

TECHNICAL SESSION ICESDiRe'24

Day 1: 13th August 2024

8:00 am - 9:00 am	Registration	
9:00 am - 10:00 am	Opening Ceremony of the IIUM Engineering Congress 2024 Welcoming Remarks by The Dean, The Covering Rector, and The President Venue: Auditorium A Zoom: https://shorturl.at/1qsAz	
10:00 am - 11:00 am	IIEC'24 Keynote Speaker Session Ts. Hj. Muhtar Suhaili (GCEO of EPIC Berhad) Title: Sustainable Engineering for Humanity Venue: Auditorium A Zoom: https://shorturl.at/1qsAz	
11:00 am - 11:15 am	Welcoming Remarks by 2nd ICESDiRe'24 Chairman Dr. Saerahany Legori Ibrahim Venue: Main Conference Room (E1) Zoom: https://shorturl.at/1qsAz	
11:15 am - 12:15 pm	ICESDiRe'24 Keynote Speaker Session 1 Prof. Ir. Dr. Ruslan Hassan (International Islamic University Malaysia) Venue: Main Conference Room (E1) Zoom: https://shorturl.at/1qsAz Title: Sustainability and Resilience: Efficient Design, Long Term and Closed Loop Methodologies Chairperson: Prof. Ir. Dr. Maisarah Ali	
12:15 pm - 1:15 pm	ICESDiRe'24 Keynote Speaker Session 2 Dato' Ir. Dr. Nik Mohd Kamel Nik Hassan (Dr. Nik & Associates Sdn. Bhd.) Venue: Main Conference Room (E1) Zoom: https://shorturl.at/1qsAz Title: New Frontiers in Civil Engineering for Managing Floods in Malaysia Chairperson: Prof. Ir. Dr. Maisarah Ali	
1:15 pm - 2:30 pm	Lunch Break	
2:30 pm - 5:30 pm	Parallel Session 1	Parallel Session 2
	Geotechnical Transportation Venue: Main Conference Room (E1)	Structure Construction Materials Venue: E2-2-4
5:30 pm	Disperse	

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Day 2: 14th August 2024

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9:00 am - 10:00 am	<p>ICCESDiRe'24 Keynote Speaker Session 3 Prof. Dr. Mohamed Hasnain Isa (Universiti Teknologi Brunei) Venue: Main Conference Room (E1) Zoom: https://shorturl.at/1qsA Title: Mitigation of Greenhouse Gas Emissions from Landfills Chairperson: Prof. Dr. Abdullah Al Mamun</p>	
10:00 am - 11:00 am	<p>ICCESDiRe'24 Keynote Speaker Session 4 Mr. Akhramsyah Muammar Ubaidah Sanusi (Kitaran Tabah Sdn. Bhd.) Venue: Main Conference Room (E1) Zoom: https://shorturl.at/1qsAz Title: Sustainable Development in the Malaysian Landscape: Growth Against Realities Facing NETR, NIMP and Other Initiatives Chairperson: Prof. Dr. Abdullah Al Mamun</p>	
11:00 am - 11:20 am	Break	
11:20 am - 1:00 pm	<p>Parallel Session 3</p> <p>Geotechnical Transportation Venue: Main Conference Room (E1)</p>	<p>Parallel Session 4</p> <p>Water Environment Venue: E2-2-4</p>
	<p>Parallel Session 5</p> <p>Structure Construction Materials Venue: Main Conference Room (E1)</p>	<p>Parallel Session 6</p> <p>Water Environment Venue: E2-2-4</p>
1:00 pm - 2:00 pm	Lunch Break	
2:00 pm - 4:30 pm	<p>Parallel Session 5</p> <p>Structure Construction Materials Venue: Main Conference Room (E1)</p>	<p>Parallel Session 6</p> <p>Water Environment Venue: E2-2-4</p>
4:30 pm - 5:30 pm	Closing	

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13th August 2024 (Day 1)

Parallel Session 1: Geotechnical & Transportation

Chairperson: Dr. Nur Khairiyah Basri

Co-chairperson: Ts. Dr. Wan Nur Aifa Wan Azahar

Venue: Main Conference Room (E1)

