

JURNAL KEJURUTERAAN

Jurnal Kejuruteraan 36(6) 2024

e-ISSN : 2289-7526

Structural Performance of Precast Non-Load Bearing Wall Panels with Recycled Concrete Aggregate and Perlite

*Amir Khomeiny Ruslan**, Noorsuhada Md Nor, Nur Amira Wahida Musnazri, Amril Hadri Jamaludin, Soffian Noor Mat Saliah, Mohd Azrizal Fauzi, Ahmad Syauqi Md Hassan & Nor Azian Aziz

2251

Analyzing the Shear Performance of Dapped Wet Vertical Wall-to-Wall Connection (Menganalisis Prestasi Ricih Sambungan Dinding-ke-Dinding Menegak Basah Dapped)

*Amril Hadri Jamaludin**, Noorsuhada Md Nor, Amir Khomeiny Ruslan, Soffian Noor Mat Saliah, Ahmad Syauqi Md Hassan, Mohd Azrizal Fauzi, Shahrum Abdullah & Fatma Sakinah Razali

2259

Exploring The Behaviour of Dapped Wet Wall-To-Wall Connections Under Uniformly Distributed Load (Meneliti Perilaku Sambungan Basah Dinding-ke-Dinding yang Dikenakan BebanTeragih Seragam)

*Amril Hadri Jamaludin, Noorsuhada Md Nor**, Muhhamad Nur Aizuddin Amrin, Amir Khomeiny Ruslan, Ahmad Syauqi Md Hassan, Soffian Noor Mat Saliah, Muhammad Afiq Tambichik, Mohd Azrizal Fauzi & Shahrum Abdullah

2273

Control Strength Lightweight Mortar made by Recycled Concrete Aggregate and Expanded Perlite

*Ahmad Syauqi Md Hasan**, Noorsuhada Md Nor, Amril Hadri Jamaludin, Amir Khomeiny Ruslan, Nur Masyitah Osman, Sherliza Zaini Sooria, Soffian Noor Mat Saliah & Mohd Azrizal Fauzi

2287

- Investigation of Wall Panel Performance Using Recycled Concrete Aggregate and Perlite as Partial Replacement for Natural Fine Aggregate Under Uniformly Distributed Load
(Penyiasatan Prestasi Panel Dinding Menggunakan Agregat Konkrit Kitar Semula dan Perlit sebagai Penggantian Separa bagi Agregat Halus Asli Di Bawah Beban Teragih Seragam) 2301
Amir Khomeiny Ruslan, Noorsuhada Md Nor, M. Z. Ruzailan, Amril Hadri Jamaludin, Soffian Noor Mat Saliah, Mohd Azrizal Fauzi, Ahmad Syauqi Md Hassan & Nor Azian Aziz*
- Improving the Efficiency of Minimum Determinant Computation in Space Time Trellis Code with Optimal Subtree Pruning
(Meningkatkan Kecekapan Pencarian Penentu Terkecil dalam Kod Ruang Masa Trellis melalui Pencantasan Substruktur Optimal) 2313
Ungku Azlin Ungku Chulan, Norbahiah Misran, Mohammad Tariqul Islam & Ungku Azmi Ungku Chulan*
- Kajian Kesedaran dan Amalan Kampus Hijau di Politeknik Malaysia
(A Study on Green Campus Awareness and Practice at Polytechnic Malaysia) 2323
Siti Arinah Sanat & Muhamad Azry Khoiry*
- Penilaian Jejak Air dalam Penanaman Padi di Kawasan Muda Malaysia
(Water Footprint Assessment of Paddy Cultivation in Muda Area Malaysia) 2337
Nursabrina Azhar, Noor Hasyimah Rosman, Muhammad Anwar Alias, Inawati Othman & Hasnida Harun*
- Kesan Sisa Enapcemar Naftalena terhadap Kebolehkeraan dan Kekuatan Mortar dan Konkrit
(Effect of Waste Naphthalene Sludge on Workability and Strength of Mortar and Concrete) 2345
*Syarman Khan Syed Mohamed & Jacob Lim Lok Guan**
- Tinjauan Tingkah Laku Lengkokan Anggota Keluli Terbentuk Sejuk Terbina: Tersambung Bersemuka dan Belakang-ke-Belakang
(An Overview of Buckling Behaviour of Cold-Formed Steel Built-Up Members: Connected Face-to-Face and Back-to-Back) 2355
Muhammad Khairuddin Zulkifli, Shahrizan Baharom, Mohd Reza Azmi, Tee Sing Huat*
- Design and Analysis of Intelligent HES Mental Health Treatment Ship 2373
Tawheed Hasan, Shahrizan Jamaludin & W.B. Wan Nik
- Keberkesanan Pembelajaran Koperatif terhadap Pencapaian Pelajar JKA dalam Kursus Kalkulus Vektor: Analisis Perbandingan Antara Kumpulan Eksperimen dan Kumpulan Kawalan
(The Effectiveness of Cooperative Learning on JKA's Student Achievement in Vector Calculus Courses: A Comparative Analysis Between Experimental and Control Groups) 2383
Izamarlina Asshaari, Noorhelyna Razali, Nuryazmin Ahmat Zainuri, Haliza Othman, Munirah Mohd Fadzil & Zulki li Mohd Nopiah*

