential Remediation of Rare Earth Element Synthetic Wastewater Containing Ammonium-nitrogen Pollutant using A Greener Electrocoagulation Approach	Afnan Azzahra Ahmad Kamal, Pao Ter Teo , Uma Devigai Sivasubramaniam, Mardawani Mohamad, Noor Fazliani Shoparwe, Badhrulhisham Abdul Aziz, Projjal Basu
	69	The Transition of Thai’s Automotive Industry toward the next-generation automotive	Tawan Champecharoensuk , Kampanart Silva, Nuwong Chollacoop, Chanoknat Paosakul, Bunyachon Phondi
	105	Advancement in Solar ETC-based Air Heating Systems as a Sustainable Technology	Vineet Veer Tyagi , Amit Kumar, Kapil Chopra, Jeyraj A/L Selvaraj

Topic: Energy Efficiency, Smart Grid and Elective Vehicle

Parallel Session	Paper ID	Title	Author (s)
<p align="center">Day 1 1st October 2025</p> <p align="center">Session 1D 2:00 pm – 3:40 pm</p>	101	Enhanced Vehicle-to-Grid Power Flow Using Predictive Optimization of Bidirectional Converters	Maher Abdolrasol , Goh Su Mei, Hui Jing Lee, Sieh Kiong Tiong
	112	Design of Controller for FTMS based on BAT Optimization	Puja Haldar , Sumit Kumar Pandey
	138	Future Load Profile Nomination (FLPN) Based Anomaly Detection in Power Systems Using a Modified CUSUM Algorithm under Varying Nomination Accuracy and Participation	Franclein Francisco , Abdul Aziz Mabaning
	141	Enhancing Crowdsourced Load Forecasting with Future Load Profile Nominations	Perly Rica Flores , Abdul Aziz Mabaning
	144	A Review of Power System Inertia Estimation under Incomplete Observability: An Opportunity for Integrating Future Load Profile Nomination	Ryan Abella , Abdul Aziz Mabaning

Topic: Renewable Energy

Parallel Session	Paper ID	Title	Author (s)
Day 1 1st October 2025 Session 2A 4:00 pm – 5:40 pm	50	Phase Change Materials with Piezoelectric-Doped Graphene in GBa ²⁺ GMn ²⁺ Nanocomposites: Advancing Supercapacitor Technology for Next-Generation Energy Storage Devices	Sikiru Surajudeen Olalekan, Mohd Muzamir Mahat
	61	Implementation Design of Solar Powered SYCLER (System of Cycling for NPK Fertilizer)	I Gede Putu Oka Indra Wijaya, Satrio Pambudi Jati, Rizaldy Shiddiq, Samuel Senin, Ekki kurniawan, Suto Setiyadi
	65	Evaluating the Optimal Pitch for Bifacial PV Arrays: A Tropical Case Study with and without Land Constraints	Nur Diyana Nadirah binti Fuadi, Hedzlin Zainuddin, SI Sulaiman, Nurmalessa binti Muhammad @ Atan
	85	The influences of macro-environmental factors on renewable energy development	Eng Mun Khong, Seow Ai Na, Lam Siew Yong
	88	Tuning the pH: Unlocking the growth potential of Nannochloropsis sp.	Jassinnee Milano, Saiffuddin Nomanbhay, Sieh Kiong Tiong, Shir Reen Chia, Hwai Chyuan Ong, Surya Dharma

Topic: Energy Efficiency and Electric Vehicle Technology

Parallel Session	Paper ID	Title	Author (s)
Day 1 1st October 2025 Session 2B 4:00 pm – 5:40 pm	119	FEA investigation of Hybrid Excitation Flux switching motor with modular rotor for electric vehicles	Saira Soomro, Erwan Bin Sulaiman , Mahyuzie Jenal, Irfan Ali Soomro, Hassan Ali Soomro
	39	Dynamic Modelling and Control an Electric Motorcycle for Energy Recovery via Regenerative Braking	Nurul Muthmainnah Mohd Noor
	52	End-of-life Vehicle (ELV) Management Promoting Remanufacturing within a Circular Economy Framework to Control Carbon Emission	Nurismahani Ngadiman , Muhamad Zameri Mat Saman, Nor Hasrul Akhmal bin Ngadiman, Falah Bin Abu
	122	A Review of Tracking Technologies for Validating Future Trip Profile Nominations in Electric Vehicles	Farhaan Alawiya , Abdul Aziz Mabaning
	137	Robust Power System State Estimation Using Future Load Profile Nominations with Weighted Least Absolute Value Optimization	Earl Humprey Bantug , Abdul Aziz Mabaning