Time	ID	Title
2:30 pm – 2:50 pm	15	Mitigating the Temperature Rise in Peat Soil Using Effective Microorganisms Munira Shahbuddin
2:50 pm – 3:10 pm	26	Performance Evaluation of Asphalt Mixture Incorporating with Polyethylene Terephthalate Nabil Irfan Nasir, Wan Nur Aifa Wan Azahar, Norhidayu Kasim, Nur Khairiyah Basri, Ahmad Bukhari Ramli, Nur Atikah Kamaruzaman
3:10 pm – 3:30 pm	14	Behavior of Micromobility User towards Different Road Category Azzuhana Roslan, Rizati Hamidun, Nora Sheda Mohd Zulkifli, Zarir Hafiz Zulkipli, Kak D Wing
3:30 pm – 3:50 pm	19	Machine Learning for Silt Mapping Distribution in Geohazard Prone Area Mohammad Radzif bin Tahirin
3:50 pm – 4:10 pm	42	Improvement of the Physical and Mechanical Behaviour of Clayey Sand with Clay Brick Dust Norhidayu Kasim, Umme Saima Nur, Wan Nur Aifa Wan Azahar, Ahmad Bukhari Ramli
4:10 pm – 4:30 pm	37	The Influence of Reclaimed Asphaltic Pavement (RAP) on the Cold Mix Asphalts Performance Nur Khairiyah Basri, Nurul Billahizzati Rusli, Wan Nur Aifa Wan Azahar, Nadiah Md Husain, Wan Nur Firdaus Wan Hassan, Ahmad Bukhari Ramli, Siti Noratikah Che Deraman, Norhidayu Kasim
4:30 pm – 4:50 pm	40	Contact Angle Modification in Optimizing Adhesion Performance of Bitumen Binder in Stone Mastic Asphalt Mixture Nadiah Md Husain, Nur Alisa Izati Azri, Siti Noratikah Che Deraman, Wan Nur Firdaus Wan Hassan, Nur Khairiyah Basri, Tahara Ramadan Md Kassim
4:50 pm – 5:10 pm	27	Binder Characterisation and Performance of Asphaltic Concrete Modified with Waste Engine Oil Wan Nur Aifa Wan Azahar, Muhammad Amirul Hakim Azman, Norhidayu Kasim, Nur Khairiyah Basri, Ahmad Bukhari Ramli, Atikah Kamaruzaman

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13th August 2024 (Day 1)

Parallel Session 2: Structure, Construction & Materials

Chairperson: Dr. Siti Asmahani Saad

Co-chairperson: Dr. Tahara Ramadan Md Kassim

Venue: E2-2-4

Time	ID	Title
2:30 pm – 2:50 pm	1	Sustainable Lightweight Block with Construction Waste in Malaysia <i>Nor Azian Aziz, Zamri Hashim</i>
2:50 pm – 3:10 pm	3	Analysis of Variation Orders for Performance of Building Construction Projects <i>Afifah Ayob, Nur Hadirah Amfazi, Mustaqqim Abdul Rahim</i>
3:10 pm – 3:30 pm	24	Durability Of Stone Mastic Asphalt Mixture with The Amalgamation of Bamboo Fibers as Binder Modifier <i>Nadiyah Md Husain, Noor Syahirah Khiyon, Siti Noratikah Che Deraman, Nur Khairiyah Basri, Wan Nur Firdaus Wan Hassan, Siti Asmahani Saad</i>
3:30 pm – 3:50 pm	11	Behavior of Rubberized Concrete Beams Reinforced with GFRP Reinforcement <i>Ahmed Noaman, Omaima Wajeih Jumaa, Akram S. Mahmoud</i>
3:50 pm – 4:10 pm	12	Comparison Between Molasses and Sika Plastisiment Vz As Set-Retarders in the Characteristics of High-Strength Self-Compacting Concrete (HC-SCC) <i>Mochammad Teguh, Nanindya Aliyyinaya</i>
4:10 pm – 4:30 pm	29	The Influence of Hot Water Curing To The Mechanical Properties Of Ultra High Performance Concrete (UHPC) Incorporating Alumina Powder <i>Hani Zulaika Hisham, Wan Nur Firdaus Wan Hassan, Nur Khairiyah Basri, Ahmad Bukhari Ramli</i>
4:30 pm – 4:50 pm	33	Identifying Active Design Features for Buildings in Hot-Humid Countries <i>Md Motiar Rahman, Nor Aqilah Haji Juffle, Rajul Adli Asli</i>
4:50 pm – 5:10 pm	39	Evaluating the Existing Solutions to Enhance Contractors' Early Involvement: A Case Study <i>Ehsan Saghatforoush, Samereh Jadidoleslami, Amirhossein Heravi, Christopher Preece</i>
5:10 pm - 5:30 pm	25	The Impacts of Tyre Rubber Surface Treatments on the Strength of Rubberized Concrete <i>Wan Nur Firdaus Wan Hassan, Alia Nazifa Aminuddin, Siti Asmahani Saad, Nadiyah Md Husain, Siti Noratikah Che Deraman</i>

