

10th Brunei International Conference on Engineering and Technology 2025

Bandar Seri Begawan, Brunei Darussalam
20–22 October 2025

Programme Schedule



Brunei International Conference on Engineering and Technology
*"Innovation in engineering and technology towards
enhancing quality of life and society"*

Day 1 20.10.2025, Monday Opening Ceremony of Universiti Teknologi Brunei Science, Technology and Engineering Connect 2025 (UTB-STE Connect 2025) 28 Rabiulakhir 1447H 20th October 2025 Main Conference Hall International Convention Centre, Berakas
--

Time	Programme of Event
8:30 AM	Arrival of Invited Guest
9:00 AM	Arrival of Special Guests
9:30 AM	Arrival of Guest of Honour, Yang Berhormat Datin Seri Setia Dr. Dayang Hajah Romaizah binti Haji Md Salleh, Minister of Education, Chairperson of UTB Council Photo Session Recitation of Surah Al-Fatihah and Doa Selamat Welcoming Speech by Yang Mulia Datin Paduka Professor Dr. Dayang Hajah Zohrah binti Haji Sulaiman, Vice-Chancellor of Universiti Teknologi Brunei Opening Speech by Yang Berhormat Datin Seri Setia Dr Dayang Hajah Romaizah binti Haji Md Salleh, Minister of Education Opening of UTB-STE Connect 2025 Multimedia Presentation Plenary Session by Professor Sibrandes Poppema, President, Sunway University Presentation of UTB-STE Connect 2025 Token of Appreciation to Plenary Speaker Refreshment End of Ceremony

Brunei International Conference on Engineering and Technology 2025 (BICET 2025)

Time	Programme of Event
13:30	BICET Registration Venue: Main Lobby, School of Applied Science and Mathematics (SASM) Building, UTB
14:00	Opening Remark BICET2025 - Conference Room, Level 2, SASM Building Dr Tan Soon Jiann Co - Chairperson BICET 2025
14:15	Keynote 1 (Physical) - Conference Room, Level 2, SASM Building Professor Ir. Dr. Sharul Kamal Abdul Rahim, Wireless Communication Centre (WCC) at Universiti Teknologi Malaysia, Malaysia <i>Title: Beamforming and Antenna Arrays for Smart City Communication Systems</i> Moderator: Ir. Dr. Kenneth Siok Kiam Yeo, Programme Leader, EEE PA, FEng, UTB
15:00	Coffee Break

ELECTRICAL AND ELECTRONIC ENGINEERING TRACK

Day 1 - AFTERNOON PARALLEL SESSION (1) - CLASSROOM 4 (SASM Building)

SESSION CHAIR 1: Dr Sheik Mohammed Sulthan and SESSION CHAIR 2: Dr Suganthi Saravana Balaji

Time	Paper ID	Paper Title	Authors
15:30	13	Indoor and Outdoor Temperature Influence Towards Classroom AC Temperature Setpoint	Siti Zubaidah Bahrin, Nor Asiah Muhamad and Kah Haw Law
15:45	92	Inverter Placement Thermal Study For 20 kW 36-Panel Solar Plant	Azieuddin Shahrin, Nor Asiah Muhamad and Ishlah Rahman
16:00	96	Operation and Maintenance of Grid-Tied Solar Photovoltaic (PV) System at Lumut Campus, Politeknik Brunei	Mohammad Ishlah Haji Abdul Rahman
16:15	14	Effect of Stirring Time On The AC Breakdown Voltage Test of Insulation Oils	Erra Aerwenny Roslan, Nor Asiah Muhamad and Swee Peng Ang
16:30	75	Modelling of Classroom Lighting System Utilizing Natural and Artificial Lighting using DIALux	Muhamad Arif Hakimi B Ramlee, Chin-Leong Wooi, Yi Lung Then, Nor Asiah Muhamad, Syahrin Nizam Muhmmad Arshad Hashim, Muzaidi Othman and Hadi Nabipour-Afrouzi
16:45	End of Day 1		