Topic: Energy Efficiency, Conservation and Sustainability

Parallel Session	Paper ID	Title	Author (s)
Day 1 1st October 2025 Session 2C 4:00 pm – 5:40 pm	21	Design of a Centrifugal Pump Permanent Magnet Motor with Line-Start Capability	Veeraraghavalu Rajini, Nagarajan V S, Manoj Kumar M
	34	Design of 4.5 kW Dual Rotor Permanent Magnet Motor for Electric Vehicle	Veeraraghavalu Rajini, Nagarajan V S, Manoj Kumar M
	38	Effective Microalgae Harvesting via Biosurfactant-assisted Foam Flotation	Wei Lun Ch'ng, Wei Lun Ch'ng, Sue Lyn Tan
	49	Phase Shifted Full Bridge (PSFB) Converter with Active Clamp and Synchronous Rectifier (SR) Using Gallium Nitride Devices	Muhammad Ridzuan Bin Razali, Jafferi Jamaludin, Ahmad Shuhaimi Bin Abu Bakar
	131	The Effect of Circular Turbulator on Velocity Distribution and Turbulence Intensity in a 90° Elbow Channel	Randi Purnama Putra

Topic: Renewable Energy, Net-Zero Emissions and Carbon Neutrality

Parallel Session	Paper ID	Title	Author (s)
Day 1 1st October 2025 Session 2D 4:00 pm – 5:40 pm	26	Bioplastic Films from Spirulina and PVA: Mechanical and Biodegradation Properties of Biodiesel-Derived Glycerol vs Natural Latex Plasticizers	Sangeeta Ravindran, Mei Yin Ong , Mei Yin Ong, Shir Reen Chia, Saifuddin Nomanbhay
	87	China's Response to Carbon Neutrality	Dai Bei, Andrew Lepone , Grace Lepone
	103	Emerging Flexible Materials for Energy Storage devices	Shahid Bashir
	89	Four-ball tribometry of calophyllum inophyllum biodiesel: Assessing lubrication performance, COF, and Wear Characteristic	Jassinnee Milano , Sieh Kiong Tiong, Shir Reen Chia, Mohd Faiz Muaz Bin Ahmad Zamri, Hwai Chyuan Ong, Surya Dharma
	156	An Overview: Implementation of Storage Systems for Enhancement of Solar and Wind Hybrid Systems	Huda Kauser, Ahmed AlBusaidi , Anju Parameswaran, Hussein A. Kazem

Topic: Renewable Energy

Parallel Session	Paper ID	Title	Author (s)
Day 2 2nd October 2025 Session 3A 9:00 am – 10:40 am	94	An Indoor Light-based Energy Harvesting System for Powering Wireless Motion Sensor	Norezmi Md Jamal, Nor Ain binti Mohd Bahrar , Mohd Nurul Al-Hafiz bin Sha'abani, Lam Hong Yin
	109	Japan-ASEAN for a Sustainable Future through Proactive Energy Management: An Initiative for Accelerating the Transition to Fully Renewable Energy	Abdul Aziz Mabaning
	110	Evaluation of the temperature variation in the battery pack relative to the cell position	Hafeez Khoharo , Jeyraj A/L Selvaraj, Md Hasanuzzaman
	152	Development of Clean Energy Generation with Hydrogen	Rohaida Hussain , Idris Abd Latiff, Francine Fitzgerald Dao Jeoffery
	153	Performance Analysis of Snubber Circuit Integration in Transformer less Inverters	Aina Suhailah Mohd Azhar , Maaspaliza Azri