- Keluli Tahan Karat SS304L Terubahsuai Permukaan untuk Sensor Elektrokimia Mikrob dalam Pemantauan Semasa Kualiti Air
(Surface Modified SS304L Stainless Steel for Microbial Electrochemical Sensors in Real Time Monitoring of Water Quality) 2389
Farah Syakinah Md Sokor, Ryan Yow Zhong Yeo, Manal Ismail & Swee Su Lim*
- Bedak Padat daripada Penapaian Beras Menggunakan Teknik RSM
(Formulation of Compact Powder from Rice Fermentation using Response Surface Methodology (RSM)) 2403
*Nurfarisha Ahmad Fironus Firdaus, Mohd Hafi zuddin Muhamad, Hassimi Abu Hasan & Noorhisham Tan Kofli**
- Pengoptimuman Pengeluaran Bioetanol Menggunakan Strain Yis Tempatan yang Diasingkan dari Malaysia Melalui Sel Yis Terkurung dalam Bebola Alginat
(Optimization of Bioethanol Production Using Locally Isolated Yeast Strain from Malaysia via Alginate Beads Immobilized Yeast Cell) 2415
*Abbas Ismail, Masniroszaima Md Zain, Siti Rozaimah Sheikh Abdullah & Noorhisham Tan Kofli**
- Penyingkiran Pewarna Hijau Malakit dengan Gabungan Penjerapan dan Penguraian oleh Lakase Diimobilisasi dalam Silika Mikropartikel
(Removal of Malachite Green Dye with Combination of Adsorption and Degradation by Laccase Immobilized in Silica Microparticles) 2425
Azmi Fadziyana Mansora & Cheryl Perngb*
- Kajian Literatur bagi Karakter Fizikal Bandar Warisan dari Perspektif Reka Bentuk Seni Jalanan
(Literature Review on the Physical Character of Heritage Cities from the Perspective of Street Art Design) 2433
Hilmilia Selamat, Nor Haslina Ja'afar, Nor Zalina Harun, Muhammad Fahmi Ikhwan Othman & Elina Mohd Husini*
- Formulasi dan Validasi Instrumen Kesediaan Penggunaan IoT dalam Pengesanan Kebakaran Rumah Kediaman
(Formulation and Validation of an IoT Readiness Instrument in Residential Fire Detection) 2449
Rabeah Md Zin, Adi Irfan Che Ani, Nur 'Amirah Mhd Noh & MA Hassin, Afaq Hyder Chohan*
- Tinjauan Hakisan Pantai Terhadap Nilai Pasaran Harta Tanah Pesisir Pantai:Kajian Awalan
(Survey of Coastal Erosion on the Market Value of Coastal Real Estate: A Preliminary Study) 2465
Masfaliza Mohsen, Norngainy Mohd Tawil, Khairul Nizam Abdul Maulud, Siti Rosemawar Mohd Sahi, Zulkhairy Aff andy Mohd Zaki*

- Kajian terhadap Reka Bentuk Seni Bina Rumah Melayu Tradisional dalam Konteks Keselesaan, Privasi, dan Kelestarian Menurut Ajaran Islam
(Study on Architectural Design of Traditional Malay Houses in the Context of Comfort and Sustainability According to Islamic Teachings) 2477
Mohamad Faiz Fatimah Azlam, Noor Aisyah Mokhtar & Nur Athirah Khalit*
- Keperluan Tipologi Perumahan Transit Untuk Golongan Muda di Bandar Kajian Kes: Perumahan Bandar Mikro DBKL
(The Needs of Typology of Transit Housing for Young People in the City Case Study: DBKL Micro Town Housing) 2503
Mohd Iskandar Abd Malek, Nur Ainna binti Mohamad Sabri, Nor Haslina Jaa'ar, Noorsaidi Mahat & I Nyoman Gede Maha Putra*
- Kriteria Penerapan Elemen Identiti Kebangsaan Pada Bangunan Pencakar Langit Berdasarkan Kajian Kes Menara Berkembar PETRONAS (KLCC)
(Criteria for the Application of National Identity Elements on Skyscrapers Based on a Case Study of the PETRONAS Twin Towers (KLCC)) 2519
Kamarul Afizi Kosman & Leslie Ling Fang Yi*
- Keberkesanan Ruang Pembelajaran Sedia Ada bagi Gelandangan Kanak-Kanak: Kajian Kes Sekolah Bimbingan Jalinan Kasih, Kuala Lumpur
(The Effectiveness of Existing Learning Spaces for Homeless Children: Case Study Jalinan Kasih Guidance School, Kuala Lumpur) 2535
Norazia Mohamad, Nur Hairuzza Husna Abu Sareh, Suhana Johar & Mazlan Mohd Tahir*
- Strategi Reka Bentuk Pasi bagi Keselesaan Dalaman Masjid: Kajian Kes Masjid UKM*
(Passive Design Strategies or Indoor Comfort in Mosque: A Case Study of UKM Mosque) 2549
Asyraf Darwisy Zakaria, Mohd Farid Mohamed, Wardah Fatimah Mohammad Yusoff, Nur Amirah Abd. Samad, Muhammad Zaki AbdManaf & Ammar Amjed Maghrabi*
- Comparative Study of Particle Size and Shape Effects on Powder Packing Densities 2563
Mohd Rhafiq Mazlan, Nashrah Hani Jamadon, Abu Bakar Sulong, Mohammad Azlan Aripin, Fathin Iliana Jamhari & Farazila Yusof*
- A Study on Mechanical Performance of 3D Printed Wood Mimic Materials 2571
Abid Fariduddin Mohd Fauzi, Zaliha Wahid, Nabilah Afifah Mohd Radzuan, Nurhasyimah Abd Aziz, Afifah Zakriyah Juri & Abu Bakar Sulong*
- Comparative Study of Pseudo-Static Finite Element Analysis and Closed-form Solutions of Circular Tunnels Embedded in Soft Soil and Rock 2579
Nursyafikah Hafizi, Siti Khadijah Che Osmi*, Faizzuan Fazully & Maidiana Othman*
- Improving the Efficiency of Thermoelectric Generator using Perturb and Observe MPPT Algorithm 2591
Nurul Izzah Izzati Zaihan, Tengku Norliza Tengku Mohamad & Fakroul Ridzuan Hashim*