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14th August 2024 (Day 2)

Parallel Session 3: Geotechnical & Transportation

Chairperson: Assoc. Prof. Ir. Ts. Dr. Norhidayu Kasim

Co-chairperson: Dr. Nur Khairiyah Basri

Venue: Main Conference Room (E1)

Time	ID	Title
11:20 am – 11:40 am	8	The Role of the Safety, Health, and Environment Code of Practice (SHE COP) in Mitigating Bus Crashes: A Case Study in Malaysia <i>Rohayu Sarani</i>
11:40 am – 12:00 pm	13	Evaluation of the Raised Pedestrian Crossing (RPC) for Different Speed Roads <i>Rizati Hamidun, Nora Sheda Mohd Zulkifli, Azzuhana Roslan, Syed Tajul Malik Syed Tajul Arif, Rohayu Sarani, Alvin Wai Hoong Poi, Mohd Shafie Nemmang</i>
12:00 pm – 12:20 pm	16	Bioremediation of Contaminated Soil with Oil Spill <i>Munira Shahbuddin</i>
12:20 pm – 12:40 pm	17	Effect of Traffic Calming Measures to Speed of Vehicle on Urban Roads <i>Syed Tajul Malik Syed Tajul Arif, Mohd Shafie Nemmang, Nora Sheda Mohd Zulkifli, Rizati Hamidun, Jen Sim Ho</i>
12:40 pm – 1:00 pm	36	Case Study: Preliminary Geotechnical Assesment on Reclamation Land Project in Kuantan <i>Ahmad Bukhari Ramli, Muhamad Aiman Hakimi Noor Zaham, Wan Nur Aifa Wan Azahar, Wan Nur Firdaus Wan Hassan, Norhidayu Kasim, Nur Khairiyah Basri</i>

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14th August 2024 (Day 2)

Parallel Session 4: Water & Environment

Chairperson: Dr. Dani Irwan Masbah

Co-chairperson: Dr. Saerahany Legori Ibrahim

Venue: E2-2-4

Time	ID	Title
11:20 am – 11:40 am	4	Numerical Modeling of Rip Currents at RK Beach, Visakhapatnam Using XBeach Model Sivaiah Borra , Zahir Ramli, PSN Acharyulu, Arun Kumar VV Surisetty, Balakrishnan Nair T.M., Srinivasa Kumar T, C.V. Naidu
11:40 am – 12:00 pm	21	The Use of Enzymatic Pretreatment for Anaerobic Digestion of Palm Oil Mill Effluent Abdullah Al-Mamun , Md Zahangir Alam, Nur Khairiyah Basri, Md Sazidur Rahman
12:00 pm – 12:20 pm	9	The Applicability of the HEC RAS 2D Rain-On-Grid Method for Flash Flood Simulation in A Small And Steep Catchment Bambang Winarta , Nadiatul Abdul Ghani, Syarifuddin Misbari, Norasman Othman
12:20 pm – 12:40 pm	18	Electrocoagulation for Sustainable Water Treatment: Role of Computational Fluid Dynamics Simulation Towards Energy Transition Amina Tahreen , Mohammed Saedi Jami
12:40 pm – 1:00 pm	20	Denitrification Mechanism of Domestic Wastewater Using Plant-Based Integrated Constructed Treatment System Nurul Farah Anisa Hairolnizam , Suryati Sulaiman, Nadzirah Mohd Mokhtar

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14th August 2024 (Day 2)