Topic: Electric Vehicle Technology and Smart Grid

Parallel Session	Paper ID	Title	Author (s)
<p align="center">Day 2 2nd October 2025</p> <p align="center">Session 3B</p> <p align="center">9:00 am– 10:40 am</p>	23	Resource Nationalism: Its Implications for EV Industry in Southeast Asia	Thirunaukarasu Subramaniam , Kogila Balakrishnan, Hamid Moradlou, Marini Nur Shabarnum, Zakiah Syamra Suhaimi, Manishankar Prasad
	102	A Review on Thermal Management Systems for Lithium-Ion Batteries: Enhancing the Performance and Safety in Electric Vehicles	Zahid Bashir , Jeyraj A/L Selvaraj
	113	Flexible and Mechanically Strong PVA/Corn Starch-based Hydrogel Electrolyte with Wide Electrochemical Potential Window for Zinc ion Hybrid Supercapacitors	Kah Hoe Loh
	136	Optimization of Permanent Magnet Flux Switching Motor Using Sequential Technique	Roshada Ismail , Erwan Bin Sulaiman, Yahkeish A/L Santhiran, Nasir Sulaiman
	147	Analysis for cogging Torque Reduction Method of Outer Rotor Hybrid Excitation Flux Switching Machine	Saira Soomro , Erwan Bin Sulaiman, Mahyuzie Jenal, Nasir Sulaiman

Topic: Energy Efficiency, Conservation and Sustainability

Parallel Session	Paper ID	Title	Author (s)
Day 2 2nd October 2025 Session 3C 9:00 am – 10:40 am	51	Improved Thermophysical Properties and Stability of Al ₂ O ₃ -CuO-Yb ₂ O ₃ Hybrid Nanofluids for Heat Transfer Applications	Riaz Hussain , Shahid Bashir, Jeyraj A/L Selvaraj
	57	Estimation of the Winding Rise Temperature Ranges of the Dry-Type Transformer (DTTH) For Higher Loading Capability Based on Performance Evaluation	Shaharudin Yub , Khairil Rahma, Khairil Azhar bin
	60	Effect of Water Volume Filling Ratio on Thermal Resistance in a Custom-Designed Vapor Chamber	Poo Balan Ganesan , Wu Binglin
	68	Optimized Sustainable Spray Drying of Pineapple-Centella asiatica L. Powder for Improved Yield and Stability	Syafiza Abd Hashib , Norazah Abd Rahman, Wuled Lenggoro, Karen Wee Wei Ping
	70	Performance Evaluation of a Hybrid Solar Photovoltaic-Thermal (PV-T) System under Malaysian Climatic Conditions	Bhumi Verma, Rubina Bahar , Dai Hong Ling, Hieng Kiat Jun, Foon Siang Low, Chai Yan Ng

Topic: Renewable Energy (Online)

Parallel Session	Paper ID	Title	Author (s)
<p style="text-align: center;">Day 2 2nd October 2025</p> <p style="text-align: center;">Session 3D 9:00 am – 10:40 am</p> <p><i>Note: time zone</i> <i>MYT</i></p>	64	Techno-Economic Analysis of Solar Power Plant Development in Cimahi Train Station: A Comparative Study of On-Grid and Off-Grid Scenarios for Energy Transition	Kharisma Bani Adam , Ihsan Maulidin
	66	COOPS: Cogeneration optimization simulator through real data processing and control through LabVIEW	Oon Erixno, Farah Ramadhani , Mohd Syukri Ali
	71	Photovoltaic Real Simulator (PVRS): an IoT-Based Learning Tool for Simulating Renewable Energy Performance	Bramantya Indracahya , Oon Erixno, Satrio Pambudi Jati, Samuel Senin, Basuki Rahmat, Jaspar Hasudungan, I Gede Putu Oka Indra Wijaya
	76	Impact of Renewable Energy Penetration on Load Flow and Transient Stability in in Small-Scale Electrical System	Lindiasari Martha Yustika , Affan Fathur Rabbani, Rifki Rahman Nur Ikhsan
	117	Identifying and Matching of Solar Photovoltaic Defects Using Infra-Red Thermal and Electroluminescence Images	Azimah Omar, Md Rauf Islam Sharker , Mohd Syukri Ali