Day 2 - 21st October 2025, Tuesday

Time	Event
8:15	Keynote 2 (Online-Hybrid) - Conference Room, Level 2, SASM Building Professor Dr. Monzur Imteaz Head of the Urban Environmental & Transport Systems at Swinburne University of Technology, Melbourne, Australia Title: Water Recycling, Stormwater Harvesting, Desalination: Where To Start? Moderator: Professor Dr. Mohamed Hasnain Isa, Assistant Vice Chancellor (Research), UTB
9:00	Keynote 3 (Online-Hybrid) - Conference Room, Level 2, SASM Building Professor Dr. Wayne NP Hung Department of Engineering Technology & Industrial Distribution of Texas A&M University in Texas, USA. Title: Metal Additive Manufacturing: Challenges and Opportunities Moderator: Professor Dr. Mohammad Yeakub Ali, Deputy Dean (Research), FEng, UTB
9:45	Distinguished Lecture 1 (Physical) - Conference Room, Level 2, SASM Building Dr. Ir. Terry Douglas Jayasuriya-Gomes TDJ Consultancy Group, IET Brunei Representative Title: Sustainable Process Safety Management: A Strategic National Imperative for Safety and Continuity Moderator: Ir. Dr. Kenneth Siok Kiam Yeo, Programme Leader, EEE PA, FEng, UTB
10:15	Coffee Break

Day 2 - MORNING PARALLEL SESSION (2) - CLASSROOM 4 (SASM Building)			
SESSION CHAIR 1: Dr Chin-Leong Wooi and SESSION CHAIR 2: Ir. Dr. Kenneth Yeo			
Time	Paper ID	Paper Title	Authors
10:30	7	Design and Implementation of an IoT Wearable for Upper Body Posture Correction and Muscle Fatigue Monitoring	Siti Adriana Syazwina Hazli, Miza Syazwina Muhamad Jusri, Zamiah Haziqah Muhammad Asnawi, Ahmad Azlan Ab Aziz, Nor Aiman Sukindar, Zunaidi Ibrahim and Siti Maria As-Soleha Muhd Al-Qusyairi
10:45	35	IoT-Based Indoor Hydroponic Cultivation System	Dayangku Nur-Syifaa Binti Pengiran Kamal Allim, Saiful Bahri bin Hj Md Jaafar, Swee Peng Ang and Kah Haw Law
11:00	86	Self-Harvesting Aquaponic System with IoT Monitoring	Siti Nurmahirah Md Arif, Nur Naafizah Mohammad Rapi, Mohammad Amirul Hakim Hj Shamli, Noralam Tuah, Ismit Mohamad, Norhafizah Muhammad and Azlina Diyanah Hamid
11:15	107	Smart Parking: Real-Time Monitoring With Application-Based Reservation	Sui Mei Koo, Nurazmina Lingas, Nazri Ahmad and Ismit Mohamad
11:30	112	The Integration of An IoT System For Monitor And Maintaining Vertical Rice Farming Cultivation	Muhamad Amirun Irfan Hasan, Wida Susanty Haji Suhaili, Heru Susanto, Haji Abdul Matteen Haji Tahir and Ang Swee Peng
11:45	60	Design and Implementation of a Solar PV Powered Hybrid Food Dehydrator	Abdul Wazif Bin Ja'Afaruddin, Dr. Sheik Mohammed Sulthan, Dr. Ang Swee Peng and Muhammad Norfauzi Dani
12:00	Lunch Break		

Time	Event		
13:30	Keynote 4 (Online-Hybrid) - UTB SASM Building Lecture Theatre		
	Professor Dr. R. Vinu Chemical Engineering department at Indian Institute of Technology, IIT Madras, Chennai, India <i>Title : Thermocatalytic Conversion of Biomass to Biofuels and Phenols: A Circular Economy Approach to Renewable Carbon Utilization</i>		
	Moderator: Professor Dr. Sivakumar Manickam, Dean (GSRO), UTB		
Day 2 - AFTERNOON PARALLEL SESSION (3) - CLASSROOM 4 (SASM Building)			
SESSION - CHAIR 1: Dr Norfauzi POKDPDP Haji Dani and SESSION CHAIR 2: Norhafizah Muhammad			
Time	Paper ID	Paper Title	Authors
14:15	145	Fabrication of Compact Patch Antenna Loaded CRR with Efficiency Enhancement and Higher-Order Mode Suppression	Mohamad Faiz Mohamed Omar, Sharul Kamal Abdul Rahim, Mohd Fadzil Ain, Azlan Aziz, Mohd Nazri Mahmud, Asrulnizam Abd Manaf and Intan Sorfina Zainal Abidin
14:30	93	A Patch Partial Ground Dipole Antenna design for LoRa IoT Applications	Ir. Dr. Ahmad Azlan Ab. Aziz and Siti Maria As-Soleha Muhd Al-Qusyairi

