

# JURNAL KEJURUTERAAN

Jilid/Volume 34(6), 2022

ISSN 0128-0198

- Structural Crack Detection System using Internet of Things (IoT) for Structural Health Monitoring (SHM):  
A Review 983  
*Abdul Hadi Abdul Razak, Nur Shuhada Abdullah, Syed A. M. Al Junid, Abdul K. Halim, Mohd F. M. Idros,  
Fairul N. Osman & Faisal Nazamuddin*
- Emerging Trends in Flood and Landslide Research: Single Vs Multi-Hazard Disaster Analysis Using GIS 999  
*Khairul Azmeel Mohd Sopery, Nur Shazwani Muhammad, Jazuri Abdullah, Mohd Syazwan Faisal bin Mohd &  
Safari bin Mat Desa*
- Study of Mechanical and Thermal Properties for Epoxy Grouts Subjected to Seawater Conditioning at Elevated  
Temperature: Tensile Test and Compressive Test 1017  
*Muhammad Afhnan Ahmad Temizi, Meor Iqram Meor Ahmad, Nor Kamaliana Khamis & Muhammad Yunus  
Ahmad Samsudin*
- Effect of Crushed Coconut Shell and Over Burnt Brick on the Mechanical Behaviour of Green Concrete  
as a Partial Replacement of Coarse Aggregate 1207  
*Fahad Ali Shaikh, Naraindas Bheel, Ali Raza Khoso, Asif Raza, Asadullah*
- Factors Affecting the Use of UniRide Bicycle-Sharing in a University Setting 1309  
*Mohammad Ikhwan Suga & Abdul Azeez Kadar Hamsa*
- Numerical Modelling of Shallow Foundation on Multi-Layer Soil with varying Stiffness 1053  
*Muhammad Rehan Hakro, Aneel Kumar, Zaheer Almani & Syed Raghil Ali Shah*
- The Solvability of the 3-D Elastic Wave Equations in Inhomogeneous Media 1063  
*Purwadi A. Darwito, Gunawan Nugroho, Murry Raditya & Tawio*
- Effect of Oxide Flux Particle Size on Weld Bead Morphology of Hastelloy C-22 1077  
*Dixit Patel, Suketu Jani & Darshit Shah*
- Stabilization Expansive Clayey with Nano-Lime to Reduce Environmental Impact 1085  
*Ali Akbar Firoozi, Maryam Naji & Ali Asghar Firoozi*
- Design of Improved Incremental Conductance with Fast Intelligent (FI) Based MPPT Technique for  
Solar PV System 1093  
*Khaleel Abed Abutaima & Ramizi Mohamed*
- Impacts of COVID-19 on Travel Mode Preferences in Klang Valley 1105  
*Nor Aznirahani Mhd Yunin, Ho Jen Sim & Imran Yussof*
- An Effective Software Architecture of Islamic Inheritance System Employing Structured Paradigm 1111  
*A. H. M. Sajedul Hoque, Sadia Tabassum, Abdullah Nazib, Rashed Mustafa & Mohammad Osiur Rahman*
- APenganalisaan Julat Hujan Bulanan Terburuk Di Malaysia Dari Tahun 2017 Hingga 2019 1125  
*Roshilah Ramli & Mandeep Jit Singh*