Topic: Renewable Energy

Parallel Session	Paper ID	Title	Author (s)
Day 2 2nd October 2025 Session 4A 11:00 am – 12:40 pm	123	Effect of Using Crude Palm Oil Biodiesel on Diesel Engine Performances	Dori Yuvenda , Randi Purnama Putra, Krismadinata, Remon Lapisa, Purwantono
	134	Improved Grey Wolf Optimization Algorithm for Optimal Distributed Generation Sizing and Placement for Minimum Power Loss and Voltage Deviation	Madiah Md Rasid , Fang HaoXu, Mohd Hafiz Habibuddin, Norazliani Md Sapari, Nur Ayeesha Qisteena Muzir, Norzanah Rosmin
	135	Unlocking Biogas Potential from Livestock Waste in Malaysia: A Sustainable Pathway for Renewable Energy and Circular Agriculture	Shalini Muniandy
	148	Comparative Study of Lab-Scale and Upscaled Malaysia Dolomite Catalysts for Green Diesel Production.	Nur Mazlini Razali, Raja Mohamad Hafriz Raja Shahrizzaman, Fazril Ideris, Nur Ayuni Raudhah Binti Anuar, Muhammad Ammar Syukri Bin Muhamad Adzahr , Amar Ifwat Bin Usaini, Ahmad Farhan Bin Zainuddin
	149	A Case Study of Pilot Reactor Producing Premixed Bio-Based Fogging Solution (BFS) Via Transesterification of Non-Edible Oil	Fazril Ideris, Nur Mazlini Razali, Raja Mohamad Hafriz Raja Shahrizzaman, Muhamad Nazrain Muhamad Nassri, Saiful Hafiz Habib, Amar Ifwat Usaini , Muhammad Ammar Syukri Bin Muhamad Adzahr, Ahmad Farhan Bin Zainuddin
	114	The prospective of bacterial cellulose as green material for wound healing	Fauziah Marpani

Topic: Renewable Energy and Hydrogen Economy

Parallel Session	Paper ID	Title	Author (s)
Day 2 2nd October 2025 Session 4B 11:00 am – 12:40 pm	19	Review of international standards adopted for metering in Hydrogen Refueling Stations (HRSs): Focusing on Malaysia context.	Hafidzi Hamdan , Alhassan Salami Tijani, Ahmad Hussein Abdul Hamid
	27	Recent advancements in the synthesis of bio-based PA and PET from biomass	Chung Hong Tan , Yaw Chong Tak
	28	A sustainable energy transition via hydrogen power in SOFC and PEMFC	Chung Hong Tan , Yaw Chong Tak
	95	Simulation study on the flame acceleration of premixed hydrocarbons/air mixtures in tee pipes	Mahar Daina Binti Hamid , Nurshamimi Azira Binti Masran, Karen Bong, Zine Labidine Messaoudani, Irma Nur Afiah, Setyawati Yani
	121	Molecular Imprinting Meets Green Hydrogen: A Convergence of Material Innovation and Clean Energy Demand	Santheraleka Ramanathan , Chong Yang Chuah, Subash. C. B. Gopinath

Topic: Energy Efficiency, Conservation and Sustainability, Energy Policy

Parallel Session	Paper ID	Title	Author (s)
<p align="center">Day 2 2nd October 2025</p> <p align="center">Session 4C 11:00 am – 12:40 pm</p>	54	Investigation on the parameters influence the generation of carbon dioxide in performance of direct methanol fuel cell	Chen Yin Kiat, Azlyana Ismail
	42	Greenhouse Gas Accounting Methodology for Downstream Oil & Gas (Retail and Marketing) Business	Tuan Hooi Ng, Thayananthan Balakrishnan, Thirupathi Rao AL Narayanamoorthy
	79	Biopolymer-Derived Solid Electrolytes from Pineapple Stem Starch: A Green Approach to Supercapacitor Development	Norazilawati Muhamad Sarih, Koshillah Arumugam, Mohd Fakhrol Zamani Abdul Kadir, Ahmad Danial Azzahari
	81	Development of an Image-Processing-Based Adaptive Solar Tracker with IoT Capability: A Simulation Study Towards High Accuracy and Enhanced Power Generation	Mohd Izhar A. Bakar, Aidil Iskandar, Mohd Shawal
	107	Data-Driven Sustainability in Higher Education Institution: Analysing Carbon Emissions, Absorption, and Reduction Strategies for Achieving Carbon Neutrality	Nurul Aida Binti Sulaiman