14:45	148	Design and Development of an IoT-Enabled Soft Hand Exoskeleton for Personalised Stroke Rehabilitation	Awg Md Sallehudin Awg Md Salishaknizam, Ir. Ts. Dr Ahmad Azlan Ab Aziz, Dr. Nor Aiman Sukindar and Ir. Dr. Zunaidi Ibrahim
15:00	Coffee Break		
15:30	4	Power Usage Prediction in Wastewater Treatment Plant using Machine Learning with Noise-Based Augmentation	Susatyo Adi, Anargya Dm Christabel, Maziri Morsidi, Hazwani Suhaimi and Pg Emeroylariffion Abas
15:45	26	eFullRecall: A High-Recall Patent Retrieval and Ranking Method using Semantic Relationship Chains	Amna Ali, Chandratilak De Silva Liyanage, Maziri Morsidi and Pg Emeroylariffion Abas
16:00	30	Optimising Fish Counting in Aquaculture with Deep Learning: A YOLOv11 and Faster R-CNN Benchmark	Haziq Hariz Hisham, Rahimi Zahari and Pg Emeroylariffion Abas
16:15	59	Optimal Electric Vehicle Load Shifting Using a K-Means Clustering Based MILP Technique	Suganathi S T, Dr. Sheik Mohammed Sulthan, Gobbi Ramasamy, Ngu Eng Eng and Thenmozhi G
16:30	106	Effectiveness of Reconfigurable Intelligent Surface in Multipath Fading Channel	Hasnul Hashim
16:45	End of Day 2		

Day 3 - 22nd October 2025,Wednesday			
Time	Event		
Day 3 - MORNING PARALLEL SESSION 4 - ONLINE			
SESSION - CHAIR 1: Ir. Ts. Dr Ahmad Azlan Ab Aziz and SESSION CHAIR 2: Hajah Dr. Nur'azmina Lingas			
Time	Paper ID	Paper Title	Authors
10:00	54	Design of Energy Efficient Hybrid Power Management Model for BTS Integrating Solar Energy	Abdur Rahman, Mohammad Yeakub Ali, Muhammad Mahbubur Rashid, Syed Munimus Salam and Nur Mohammad
10:15	72	Enhanced Hybrid Quantum-LSTM Architecture for Advanced Solar Photovoltaic Power Forecasting: A Comprehensive Quantum Machine Learning Approach	Mayan Sharma, Sri Revathi B, Vishnu Suresh and Dr. Sheik Mohammed Sulthan
10:30	101	IoT-Based Rainwater Harvesting For Roof Misting In Brunei: A Machine-Learning-Supported Approach	Abdul Hafiy Bin Abdul Wahab, Nur Mawaddah Syairah Binti Haji Hasnan Hasnan, Niaj Sharif, S H Shah Newaz, Shahriar Shams, Mohamad Saiful Bin Haji Omar, Sheik Mohammed
12:00	Lunch Break		
14:00	BICET 2025 Closing Ceremony - Conference Room, Level 2, SASM Building Professor Ir Dr Mohammad Yeakub Ali Chairperson (Technical Committee) BICET 2025		
14:30	End of Day 3		

CHEMICAL AND ENERGY ENGINEERING TRACK

Day 1 - MORNING PARALLEL SESSION (1) – CLASSROOM 7 (SASM Building)
SESSION CHAIR 1: Prof. Siva and SESSION CHAIR 2: Dr. Wendy

Time	Paper ID	Paper Title	Authors
15:30	17	Thermally Robust Polymer–Carbon Nanocomposites for GHz EMI Shielding and Dielectric Applications: Scalable Fabrication and Stability Enhancement	Maziyar Sabet, Amalia Batrisyia Binti Ans Nawi and Reddy Prasad
15:45	28	Valorization of Sembada 188 Rice Husk as a Sustainable Bioadsorbent for Methylene Blue Removal	Yie Hua Tan, Ummul Hasanah Haji Hassan, Bridgid Lai Fui Chin, Jenney Lim Song Ngu, Nabisab Mujawar Mubarak and Tony Hadibarata
16:00	114	Effect of Fly Ash on Phase and Compositional Behaviour of Cement	Muhammad Mozart Na'Im Bin Haji Muhammad Emmy Shamry, Dr. Khairunnisa Nabilah Haji Ruslan, Dr. Md. Maksudur Rahman Khan, Dr. Reddy Prasad D.M and Pg Dr. Hj Saiful Baharin Pg
16:15	50	Plasmonic nanoparticle ink for anti-counterfeit authentication	Kae Jye Si and Shyang Pei Hong
16:30	24	Evaluation Of Packing Type and Material on Pressure Drop and Column Sizing in Absorption Towers	Izzah Syazwani Muhamad Jusri, Yie Hua Tan and Mubarak Nabisab Mujawar
16:45	105	Modeling Safety Behavior Predictors Among Engineering Students in Brunei Entering in the Oil And Gas Industry	Alexander Joseph Song Wern Tsih, Reddy Prasad D M, Bashir Suleman Abusahmin and Mohammad Hazwan Bin Azri
17:00	End of Day 1		

