

| PHYSICAL PARALLEL SESSIONS | Session 1 (Auditorium) - Level 2 | | |
|----------------------------|--|---|---|
| Chairperson | Dr. Ilya Joohari (UniMAP) | | |
| Theme | Transportation & Traffic Engineering/Highway Engineering/Geotechnical Engineering/Construction Management/ | | |
| Time | Paper ID | Paper Title | Presenter |
| 2.30 – 2.50 | - | <i>“Evolution of Roundabouts”</i> | INVITED SPEAKER: DR. HONG KI AN |
| 2.50 – 3.10 | 12 | Modelling the Effect of Psychology Factors and Environmental Concerns on Mass Rapid Transit Usage Intention among Private Vehicle Users in Klang Valley, Malaysia | Ahmad Fakhri Fakhruddin Abd Wahab ¹ , <u>Tun Ahmad Adlan Asma'an Jamaluddin</u> ¹ , Muhamad Nazri Borhan ^{1,2} , Ahmad Firdhaus Arham ³ , Ahmad Nazrul Hakimi Ibrahim ^{1,2*} |
| 3.10 – 3.30 | 7 | Pavement Maintenance and Surface Treatment: Evaluation and Prevention Towards Road Safety Aspect Along Ampang Jaya Road | <u>Aniza Albar</u> ^{1*} , I D Abdul Rashid ² , S Haron ³ , A A A Azinal Abidin ⁴ , R Ramli ⁵ |
| 3.30 – 3.50 | 14 | Comparison of 85th Percentile Operating Speed With Different Median Segregation for Multilane Highways: A Case Study Kapar-Kuala Selangor | Mohd Rhazef Che Sori, Mohd Zul Hanif Mahmud, Muhammad Akram Adnan, Mr. Che Ros bin Ismail, Wardati Hashim, Muhammad Farhan Zolkepli, Mohd Khairul Afzan Mohd Lazi, Sitti Asmah Hassan |
| 3.50 – 4.10 | 53 | A Review of the Impact of Human Behaviour and Road Infrastructure on Road Accidents | <u>Mahbub Hassan</u> ¹ , Hong Ki An ² , Joewono Prasetijo ³ , Md. Abdul Aziz Khan ⁴ |
| 4.10 – 4.30 | 60 | Numerical analysis on the differential settlement of geosynthetic reinforced soil integrated bridge system | N.H.H. Abdullah ¹ , K.S. Ng ^{1*} , I.B. M. Jais ² |
| 4.30 – 4.50 | 25 | Experimental Study of Copper Contamination in Mechanical Properties of Residual Soil Under Different Concentration | Allentykoster Anak Anyap ¹ , <u>Muhammad Hafeez Bin Osman</u> ¹ , Badrul Nizam Bin Ismail ¹ , Aniza Binti Albar ¹ |
| 4.50 – 5.10 | 75 | Opposing Approaches for Enhancing Energy Efficiency in Buildings | Md Motiar Rahman ¹ |
| 5.10 – 5.30 | 19 | Full Extraction of Asbuton Bitumen for Binder Replacement in Warm Mix Asphalt | Muhammad Reza Agraha Maha, Mohd Khairul Idham Mohd Satar, Mohd Rosli Hainin |

**PHYSICAL
PARALLEL SESSIONS**

**Session 2
(Bilik Mesyuarat Aras Bawah) - Ground Floor**

Chairperson

Assoc. Prof. Ts. Dr. Abdul Haqi Ibrahim (UniMAP)

Theme

Environmental Engineering/Water Resources Engineering/Sustainable Infrastructure/Structural Engineering/Disaster Management

Time

Paper ID

Paper Title

Presenter

2.30 – 2.50

31

Brine Waste from Seawater Desalination in Malaysia

Norhafezah Kasmuri 1,2*, Cynthia Mahadi 2,3 and Mohd Fuad Miskon 4

2.50 – 3.10

66

A Case Study on Reuse and Recycling Implementation for Construction and Demolition Waste In Langkawi Island: An Overview