Topic: Renewable Energy, Energy Efficiency, Energy Policy (Online)

Parallel Session	Paper ID	Title	Author (s)
<p align="center">Day 2 2nd October 2025</p> <p align="center">Session 4D 11:00 am – 12:40 pm</p> <p><i>Note: time zone MYT</i></p>	120	Optical and Morphological Characteristic of ZnO:Al/SiO ₂ Nanorods for Enhanced Light Absorption in Dye-Sensitized Solar Cells	Puji Nurrahmawati , Rangga Agung Pribadi Heriawan, Adam Rasyid Sidiqi, Nevi Faradina, Ranny Febrianali, Iwantono Iwantono, Suratun Nafisah, Marlia Morsin
	126	Impact of Electric Vehicle Penetration on Distribution Grid Stability during the Energy Transition	Citra Dewi , Ricky Maulana, Nevi Faradina, Doni Tri Putra Yanto
	31	Experimental investigation of a low-oscillation incremental conductance MPPT for enhanced energy harvesting in a Photovoltaic system	Asnil , Refdinal Nazir, Krismadinata, Muhammad Nasir, Muhammad Imran Hamid
	47	Thermal Feasibility Study of Liquid Hydrogen Storage Tank for Clean Energy Transport in the Context of Energy Transition	Jangkung Raharjo, Ihsan Maulidin , Amaliyah Rohsari Indah Utami, Suwandi
	74	A Review: Comparison of Pyrolysis Oil Quality from Plastic Waste and Biomass and Its Effects on Internal Combustion Engine Performance	Arika Yuza, Farah Ramadhani, Kella Chantika , Lindiasari Martha Yustika

Topic: Renewable Energy, Energy Efficiency, Conservation and Sustainability

Parallel Session	Paper ID	Title	Author (s)
<p align="center">Day 2 2nd October 2025</p> <p align="center">Session 5A 2:00 pm – 4:20 pm</p>	62	How CSR Committee and Independent Assurance Effect to ESG Performance in Indonesia Firms?	Wahdan Arum Inawati
	142	Development of High-Performance Supercapacitors from Oil Palm Empty Fruit Bunch (EFB) Biomass	Narmatha Gopalakrishnan
	143	Synthesis and Characterization of Palm-Based ZnO/Biochar Composites as Electrode Material for Supercapacitor	Yogini Gunasekaran
	145	Sorption of Heavy Metals on Polyethylene Microplastics in Johor River Basin: Implication for Aquatic Pollution and Sustainable Water Management	Nurul Ain Umaiban Yusof, Nurul Ain Umaiban Binti Yusof, Shamila Azman, Mohd Radhie Mohd Salleh
	146	Environmental Aging of Polyethylene Microplastics: Surface Degradation and Enhanced Sorption Behavior Toward Aquatic Pollutants	Nurul Ain Umaiban Yusof, Shamila Azman
	155	Advancing Bioenergy: Simulation-Based Development of a Multistage Membrane System for Renewable Natural Gas from Organic Waste	Azuan Abdul Latif, Afifi Zainal, Balqis Ishak, M Rizza Othman