Day 2
21.10.2025, Tuesday

Day 2 - MORNING PARALLEL SESSION (2) - CLASSROOM 7 (SASM Building)
SESSION CHAIR 1: Dr Aravind and CHAIR 2: Dr Hazwan

Time	Paper ID	Paper Title	Authors
10:30	32	Optimization of Vanillic Acid Synthesis from Oil Palm Empty Fruit Bunches (<i>Elaeis guineensis</i> Jacq) Fermented with <i>Trichoderma harzianum</i>	Salsa Alyaa Koirunisa Suhandi, Rayna Cangra Pempasa, Muhamad Farhan Agustian, Lili Melani and Muhammad Yusuf Abduh
10:45	57	Laboratory And Cost-Benefit Analysis of Greywater Harvesting System in Brunei Darussalam	Shaidatul Nabilah, Stefan Godeke and Pg. Emeroylariffion Abas
11:00	40	Preliminary Optical Sensor-Based Assessment of Carbon Dynamics in Mangrove Waters of Selirong Island, Brunei Darussalam	Afiqah Baharudin, Rahayu Sukri, Salwana Md. Jaafar, Muhammad Hadi Sahat and Stefan Gödeke

11:15	56	Design And Development of Chitosan Cellulose-Based Permeable Reactive Barrier for Pharmaceutical Wastewater Treatment	Sivarajasekar N, Thrisha Aravindh, Sukanya Karuppannan and Sivakumar Manickam
11:30	65	Performance Of Palladium/Graphitic Carbon Nitride (Pd/Gc ₃ N ₄) Based Electrode for Electrooxidation of Glycerol	Yi Xuan Liyau, Theodora Steffie Johnny, Md. Noor Bin Arifin, Khairunnisa Nabilah, D. M. Reddy Prasad and Md Maksudur Rahman Khan
11:45	29	Failure Prediction and Risk Assessment of Metals in Sour Corrosion Environments Using Statistical Tools	Yasmin Mubin, Reddy Prasad D.M., Bashir Suleman Abusahmin and Md Maksudur Rahman Khan
12:00	Lunch Break		
Day 2 - AFTERNOON PARALLEL SESSION (3a) - CLASSROOM 7 (SASM Building) CHAIR 1: Dr. Sivarajasekar and SESSION CHAIR 2: Dr Maziyar			
Time	Paper ID	Paper Title	Authors
14:15	108	Tailored Biochar Formulations for Soil-Specific Applications: Optimizing Biochar Properties for Enhanced Soil Health in Sandy, Clay, and Loamy Soils	Zi Liang Lee, Lai Ti Gew, Jactty Chew, Hwai Chyuan Ong and Long Chiau Ming
14:30	121	Biochar From Spent Coffee Grounds Enriched with Plant Growth-Promoting Bacteria: A Contribution to a Circular Economy	Amal Basirah Karim, Hazwani Suhaimi, Nur Amal Fadhilah Narawi, Roslynn Rosli and Pg Emeroylariffion Abas
14:45	144	Improving Industrial Solid Waste Resource Efficiency Through Digital Economic Development: Evidence from Prefecture-Level Cities in China	Haodi Dong and Kamrul Alam Raju Mohammad
15:00	Coffee Break		
Day 2 - AFTERNOON PARALLEL SESSION (3b)- CLASSROOM 7 (SASM Building) CHAIR 1: Prof Yusuf and SESSION CHAIR 2: Dr Si			
Time	Paper ID	Paper Title	Authors
15:30	142	Advanced Machine Learning Framework for Accurate and Interpretable CO ₂ Capture Predictions in Porous Carbon Materials	Dimple Bonugu, Rama Rao Karri, Achintya Reddy Kunal, Harshith Bangaru, Mullai Venthana Selvam and Surekha Paneerselvam
15:45	143	Electrooxidation Degradation of Tetracycline Using Mof-Based Electrodes for Water Treatment	Adam Momin, Asmaal Sultan, Noor Hadijah Hadi, Nabilah Ruslan, Rama Rao Karri, Koduru Reddy, Lakshmi Lingamdinne and Rakesh Kulkarni
16:00	73	Photoelectrocatalytic CO2 Reduction Over PANI Modified G-C3N4	Yi Xuan Liyau, Theodora Steffie Johnny, Md. Noor Bin Arifin, Khairunnisa Nabilah, D. M. Reddy Prasad and Md Maksudur Rahman Khan
16:15	90	Preliminary Study of Metal Contaminants in Brunei Wasan Paddy Waters	Amillen Fizry Senaut, Nabisab Mujawar Mubarak, Khairunnisa Nabilah Ruslan, D.M. Reddy Prasad and Mohd Faizan Ibrahim
16:30	149	Electrochemical Investigation on Ni-Cu-P Coated Anodes for Alkaline Aluminium Air Batteries	Suresh T, Samuel Ratna Kumar P S, Selvambikai M, Mashinini P M, Moussaoui K, Zitoune R
16:45	104	Non-Azide Gas Generant for Automotive Airbags: Thermal and Kinetic Analysis of Guanidine Nitrate/Strontium Nitrate Mixture	Aravind S L, Reddy Prasad D M, Suganthi S T and Md Maksudur Rahman Khan
17:00	End of Day 2		