Mohamed Fuad Shahariman, Muhammad Azizi Azizan, Nur Amierah Harun

3.10 – 3.30

2

Establishing Rainfall Intensity-Duration-Frequency Curves for Baghdad, Iraq Using Satellite Data

Mohammed Magdy Hamed *, Sarah Jabbar Zeri and Shamsuddin Shahid

3.30 – 3.50

41

Analysis of Fresh and Mechanical Properties of Lightweight Concrete with Spent Garnet and Seawater As Mixing Ingredients in Oil Palm Shell

Nur Farah Aziera Jamaludin1, Khairunisa Muthusamy1,* Muhammad Fitri Abu Hashim1, Haiqal Akashah Mohamad Nazle1, Nor Hazurina Othman2

3.50 – 4.10

43

Properties of Concrete Containing Spent Garnet as Fine Aggregate Replacement

Hanis Nadiah Ruslan, K Muthusamy1, M H Muzafar Shah1, F Mat Yahaya1 and F Zulkarnain2

4.10 – 4.30

45

Exploring the Potential of Accelerated Carbonation to Enhance Feedstock Characteristics in Activated Steel Slag

Jason Ting Jing Cheng 5, IR Ts Dr Lee Foo Wei 1, IR Ts Dr Mo Kim Hung 2, IR Ts Dr Yew Ming Kun 3, IR Ts Dr Yip Chun Chieh 4

4.30 – 4.50

57

Cementitious Composites for Structural Strengthening of Reinforced Concrete Members: A Brief Overview

Abir Mahmood1, A. B. M. Amrul Kaish1, Sudharshan N. Raman2, M. Jamil3, Roszilah Hamid1

4.50 – 5.10

61

Mechanical Performance of Cement Mortar with Clear Glass Waste Powder as a Partial Sand Replacement

Ng Wei Yean, Jee Hock Lim1,2, Foo Wei Lee1 and Siong Kang Lim1

**ONLINE
PARALLEL SESSIONS**

**Session 3
(Discussion Room 1)
Level 2**

Chairperson

Ts. Dr. Mohd Samsudin Abdul Hamid (UiTM)

Google Meet Link

<https://meet.google.com/skm-xvto-dkw>

Theme

Construction Management/Sustainable Infrastructure

Time

Paper ID

Paper Title

Presenter

2.30 – 2.50

81

Construction status and technical progress of immersed tube tunnel in China

Zhinan Hu

2.50 – 3.10

24

Performance Analysis of Supply Chain for Construction Materials at High Rise Building Project Based On Supply Chain Operations Reference Method (SCOR): A Case Study

Romi Ardhi Marzuki¹, Vendie Abma^{2*}

3.10 – 3.30

83

Fracture Properties of Defective Superconducting Materials in Complex Magnetic Field Environments

Zhen Yan

3.30 – 3.50

28

Study on Effect of Anti Bribe Management System to the Quality of Authority Organizational Operational Management

Khairul Ammar Muhammad Ali¹ , Patrick Robert Gau ¹ and Amalina Amirah Abu Bakar¹

3.50 – 4.10

40

Safety and Health Factors for Construction Sites of High-rise Building Projects in Malaysia

A A Rahim¹ , Y S Lee¹ , A R Alias¹ and R A Rahman¹

4.10 – 4.30

48

The Effectiveness of BIM Features Application Strategies for Building Refurbishment Project Performance Dimensions Improvement

Nor Suraya binti Shohime ¹ , Nur Hidayah binti Khairul Anuar ¹ and Nurfadzillah binti Ishak ¹