- Eff ect of Nano Composite Boron Carbide on the Mechanical and Corrosion Behaviour of Aluminium Matrix Composite 2603
Zaifol Samsu, Norinsan Kamil Othman, Mohd Suzeren Md Jamil, Hafizal Yazid & Mohd Sofian Alias*
- Kajian Reka Bentuk dan Fabrikasi Alat Rehabilitasi Kaki Ergonomik bagi Penderita Bunion Menggunakan Teknologi Pembuatan Aditif 2615
(Design Study and Fabrication of Ergonomic Foot Rehabilitation Tool for Bunion Sufferers Using Additive Manufacturing Technology)
Zaliha Wahid, Abdul Hakim Abdul Halim & Nor Kamaliana Khamis*
- Growth and Nutrient Uptake of Roselle (Hibiscus Sabdariffa) with the Application of Organic and Inorganic Fertilisers 2625
Muhammad Firdaus Suraimi, Muhammad Nazri Abdul Talib, Irma Noorazurah Mohamad, Nur Syahiza Zainuddin, Nurhidayah Hamzah, Marfiah Ab Wahid & Mohd Zuraidi Komari*
- Removal of Heavy Metals from Car Wash Wastewater by Using Bentonite Clay 2633
Dzulaikha Khairuddin, Siti Nurhidayah Khalid & Muhammad Zulhusni Che Razali*
- Hydrodynamic Assessment of Seashell Blocks for Coastal Protection 2643
Nur Kamalia Khairunnisa' Jazrim Shah, Nurul Rabitah Daud & Ganugapenta Sreenivasulu*
- Water Quality Assessment of Tasik Biru Seri Kundang for Potable Drinking Water 2655
Nur Syabila Sidek Ahmad, Norhafezah Kasmuri, Helmy Selim*, Satoto Edar Nayono & Amin Mojiri*
- Characteristic strength of *Gigantochloa scortechinii* (or Buluh Semantan) of Malaysian species 2667
Mohd Khairul Kamarudin, Zakiah Ahmada, Hazrina Mansor, Yazmin Sahol Hamid, Khairul Anuar Shahid & Kribanandan Gurusamy Naidu*
- Enhancing UHPC Beam Performance with GFRP Sheets 2673
Nur Fisni Mohamad Fuad, Adiza Jamadin, Sakhiah Abdul Kudus, Mohamad Farid Misnan & Hasan Ali Abbas*
- Water Quality Assessment in Wet Season of Langat River, Selangor, Malaysia 2683
*Muhammad Amir Danish, Tay Chia Chay, Muhammad Izzat Nor Ma'arof, Girma T. Chala & Nurul Fariha Lokman **
- Physico-Mechanical Properties of GGBS based Geopolymer Mortar for Semi-Rigid Binder: Impact of Crumb Rubber Replacement 2693
Mohd Najmudin Helmi Abu Bakar, Warid Wazien Ahmad Zailani, Nazirah Mohd Apandi, Muhammad Syamim Abdul Mutalif, Anis Mawaddah Abdul Majid, I Nengah Sinarta & Ni Komang Ayu Agustini*
- Compressive Strength of Cement Stabilized Cold In-Place Recycling Pavement Base Course with Ground Coal Bottom Ash and Calcium Chloride 2701
Mohd Izzat Joohari, Ekarizan Shaffie, Anas Ibrahim & Mohd Tarmizi Che Othman*

Enhancing Flood Disaster Management in Klang Valley

*Mohd Amizan bin Mohamed**, *Abdul Qayyum bin Md Zamana*, *Stephen Kajewski* & *Bambang Trigunaryah*

2709