Day 3 22.10.2025, Wednesday			
MORNING PARALLEL SESSION (4)- CLASSROOM 7 (SASM Building) CHAIR 1: Dr. Tan and CHAIR 2: Dr. Rao			
Time	Paper ID	Paper Title	Authors
8:15	18	Sustainable Production of ε-Caprolactam from Phenol: Process Design and Economic Feasibility	Nur Mu'izzah, Abdul Hakeem, Mohammad Haziq, Muhammad Saiful Rahman, Maziyar Sabet, Wendy Pei Qin Ng and Si Kae Jye
8:30	9	Design and Optimization of a Stirred Tank Bioreactor and a Decanter Centrifuge for Bioethanol Production from Biomass	Suhailah Haji Metassim, Rama Rao Karri, Osman Laabillah Abu Bakar, Muhammad Aminuddeen Syafi Jonhimran and Khairunnisa Nabilah Ruslan
8:45	5	Design and Optimization of Distillation Column and Stripping Column for Production of Bioethanol by the Fermentation of Biomass.	Muhammad Aminuddeen Syafi Jonhimran, Suhailah Hj Metassim, Osman Laabillah Abu Bakar, Khairunnisa Nabilah Ruslan, Rama Rao Karri
9:00	19	Effect mixed yeast/anaerobic sludge inoculum on bioelectricity generation in microbial fuel cell	Ashmalina Rahman, Yi X. Liyau, Mohammad Hazwan Azri, D.M.R. Prasad, Shahriar Shams and Md Maksudur Rahman Khan
9:15	79	DEMARS: A Python-Based Discrete Element Method Framework for Granular Material Simulation	Asytrialisah Roslan, Bashir Busahmin and Reddy Prasad D. M
10:00	Coffee Break		
MORNING PARALLEL SESSION (5) -ONLINE SESSION CHAIR 1: Prasad and CHAIR 2: Dr. Ummul			
Time	Paper ID	Paper Title	Authors
10:00	37	Technoeconomic Evaluation of Lactic Acid Production Using Glycerol and CO ₂ in Brunei Darussalam	Almas Hazis, Balqis Zaffri, Wa'le Sabri, Md Maksudur Rahman Khan, D. M. Reddy Prasad and Hazwan Azri
10:15	78	Effect of Brunei Lake Sediment on Power Generation and Cod Removal in Sediment Microbial Fuel Cell	Farahiyah Rahman, Ashmalina Rahman, Shahriar Shams and Md. Maksudur Rahman Khan
10:30	88	Nutrient Influence and Extraction Optimization in Microalgae for Enhanced Biofuel and Biomaterial Production	Md.Ibrahim Ahmed Chowdhury, Subash Chandra Deb, Md. Ali Azgor, Mohammad Shaiful Alam Amin, Md Salatul Islam Mozumder and Md. Maksudur Rahman Khan
12:00	Lunch Break		
14:00	BICET 2025 Closing Ceremony - Conference Room, Level 2, SASM Building Professor Ir Dr Mohammad Yeakub Ali Chairperson BICET 2025		
14:30	End of Day 3		

CIVIL ENGINEERING TRACK

Day 1 - MORNING PARALLEL SESSION (1) - CLASSROOM 6 (SASM Building)
SESSION CHAIR 1: Dr Geetha Karthi and SESSION CHAIR 2: Pg Dr Noor Muneerah Binti Pg Hj Jeludin