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| <p>ONLINE PARALLEL SESSIONS</p> | <p>Session 4 (Discussion Room 2) Level 2</p> | | |
| <p>Chairperson</p> | <p>Dr. Chong Khai Lin (UUM)</p> | | |
| <p>Google Meet Link</p> | <p>https://meet.google.com/anj-eutj-nsv</p> | | |
| <p>Theme</p> | <p>Disaster Management</p> | | |
| <p>Time</p> | <p>Paper ID</p> | <p>Paper Title</p> | <p>Presenter</p> |
| <p>2.30 – 2.50</p> | <p>20</p> | <p>Assessing the Applicability of Rainfall Index Spatial Interpolation in Predicting Landslide Susceptibility: A Study in Brunei Darussalam</p> | <p>Hamirol Aqim Salleh^{1*}, Ena Kartina Abdul Rahman¹ and <u>Uditha Ratnayake¹</u></p> |
| <p>2.50 – 3.10</p> | <p>32</p> | <p>Seismic Fragility Assessment of Embankment: A Displacement-Based Approach Using Dynamic Finite Element Model Analysis</p> | <p><u>Tanvir Ahmed¹</u>, Mohd Nur Asmawisham Alel^{1*}, Mariyana Aida Ab Kadir¹, Afikah Rahim¹, Muhammad Irfan Shahrin¹</p> |
| <p>3.10 – 3.30</p> | <p>46</p> | <p>Early Warning System for Headwater Risk in Johor Eco-Park: First Development Life Cycle Report</p> | <p>Mohd Rizaludin Mahmud^{1,2}, Mohd. Nadzri Md Reba^{1,2}, Salim Aman³, Abd. Ramlizauyahuddin Mahli³, Nor Wahida Awang⁴</p> |

| ONLINE PARALLEL SESSIONS | Session 5 (Discussion Room 3) Level 2 | | |
|--------------------------|---|--|--|
| Chairperson | Assoc Prof. Ts. Dr. Irnis Azura Zakarya (UniMAP) | | |
| Google Meet Link | https://meet.google.com/ytv-yedb-shf | | |
| Theme | Environmental Engineering/Water Resources Engineering | | |
| Time | Paper ID | Paper Title | Presenter |
| 2.30 – 2.50 | 29 | Removal of Methylene Blue from Polluted Water by Using Eco-Friendly Dragon Fruit Peels and Pineapple Crown Leaves | Amalina Amirah Abu Bakar ¹ , Nurul Athirah Jamil ¹ , Khairul Ammar Muhammad Ali ¹ and Sabariah Badrealam |
| 2.50 – 3.10 | 34 | Mining waste as an alternative aggregates in brick production for carbon capture and storage | <u>Muhammad Amir Aizat Khamis^{1*}</u> , Faradiella Mohd Kusin ^{1,2} and Ikhwannudin Iskandar ² |
| 3.10 – 3.30 | 62 | Characterization and Prediction of Acid Mine Drainage Potential and Metal Solubility: Critical Data for Tailings and Waste Rock Management in High Sulfidation Gold Deposits | M. Eka Onwardana ^{1,3,*} , Abdul Haqi Ibrahim ^{1,2} , Sedarta ³ , Tengku Tibri ³ , Lismaway ³ |
| 3.30 – 3.50 | 13 | Analysis of Land Use Change on Flood Discharge of Bengawan Solo Upstream Sub-basin | Y Sutiyono ¹ and <u>Pradipta Nandi Wardhana</u> |
| 3.50 – 4.10 | 49 | Overview of issues, challenge, and potential ground water extraction for Kelantan people | <u>Narita Noh¹</u> , Juwita Asfar ¹ , Noor Raifana Ab Rahim ¹ , Nur Zaidani Wati Mohd Darwis ¹ |
| 4.10 – 4.30 | 79 | Performance evaluation of compact water treatment system pilot project at Timah Tasoh Water Treatment Plant, Perlis | Nur Rafiqah binti Mohamad Tarji, C. Z. A. Abidin ^{1,2} , A. H, Abdul Haqi ^{1,2} and Fahmi ^{1,2} |