Topic: Renewable Energy, Energy Efficiency, Conservation and Sustainability

Parallel Session	Paper ID	Title	Author (s)
<p align="center">Day 2 2nd October 2025</p> <p align="center">Session 5B 2:00 pm – 4:20 pm</p>	100	Simulation of Line Performance Based on Criticality Assessment to Mitigate Blackout and Cascading Failures in Central Java	Rahmawaty Sukmaning Prihantiny , Muhamad Safwan Abd Rahman, Abdul Salam Nganro
	111	Performance evaluation of thermoelectric generator under variable resistive load conditions: A numerical approach	Roshan Manghwar , Jeyraj A/L Selvaraj, Muhammad Shakeel Ahmad
	128	Modelling And Simulation of the Impact of Electric Vehicle Penetration to Vehicle Energy Consumption, Environment and Chargers' Location.	Nur Ayeesha Qisteena Muzir , Norazliani Md Sapari, Nurulaqilla Khamis, Madihah Md Rasid, Rasyidah Mohamad Idris
	132	Comparative Analysis of Si and InGaAs Photodiodes for Adaptive Communication in Low-Power IoT Applications	Faezah Harun , Muhammad Syakir Bin Mohd Radzi
	154	Experimental evaluation of synchronous buck converter white-box and black-box state-space models	Mohammed Bachiri, Driss Yousfi , Mohammed Chaker, Andronic Boanarijesy
	130	Design and Implementation of an IoT-Enhanced Dynamic Solar Tracking and Monitoring System	Julie Roslita Rusli , Muhamad Shahmi Afif Shahron, Izanoordina Ahmad, Nor Hidayah Abdul Kahar, Siti Marwangi Mohamad Maharum, Nor Shafiqin Shariffuddin

Topic: Energy Efficiency, Conservation and Sustainability

Parallel Session	Paper ID	Title	Author (s)
Day 2 2nd October 2025 Session 5C 2:00 pm – 4:20 pm	82	The Role of Co-products from Sustainable Aviation Fuel in Enhancing the Utilization of Non-Food Feedstocks for Automotive Applications	Arthit Champeecharoensuk , Peerawat Saisirirat, Nuwong Chollacoop
	90	Simulation and analysis of MPPT control based on Artificial Lemming algorithm for PV system	Cao Yanna , Yushaizad Yusof, Muhammad Ammirul Atiqi Mohd Zainuri
	92	Valorization of Pineapple Peels into High-Performance Hard Carbon for Sustainable Sodium-Ion Batteries	Nanthini Mohana Suntharam
	93	Structural and photoluminescent behavior of Eu-doped calcium carbonate (CaCO ₃) nanoparticles prepared by the solid-state diffusion method for energy conversion	Khishn Kumar A/L Kandiah , Vengadaesvaran Balakrishnan, Ramesh Subramaniam, Amirul Syafiq, Ramesh Kasi, Thibeorchews Prasankumar
	99	Discovering Best Practices For Managing Solar Hybrid Systems In Rural Malaysian Schools	Azlan Arifin , Ramizi Mohamed, Yushaizad Yusof, Zulkifli Mohd Nopiah, Abdul Muhaimin Mahmud
	115	Isolation of Nanocrystalline Cellulose from Elephant Grass Fibers using Microwave assisted Acid Hydrolysis	Syaidatul Akma Mohd Zuki , Norazah Abd Rahman
	127	Mitigation Techniques on the Effect of Power Quality Issues in the Distribution System	Norazliani Md Sapari , Nur Ayeesha Qisteena Muzir, Madihah Md Rasid, Siti Maherah Hussin, Rasyidah Mohamad Idris, Dalila Mat Said, Norzanah Rosmin

Topic: Energy Efficiency, Energy Policy, Social and Governance (Online)

Parallel Session	Paper ID	Title	Author (s)
<p align="center">Day 2 2nd October 2025</p> <p align="center">Session 5D 2:00 pm – 3:40 pm</p> <p><i>Note: time zone MYT</i></p>	67	Accelerating Southeast Asia’s Energy Transition: Synergies between Renewable Energy Policy, Carbon Management, and Sustainable Development	Maudy Noor Fadhlia , Zhillan Fahlevi
	75	Analysis of Potential Alkaline Water Produced by Electrolysis Method for Agricultural Fertilizers Using Solar Cell Modules	Muh. Adrian Hidayat , Jangkung Raharjo, Ekki kurniawan
	15	Economic Viability and Investment Decision-Making for Hydrogen Infrastructure: An Empirical Analysis Using Real Options Approach	Tianfeng Lu
	72	A New Stator Coil Design for Improving the Performance of 3-Phase Induction Motors without Expensive Additional Costs	Zuriman Anthony , Refdinal Nazir, Muhammad Imran Hamid