Time	Paper ID	Paper Title	Authors
15:30	74	The Capacity of Multi-Lane Roundabouts in Brunei Darussalam	Yok Hoe Yap, Ashley Pei Wenn Chua, Siti Raihanah Supri and Soon Jiann Tan
15:45	94	Back-Analysis of Rainfall-Induced Slope Failure: A Case Study in Brunei Darussalam	Hafizah Aliakbar, Soon Jiann Tan, Uditha Ratnayake and Ena Kartina Hj Abd Rahman
16:00	46	Optimisation of Settlement Estimates: A Comparative Study of Shallow Foundation Analysis Methods	Gabriel Chiong, Meka Rao, Siong Chiong and Siew Lim
16:15	53	The Study of Start-Up Acclimatization Process of Integrated AOP-Biological Treatment of Landfill Leachate	Amni Nadzirah Hj. Mohd. Yussof, Mohamed Hasnain Isa, Rozeana Hj. Md. Juani and Hjh. Roslynnna Hj. Rosli
16:30	102	Sanitary Landfill Leachate Treatment Using Chemical Oxidation	Ruhaezeat Haji Sambas, Mohamed Hasnain Isa, Teh Sabariah Abd Manan, Muhammad Raza Ul Mustafa, Naimah Ibrahim, Lai Peng Wong, Suaidah Rahim and Amni Nadzirah Hj. Mohd. Yussof
17:00	End of Day 1		

Day 2 21.10.2025, Tuesday			
Day 2 - AFTERNOON PARALLEL SESSION (2) - CLASSROOM 6 (SASM Building) SESSION CHAIR 1: Dr Lim Pang Jen and CHAIR 2: Dr Motiar Rahman			
Time	Paper ID	Paper Title	Authors
10:30	64	Modelling the Effect of Root Depth and Location on the Stability of Slopes During Rainfall	Marteen Boey, Ena Kartina Abdul Rahman, Uditha Ratnayake
10:45	98	Survey and Analysis of Envelope Design Characteristics in Bruneian Detached Houses	Ady Taib
11:00	141	Key Barriers to Implementing BIM in Brunei Darussalam	Wang Houng Janthip Wong Houng, Md Motiar Rahman and Hj Rajul Adli Hj Asli
11:15	95	The Role of Green Infrastructure in Preventing Flash Flood	Arifatul Haziyah Hj Awg Md Akip, Md Motiar Rahman, Hj Rajul Adli Hj Asli and Uditha Ratnayake
11:30	67	Motivators for Circular Economy: A Summary of Indian Perspectives	Preethi Amrut Rao, Md Motiar Rahman, Pang Jen Lim and Saiful Baharin Duraman
Day 2 - AFTERNOON PARALLEL SESSION (3a) - CLASSROOM 6 (SASM Building) SESSION CHAIR 1: Dr Uditha Ratnayake and SESSION CHAIR 2: Dr Yok Hoe Yap			
Time	Paper ID	Paper Title	Authors
14:15	150	Synthesis of Alkali-Impregnated Nanocarbon for Removing Polysaccharides from Coir Industrial Effluent	Geethakarthis A, Remisha S R and Mohamed Hasnain Isa
14:30	89	Seawater Integrated Electrocoagulation Process Optimization for Textile Effluent Treatment: A Comparative Multi-Criteria Decision-Making Analysis Using TOPSIS and VIKOR	Tahmeed Ahmed, Md. Habibur Rahman Bejoy Khan, Amimul Ahsan and Shahriar Shams
14:45	87	Challenges for Adopting Circular Economy: A Summary of Indian Perspectives	Preethi Amrut Rao, Md Motiar Rahman, Pang Jen Lim and Saiful Baharin Duraman
15:00	Coffee Break		
Day 2 - AFTERNOON PARALLEL SESSION (3b) - CLASSROOM 6 (SASM Building) SESSION CHAIR 1: Pg Dr Noor Muneerah Binti Pg Hj Jeludin and SESSION CHAIR 2: Dr Uditha Ratnayake			
Time	Paper ID	Paper Title	Authors
15:30	110	Modelling Tidal and Fluvial Hydrodynamics in the Thames Estuary, UK - Calibration and Validation of a Two-Dimensional Hec-Cras Framework	Asari Abdul Rashid, Nur Amera Aqilah Noor Ash, Dr Uditha Ratnayake and Rama Rao Karri
15:45	20	Rainwater Harvesting Systems for Agriculture: Design Variations, Material, and Implementation Feasibility– A Systematic Review	Ahmad Safwan Ali, Shahriar Shams and Wida Susanty Haji Suhaili
16:00	42	Tools for Assessing Health of Aerobic Sludge Biomass	Rajneesh Kumar, Gurvinder Kaur Saini and Mohammad Jawed
17:00	End of Day 2		