| ONLINE PARALLEL SESSIONS | | Session 6 (Discussion Room 4) Level 2 | |
|--------------------------|---|---|--|
| Chairperson | Dr. Nur Anira Asyikin Hashim (UniMAP) | | |
| Google Meet Link | https://meet.google.com/nbf-uvbd-nmk | | |
| Theme | Geotechnical Engineering | | |
| Time | Paper ID | Paper Title | Presenter |
| 2.30 – 2.50 | 82 | Cyclic liquefaction behaviour of cemented sand: Insight from DEM simulations | Fuguang Zhang |
| 2.50 – 3.10 | 33 | Indicative Microzonation Map of the Contact Zone between the Kenny Hill and Limestone Formation using Active, Passive and Hybrid MASW Methods | M F M Zaki ¹ , Z M Ghazaly ¹ , N F Bawadi ¹ , M M Ahmad ¹ and M M Nujid ² |
| 3.10 – 3.30 | 65 | Comparative Study Between Active and Passive Soil Nailing Using PLAXIS Software | <u>Muhammad Auf Abd. Razak¹</u> and Masyitah Md Nujid ² , * |
| 3.30 – 3.50 | 3* | Impact of Roots on the Shear Strength of Root-Reinforced Soil on Slopes | Ena Kartina Abdul Rahman ^{1*} , Muneerah Jeludin ¹ , <u>Uditha Ratnayake¹</u> , Siti Maisarah Musthapa ² |

**ONLINE
PARALLEL
SESSIONS**

**Session 7
(Smart Cube 0001)
Level 1**

Chairperson

Ir. Dr. Zuhayr Bin Md. Ghazaly (UniMAP)

Google Meet Link

<https://meet.google.com/mcx-kjno-rrv>

Theme

Highway Engineering/Transportation & Traffic Engineering

Time

Paper ID

Paper Title

Presenter

2.30 – 2.50

15

Comparative Assessment of Hot and Warm Mix Asphalt to Develop a Sustainable Pavement: Kg Ayer Merah Mersing Case Study

Siti Nur Naqibah Kamarudin, Mohd Rosli Hainin, Mohd Khairul Idham Mohd Satar, Muhammad Naquiddin Mohd Warid, Haryati Yaacob

2.50 – 3.10

84

Ballastless tracks exposed to extreme heat waves: Challenges and Solutions

Yang Li

3.10 – 3.30

27

Shifting to Sustainable Micromobility: Understanding The Factors Influencing Willingness to Use E-Scooters for Campus-Based Travel of University Students in Yogyakarta, Indonesia

P A Prayitno^{1*} , K Y Fardianto² , S Sidhiq² and M Kennyzyra¹

3.30 – 3.50

64

Laboratory Evaluation of Cutback Bitumen Modified with Cup Lump Rubber

Nasralddin Abdullah Farhan^{1,a} , Abdul Hassan Norhidayah ^{1,b*} , Warid Muhammad Naquiddin Mohd^{1,c} , Ismail Che Ros^{1,d} , Mahmud Mohd Zul Hanif^{1,e}, And Mohsen Zakariya Yahya^{2,f}

3.50 – 4.10

80

High-Speed Railway Bridge Design and Construction Technology in China

Wei Chen

4.10 – 4.30

50

Unconfined Compressive Strength of Subgrade Stabilized with Coconut Shell Ash and Lime in Variation to Curing Time

Rozaini Ramli¹ , Mohammad Al Aiman Abdul Halim² and Syahirah Mansor³

4.30 – 4.50

16

Evaluation of The Physical Barrier on Lane Segregation at Multilane Highway towards Motorcyclist: A Case Study