Parallel Session 5: Structure, Construction & Materials

Chairperson: Ir. Dr. Nadiah Md Husain

Co-chairperson: Dr. Rijalul Fikri

Venue: Main Conference Room (E1)

Time	ID	Title
2:00 pm – 2:20 pm	2	Preliminary Assessment of Existing Buildings in Low –to – Moderate Seismic Region Mohd Irwan Adiyanto
2:20 pm – 2:40 pm	44	Investigate Concrete Gravity Dam Under Single and Repeated Earthquake Event Condition Various with Different Water Level Asmidah Mohamad, Nik Zainab Nik Azizan, Shamilah Anudai @ Anuar, Tahara Ramadan Md Kassim, Goh Duan Hao
2:40 pm – 3:00 pm	22	Potential and challenges of reusing dredged sediment as aggregate in cement composites Asma Ahmed
3:00 pm – 3:20 pm	30	Seawater Influence on Mechanical and Microstructure Properties of Polypropylene Fibre Reinforced Concrete (PPFRC) Siti Asmahani Saad, Ammar Izuddin Mohd Asri, Wan Nur Firdaus Wan Hassan, Siew Choo Chin, Nadiah Md Husain, Siti Noratikah Che Deraman
3:20 pm – 3:40 pm	31	Investigation of Water Flow Behaviour Around Circular Bridge Pier Using CFD- ANSYS Fluent Siti Nur Husna Mohd Yusof, Tahara Ramadan Md Kassim, Nik Zainab Nik Azizan, Daniel C
3:40 pm – 4:00 pm	28	Investigation of Wind Pressure Distribution on High-Rise Building Due to Different Shapes of Building Using Computer Simulation Siti Nur Solehah Abd Manap, Siti Noratikah Che Deraman, Nadiah Md Husain, Wan Nur Firdaus Wan Hassan, Siti Asmahani Saad
4:00 pm – 4:20 pm	34	Implementing Circular Economy in Construction: A Brief Review Md Motiar Rahman, Preethi Amrut Rao, Saiful Baharin Duraman

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14th August 2024 (Day 2)

Parallel Session 6: Water & Environment

Chairperson: Prof. Ir. Dr. Maisarah Ali

Co-chairperson: Prof. Dr. Abdullah Al Mamun

Venue: E2-2-4

Time	ID	Title
2:00 pm – 2:20 pm	7	Identification of Flow Patterns in T-Shaped Open Channel Bifurcations <i>Izihan Ibrahim, Saerahany Legori Ibrahim</i>
2:20 pm – 2:40 pm	43	Climate Change: A Review of the Impact to Floods <i>Napisah M Nasir, Dani Irwan Masbah, Ali Najah Ahmed Al Mahfoodh, Saerahany Legori Ibrahim, Izihan Ibrahim, Ahmed El-Shafie</i>
2:40 pm – 3:00 pm	41	Modelling GHG Emissions with Data-Driven Stochastic Techniques: A Country-Specific Approach <i>Mohd Fauzi Bin Zani, Sazalina Zakaria, Mohd Faizal Mohideen Batcha, Md. Fauzan Kamal Mohd Yapandj, Zainal Ahmad, Sarina Sulaiman</i>
3:00 pm – 3:20 pm	38	Investigation of Energy Dissipation of a Submerged Breakwater Using Computational Fluid Dynamic Model FLOW-3D <i>Saerahany Legori Ibrahim, Nurul Izzah Khairil, Izihan Ibrahim, Zahir Ramli</i>
3:20 pm – 3:40 pm	10	A Decent Technique in Rainfall-Runoff Model Development Using HEC-HMS <i>Bambang Winarta, Nadiatul Abdul Ghani, Nurul Tukimat</i>
3:40 pm – 4:00 pm	32	Sustainable Riverbank Protection Utilizing Coconut Coir and Vetiver Grass Using BSTEM <i>Saerahany Legori Ibrahim, Siti Nurain Che Mohd Azmi, Naqib Azfar Azmi, Izihan Ibrahim, Dani Irwan Masbah</i>
4:00 pm – 4:20 pm	35	Application of CFD for the Reduction of Health Risk And Disasters: Simulation of Cerebral Aneurysms in Brain Stroke <i>S M Afzal Hoq, K. E. Hoque</i>