Day 3 22.10.2025, Wednesday			
MORNING PARALLEL SESSION (4) - ONLINE SESSION CHAIR 1: Associate Professor Dr Munir Hayet Khan and CHAIR 2: Dr Ismawi Hj Md Yusuf			
Time	Paper ID	Paper Title	Authors
10:00	16	Recirculating Aquaculture System (RAS) in Removing Turbidity and Ammonia for Udang	Faizah Haji Fauzi, Muhammad Hafiz Bin Nulazmi, Shahriar Shams, Najeebah Az-Zahra Tashim and Lim
10:15	115	Determination of Total Maximum Daily Load (TMDL) for the Rehabilitation of Pusu River	Sohaib Abid Khan, Abdullah Al Mamun and Shahriar Shams
10:30	109	Assessment of Surface Water Quality in Brunei-Muara District	Faizah Haji Fauzi, Siti Zuhairah Brahim, Arunima Sekhar and Shahriar Shams
10:45	69	Stabilisation of Expansive Clay Using Spent Coffee Ground Ash (CGA)	Suaidah Rahim, Pg Dr Noor Muneerah Pg Hj Jeludin, Afiqah Junaidi, Norhafizah Alias and Salma Ismail
11:00	31	Stabilisation of Expansive Clay Using Spent Coffee Ground Ash (CGA)	Nurhanim Abdul Aziz, Norli Ismail and Nurul Illiana Mazlishah
11:15	80	Waste-Inclusive Enhanced Construction Material Functions: A Review of Sustainable Strategies Via Repurposing Industrial By-Products Through Cement Replacement	Zi Hao Lim, Yeong Huei Lee and Yie Hua Tan
12:00	Lunch Break		
14:00	BICET 2025 Closing Ceremony - Conference Room, Level 2, SASM Building Professor Ir Dr Mohammad Yeakub Ali Chairperson BICET 2025		
14:30	End of Day 3		

MECHANICAL ENGINEERING TRACK

Day 1 - AFTERNOON PARALLEL SESSION (1) - CLASSROOM 5 (SASM Building)

SESSION CHAIR 1: Dr Asad Khalid and SESSION CHAIR 2: Sir Murhamdillah

Time	Paper ID	Paper Title	Author
15:30	44	Machine Learning Prediction of Turbulent Kinetic Energy using β^* -Modified Turbulence Model Inputs	Chong Yii Kee and Naseem Uddin
15:45	36	Engineering Education 4.0: Using Photonics Experiments to Promote Sustainability and Energy Awareness	Haider Al Juboori
16:00	66	Development of Sensor Based Real-Time Monitoring Solar Food Dehydrator in Tropical Conditions	Mu'Tasim Latif, Azlina Diyanah Hamid and Hairol Ali
16:15	70	Experimental Study on the Performance of Solar Food Dehydrator for Efficient Drying of Mangoes and Bananas in Drunei Darussalam	Azlina Diyanah Hamid and Mu'Tasim Latif
16:30	22	Tool Life Study in Machining of Ti-6AL-4V Alloy using Coated Carbide Insert	Tanujai Navaneethan, Abdul Md Mazid, Neamul Khandoker, Avinesh Narayan, Mohammad Yeakub Ali and Ramesh Singh
16:45	25	Design Optimization and Experimental Validation of Pelton Turbine Buckets for Rainwater-Fed Micro-Hydro Systems Using CFD	Amal Basirah Karim, Hazwani Suhaimi, Nur Amal Fadhilah Narawi, Roslynn Rosli and Pg Emeroylariffion Abas
17:00	End of Day 1		

Day 2 - MORNING PARALLEL SESSION (2) - CLASSROOM 5 (SASM Building)

SESSION CHAIR 1: Dr Zhwan Ibrahim and CHAIR 2: Sir Md Hairol Bin Md Ali

Time	Paper ID	Paper Title	Author
10:30	27	Lean Management Framework for Maintenance Project in Process Industry	Izyan Hazirah, Mohammad Yeakub Ali, Samir Kamel, and Tamer Ibrahim
10:45	51	The Mechanical Properties and Microstructures of the Ti-7.8Al-1.0V-1.0Mo-1.0Fe-1.0Cr Alloy during the Thermomechanical Processing	Sheng-Yang Hsu and Chih-Yeh Chao
11:00	76	A Systematic Literature Review on Drilling Optimization Techniques for Thin Aluminium Components	Hazim Wafiuddin Kamaruzaman, Maziri Morsidi and Zunaidi Ibrahim
11:15	81	Low Velocity Impact on Straight and Curved Composite Laminates	Asad A Khalid and Syazwan Asnawi Haji Yasli
11:30	38	The Microstructures of the Ti-7.5Al-1.5V-1.5Fe-1.5Cr-1.5Sn Alloy during Thermo-Mechanical Processing	Wei Chen Su and Chih Yeh Chao
11:45	91	Performance of cotton-glass/epoxy nested tubes subjected to lateral impact loading	Asad A Khalid, Siti Sakinah Mahari Mahari, Zunaidi Ibrahim and Mur Hamdillah Murni
12:00	Lunch Break		