P A Khan, Muhammad Akram Adnan, Sulaiman N, Mohd Khairul Afzan Mohd Lazi, Siti Nur Naqibah Kamarudin, Nordiana Binti Mashros

| ONLINE PARALLEL SESSIONS | | Session 8 (Smart Cube 0002) Level 1 | |
|--------------------------|---|--|---|
| Chairperson | Ir. Muhd Afiq Hizami Abdullah (UniMAP) | | |
| Google Meet Link | https://meet.google.com/gxd-tggw-izz | | |
| Theme | Structural Engineering | | |
| Time | Paper ID | Paper Title | Presenter |
| 2.30 – 2.50 | 35 | Performance of Steel Fibre Reinforced Lightweight Aggregate Concrete in Fresh and Hardened State | <u>Nor Fazlin Zamri</u> 1*, Roslli Noor Mohamed1 , Dinie Awalluddin1 , Muhammad Najmi Mohamad Ali Mastor1 |
| 2.50 – 3.10 | 1 | Nanosilica Impact on the Compressive Strength Of Lightweight Concrete Containing Porcelanite Stone | <u>Alghairi Nashat</u> 1* , Aziz F. N.A. 2 , Abdul Rashid S. 3 , Bin Mohamed.M. Z. 4 , Amer M. Ibrahim5 |
| 3.10 – 3.30 | 58 | Finite Element Modelling of Carbon Fibre Reinforced Polymer Reinforced Concrete Beam : A Review | <u>Solahuddin Bin Azuwa</u> , and Fadzil Bin Mat Yahaya |
| 3.30 – 3.50 | 72 | Residual Compressive Strength of Locally Corroded Circular CFST Stub Columns: An Experimental Study | <u>Faesal Alatshan</u> *1 2, Siti Aminah Osman*1 , Roszilah A. Hamid1 and Fidelis Mashiri3 |
| 3.50 – 4.10 | 59 | A Review on Experimental Investigation of Fibre Reinforced Polymer Reinforced Concrete Beam | Solahuddin Bin Azuwa, And Fadzil Bin Mat Yahaya |
| 4.10 – 4.30 | 74 | Flexural Strength Behaviour of Two-Hollow Interlocking Concrete Block Inclusion with Recycled Concrete Aggregate | <u>Nur Syahirah Binti Othman</u> , *Noorsuhada Md Nor, Soffian Noor Mat Saliah |

| PHYSICAL PARALLEL SESSIONS | Session 9 (Bilik Mesyuarat IND-E-ZONE) Level 1 | | |
|-------------------------------|--|--|--|
| Chairperson | Dr. Nor Amirah Binti Abu Seman (UniMAP) | | |
| Theme | Structural Engineering/Water Resources Engineering | | |
| Time | Paper ID | Paper Title | Presenter |
| 2.30 – 2.50 | 11 | Optimization Analysis for Bolted Steel I-Beam: Considering Various Sizes of Beam Web with a Focus on Sustainability Design | Nur Liza Rahim ^{1,2,*} , Lee Jun Siang ¹ , Shamshinar Salehuddin ¹ , Norlia Mohamad Ibrahim ^{1,2} , Mohd Zulham Affandi Bin Mohd Zahid ¹ , Liyana Ahmad Sofri ¹ and Rijalul Fikri ³ |
| 2.50 – 3.10 | 67 | Comparison of the Rainfall Missing Data Methods in Enhancing Discharge Estimation | Mahyun A.W ^{1,2*} , Muhammad Azrul Bin Ismail ⁴ , Salwa M.Z.M ^{1,2} , Mohd Fauzi Bin Ramli ³ |
| 3.10 – 3.30 | 73 | Experimental Study on the Hydraulic Performance of Nonwoven Geotextile Efficiency of Sustainable Drainage System | Seman N.A.S. ^{1, 2} , Nur Afifah Mohamad Faudzi ¹ , Salwa M.Z.M. ^{1, 2} , Mahyun A.W. ^{1, 2} , A.N Kamarudzaman ^{1, 2} , Z Hassan ^{1, 2} , N.A. Abdul Rashid ³ |
| 3.30 – 3.50 | 42 | Subgrade Stabilization for Road Foundation in Application for Inundated Area in Perlis, Malaysia | Z M Ghazaly ¹ , N F Bawadi ¹ , M M Ahmad ¹ and M M Nujid ² , M F M Zaki ¹ |
| 3.50 – 4.10 | 78 | Building Information Modeling (BIM) Application towards Environmental Sustainability | N S Abdul Rahim ^{1,3} , S A Syed Zakaria ² , N Ishak ¹ , F A Ibrahim ¹ , N A Harun ¹ |
| 4.10 – 4.30 | 55 | Effects of Coal Fly Ash Replacement as Cement in Concrete Properties | Roshazita Che Amat ^{1,2} , Norlia Mohamad Ibrahim ^{1,2,3} , Nur Liza Rahim ^{1,2} , Syakirah Afiza Mohamed ^{1,3} and Foo Hui Yi ¹ |