Pipeline Wall Thickness Assessment of Various Material Grades and Water Depths Using American and Norwegian Standards <i>Mohd Azril Ahamad, Haniff Abdul Rahman &amp; Siti Aminah Osman</i>	1135
Cyber-Attack and Reliability Monitoring of The Synchrophasor Smart Grid Network <i>Atul Kumar Yadav &amp; Vasundhara Mahajan</i>	1149
Surface Roughness in High Speed Turning of Alloy Steel AISI 420 Using Carbide Tools in Dry Cutting Condition <i>Tahrin Othman, Haniff Abdul Rahman, Jaharah A. Ghani &amp; Che Hassan Che Haron</i>	1169
Seismic Resistance Evaluation of Reinforced Concrete (RC) Exterior Beam-Column Joints with and without GFRP under Quasi-static Lateral Cyclic Loading by Adopting Experimental Analysis <i>S.A. Osman, M.Y.M Yatim, Asma Nabila binti Abd. Kader &amp; Mohd Razmi Mohd Amit</i>	1175
Parameter optimization: Effect of Humidity and Fabrication Process on Flexural Strength of Kenaf/Polylactic Acid Biocomposite <i>Meor Syazalee Meor Sha &amp; Rozli Zulkifli</i>	1185
Evaluate Effect of Pulsed Current Gas Tungsten Arc Welding Process Parameter on Intergranular Corrosion of SS304L Weld <i>Sagarkumar I. Shah, Dr. Hemantkumar R. Thakkar, Harmik Patel, Pratik T. Kikani, Dr. G. D. Acharya</i>	1191
Comparison of Physical and Chemical Method for Removing Copper from Non-Metallic Printed Circuit Board Scrap <i>Jafreena Adira Jaafar, Nor Yuliana Yuhana &amp; Nur Hidayatul Nazirah Kamarudin</i>	1199
Physical Properties of Sintered Stainless Steel 17-4PH Micro-Part Processed by Micro-Powder Injection Molding <i>Al Basir, Abu Bakar Sulong, Nashrah Hani Jamadon &amp; Norhamidi Muhamad</i>	1209
Emergency Management in Building Based On 3D BIM and GIS Technology <i>Muhammad Fadhli Mustaqim Bin Mazlan, Khairul Nizam Abdul Maulud &amp; Syed Ahmad Fadhli Syed Abdul Rahman</i>	1215
Effect of Flow Operation Modes on Removal of Acetic Acid from Oil Palm Frond Biomass Hydrolysate using Hollow Fiber Supported Liquid Membrane <i>Norlisa Harruddin, Syed M. Saufi, Vikneswary Rajendaren, Che Ku M. Faizal &amp; Abdul Wahab Mohammad</i>	1229
Enhancement of Aerodynamic Performance of High Speed Train Through Nose Profile Design: A Computational Fluid Dynamics Approach <i>Khurram Hameed Mughal, Salman Abubakar Bugvi, Muhammad Fawad Jamil, Basim Taimoor, Taha Ahmad, Muhammad Irfan Ashrafi, Abdul Ahad &amp; Ali Abdullah Gondal</i>	1237
Characterization of Cenospheres from Malaysian Coal Generated Power Plants: Jimah, Kapar and Manjung <i>Salmia Beddu, Teh Sabariah Binti Abd Manan, Mahyun Binti Mohd Zainoodin, Nur Liyana Mohd Kamal, Affiani Machmudah, Saba Yavari, Daud Mohamad, Zarina Itam, Agusril Syamsir, Fadzli Mohamed Nazri, Yee Hooi Min, Warid Wazien Ahmad Zailani, Md Fauzan Kamal Mohd Yapandi, Zakaria Che Muda, Abdulnoor A.J. Ghanimi, Mohamed Hasnain Isa, Nasir Shafiq<sup>d</sup>, Amirrudin Ahmad &amp; Nadiah Wan Rasdi</i>	1251
Biogas Production Under Different Inoculum to Palm Oil Mill Effluent Ratio <i>Siti Noor Khaleeda Mhd Syahri, Hassimi Abu Hassan, Peer Mohamed Abdul, Siti Rozaimah Sheikh Abdullah &amp; Raja Farzarul Hanim Raja Azmy</i>	1265

- Renewable Energy Scenarios for Sustainable Electricity in Malaysia and the Application of Analytical Hierarchy Process (AHP) for Decision-making 1271  
*Li Yang & Irina Harun*
- Effects of CO<sub>2</sub> Flow Rate in Supercritical Fluids Extraction of *Polygonum minus* Roots 1281  
*Nur Afiqah Mohd Azhari, Masturah Markom, Ismanizan Ismail & Nurina Anuar*
- Oil Palm Biomass Pretreatment and Hydrolysis: A Recent Biotechnological Venture Towards Bio-Based Lactic Acid Production 1287  
*Nuraishah Abd Rahim, Abdullah Amru Indera Luthfi, Peer Mohamed Abdul, Jamaliah Md Jahim & Nurul Adela Bukhari*