Day 2 - AFTERNOON PARALLEL SESSION (3a)- CLASSROOM 5 (SASM Building)			
SESSION CHAIR 1: Dr. Nassem Udin and SESSION CHAIR 2: Sir Ahmad Shamil			
14:15	85	Assessment of Machinability of Super Duplex 2507 Under Flood Cooling	Taufiq Manan, Mohammad Yeakub Ali, Seri Rahayu Ya'Akub, Mohd Sayuti Karim, Abdul Md Mazid and Avinesh Narayan
14:30	21	Industrial Application of Optimised Machining Parameters for Slurry Valve Disc Repair	Avinesh Narayan, Abdul Mazid, Ramesh Singh, Patrick Fordyce, Md Yeakub Ali and Tanujai Navaneethan
14:45	84	Investigation on the Effects of Machining Parameters on the Surface Roughness of Aluminium in the End-Milling Process	Ahmad Najib Basman, Maziri Morsidi, Zunaidi Ibrahim, Rahayu Ya'Akub and Ahmad Shamil Abdul Rahman
15:00	Coffee Break		
17:00	End of Day 2		

Day 3 - MORNING PARALLEL SESSION (4b) - ONLINE			
SESSION CHAIR 1: Dr. Maziri and CHAIR 2: Ir. Dr. Zunaidi			
Time	Paper ID	Paper Title	Author
10:00	45	Investigation of a tidal turbine in an array configuration for low velocity applications	Nurdhiyauddin Nudin and Roslynn Rosli
10:15	82	A Systematic Review on the Development of Bio-Inspired Prosthetic Foot Using Carbon Fibre Composite	Nur Aqidah Izzati Hj Mohd Sani, Zunaidi Bin Ibrahim and Asad Khalid
10:30	47	Performance Analysis of Rice-Straw Based Insulation Panel	Md Sejan Hossain, Md Taslim Alam Rafi, Mohammad Yeakub Ali, Mohammad Nurul Islam, Md Abdul Kader, Md Mukul Uddin, Pial Hasan Alvi and Md Almostasim Mahmud
10:45	58	Transient Thermal Surge Management of Pouch Cell Batteries Using Compact Air Channel with the Presence of Fin and Composite Phase Change Material.	Md. Maruf Tahmid, Md. Abdul Monem, Md. Mukul Uddin, Mohamed Hairol H M Ali, Md. Almostasim Mahmud, Mohammad Nurul Islam and Md Abdul Hamid
11:00	63	Enhancing Water Yield of Pyramid Solar Still through Natural Rock Serving as a Heat Storage Medium	Saad A. Mutasher Al Jaber, Mohammed Al Aufi, Khalid Al Busaidi, Qais Al Ghafri, Mohammed Al Abdali and Asad A.Khalid
11:15	147	Carbon nanotubes based nano-materials against Acanthamoeba castellanii	Kit-Xun Chan, Tooba Jabri, Maria Talha, Muhammad Raza Shah, Asia Naz Awan, Long Chiau Ming, Ayaz Anwar and Seng-Kai Ong
11:30	83	Dry Machining of Super Duplex 2507 Stainless Steel: Assessment of Machinability	Nur Darwisyah Batrisyia Muhammad Danial Dzimar, Mohammad Yeakub Ali, Maziri Morside, Ramesh Singh, Abdul Md Mazid and Tanujai Navaneethan
11:45	8	Design and Development of a 3D-Printed EMG-Controlled Prosthetic Arm for Automated Finger Rehabilitation	Piut Hazman, Zunaidi Ibrahim, Dk Seri Rahayu Pg Ya'Akub, Ahmad M. S. Elakloun and Ir Dr Ahmad Azlan Ab Aziz
12:00	Lunch Break		
14:00	BICET 2025 - Closing Ceremony - (Conference Room, Level 2, SASM Building) Professor Ir Dr Mohammad Yeakub Ali BICET2025 Chairperson		
14:30	End of Day 3		