| PHYSICAL PARALLEL SESSIONS | | Session 10 (Discussion Room 5) Level 2 | |
|----------------------------|--------------------------------------|--|---|
| Chairperson | Dr. Noor Ainee Binti Zainol (UniMAP) | | |
| Theme | Environmental Engineering | | |
| Time | Paper ID | Paper Title | Presenter |
| 2.30 – 2.50 | 54 | Removal of Diclofenac by Photocatalysis Utilizing Crosslinked Chitosan/Oil-Palm Ash Embedded Titanium Dioxide | K Z Ghee1 , Z Mokhtar1,3, M Hasan2,3 |
| 2.50 – 3.10 | 63 | The Potential of Different Bio-Decomposer for Composting of Food Waste and Rice Husk | I A Zakarya1,2,4 , T N Tengku Izhar1,2 , S Raju1 and M Mohamad3 |
| 3.10 – 3.30 | 68 | Effects of Construction Waste Management on Environmental Sustainability at Construction Sites | Farah Naemah Mohd Saad1,2; Nurain Jalaluddin1 ; TengkuNuraiti Tengku Izhar1 and Rajeb Salem A.Hwidi3 |
| 3.30 – 3.50 | 69 | Batch Adsorption Studies on Copper Removal from an Aqueous Solution using Natural Zeolite: Process Optimization | N A Muhamad Amin, A N Kamarudzaman, N R Rahmat, Z Hassan, N W A Zainon Najib, Amirah A.S.N, and M F Ab Jalil |
| 3.50 – 4.10 | 70 | Removal of colour methylene red orange (MRO) by using commercial granular activated carbon (CGAC) | Salwa M Z M1,2 , Muhammad I A H1 , Amirah A S N1,2, A N Kamarudzaman1,2, Z Hassan1,2, Mahyun A W1,2, N R Rahmat1,2, Najihah A R1,2, Mohammad Tamizi Selimin5 , Muaz Mohd Zaini Makhtar3,4 |
| 4.10 – 4.30 | 71 | Assessment of Traffic Noise Pollution in Arau, Perlis | Satirah Idayu Mat Noor1 , Masitah Hasan1,3*, Zulfakar Mokhtar2,3 Naimah Ibrahim1,3, Nazerry Rosmady Rahmat1,3 |
| 4.30 – 4.50 | 76 | Synthesis, Characterization and Flocculation Performance of Quaternized Cellulose based Flocculant derived from Office Paper Waste for Dye Removal | Noor Ainee Zainol, Nur Alyyssa Razali, Nor Aida binti Yusoff, Mrs. Khairunissa Syairah binti Ahmad Sohaimi, Nor Munirah binti Rohaizad, Siti Nazrah Zailani, Hassimi Abu Hasan |
| 4.50 – 5.10 | 77 | Copper (II) Ion Removal using Charcoal derived Coconut Shell Adsorbent | Nor Wahidatul Azura Zainon Najib1,2,* and Nur Alyaa Mohammad Shokri1 |