

TABLE OF CONTENTS

<u>Paper No.</u>	<u>Title/Authors</u>	<u>page</u>
CE01	Rice husk as a fuel source in direct carbon fuel cells <i>Chin Choon Ming, Veena A. Doshi, Wong Wai Yin</i>	1
CE02	Investigate the Common Factor in Poisoning Herbs <i>Eric J. Y. Tan, Mohamed Nassir</i>	10
CE03	Desulphurization of Fuel Oil Using Ionic Liquid Analogue <i>Ho Szu Jie, Kaveh Shahbaz, Rashmi G. Walvekar</i>	23
CE04	Investigation on Used Tea Leaves-Derived CO₂ Adsorbent <i>Jagvinder Singh, Rebecca Lim Xiao Yien, Veena A. Doshi</i>	37
CE05	Optimising Yield and Production Cost of Bioactive Compounds using Process Synthesis and Design Approach <i>Joanne W.R. Chan, Chien Hwa Chong, Nur Fariyah Abdul Malek, Denny K. S. Ng, Chun Hong Khek, Adam Figiel, Aneta Wojdyło</i>	46
CE06	Antioxidant potential of Malaysian Medicinal Plant <i>Kalananthni Pushpanathan, Rajesh Rajasekaran</i>	59
CE07	Treatment of Palm oil Refinery effluent using Advanced Oxidation Process <i>Chooi San Lai, Rajesh Rajasekaran, Veena A. Doshi</i>	79
CE08	Characterization and Theoretical Modelling of DES Based Nano-Fluid <i>Mohamed Osama, Rashmi G. Walvekar, Kaveh Shahbaz</i>	93
CE09	Fractionation of Sugar from Hydrolysis of Pretreated Cellulose by Ultrafiltration and Reuse of Enzyme <i>Nguyen Huynh Thao Thy, Rajesh Rajasekaran, Masniroszaima Md Zain</i>	102
CE10	Hibiscus Sabdariffa as a Coagulant for Treating Dye Wastewater <i>Nor Azhreeha Abdul Hamed, Nurhazwani Ismail</i>	114
CE11	Removal of Residual Catalyst from Palm Oil-Based Biodiesel Using New Ionic Liquids Analogous <i>Phing Hui Min, Kaveh Shahbaz, Rashmi Walveka</i>	125
CE12	An Investigation on the relationship between activated carbon micropore and CO₂ adsorption <i>Raveena Menon, Rebecca Lim Xiao Yien, Veena A. Doshi</i>	141
CE13	Performance of POME blended nano-lubricant <i>Sharmini Jegachandra, Rebecca Lim Xiao Yien, Rashmi Walvekar</i>	154
CE14	Wastewater treatment by immobilized algae in membrane bioreactor <i>Siow Y. Ying, Masniroszaima M. Zain, Nurhazwani Ismail</i>	167
CE15	Case study: Analysis of water quality in Sungai Batu Ferringhi <i>Tsu Weng Huang, Rajesh Rajasekaran</i>	175
EE01	Electromagnetic Analysis of a Novel Double Rotor Interior Permanent Magnet Motor <i>Lam Pin Wen, Aravind CV, Reynold Hariyadi</i>	187
EE02	Improvement in the Performance of the Double Rotor Switched Reluctance Machine Using Magnetic Circuit Design <i>Reynold Hariyadi, Aravind, C.V, Lam Pin Wen</i>	197

<u>Paper No.</u>	<u>Title/Authors</u>	<u>page</u>
ME01	Development of a Design Optimization Methodology for a Home Appliance Product Part Design <i>Andrew Yee Chin Wei, Mohammad Hosseini Fouladi, Yap Kim Haw</i>	207
ME02	Optimization of Temperature and Velocity on Heat Transfer Enhancement of Non-Aqueous Alumina Nanofluid <i>J.S. Chan, A. Ghadimi, H.S.C. Metselaar</i>	226
ME03	Personalized Learning in the Engineering Curriculum: Web-based Approach <i>Erfan Pakroo, Douglas Tong Kum Tien, Mohammad Hosseini Fouladi</i>	243
ME04	Effectiveness of Contrast Therapy on Muscle Recovery <i>Eu Zi Sheng, Mohamed Nassir, Douglas Tong Kum Tien</i>	259
ME05	Dynamic Modelling of solar thermal air conditioning <i>Gabriel Ngui, Chin Hong Lim</i>	275
ME06	Effect of Aircraft Wing Geometry and Shape on the Lift at Low Subsonic Speeds <i>Muhammad Azdi Ikhwan bin Zakaria, Abdulkareem Sh. Mahdi Al-Obaidi</i>	286
ME07	Thrust Generation Using Synthetic Jet <i>Muhammad Hazim bin Anuar, Mushtak Al-Atabi, Ooi Ferng Lin</i>	303
ME08	Effect of Evaporator Heater Power Input and Condenser Water Flow Rate on the Performance of a Refrigerator – Developing Empirical Models <i>Ali Naif, Abdulkareem Shafiq Mahdi Al-Obaidi</i>	314
ME09	An Engineering Approach to Reduce Noise Level in a Public Area <i>Neeraj Annand Raj, Mohammad Hosseini Fouladi</i>	328
ME10	Development of an Integrated Approach to Tube Assembly FE Model Correlation <i>Z. X. Pang, M. Hosseini Fouladi, K.H. Yap</i>	348
ME11	Evaluation of maximum temperature of Rayleigh Plesseet Noltingk Neppiras and Poritsky (RPNNP) equation <i>Philip Mah Koon Yue, Azadeh Ghadimi</i>	360
ME12	Gaphene Oxide Nanofluids Characterization & Electrical Conductivity <i>Saktiyaramana Karpayah, Azadeh Ghadimi, Mohammad Taghi Hajibeigy</i>	369
ME13	High AOA Aerodynamics of NACA0012 Airfoil at Low Subsonic Speeds – Numerical and experimental <i>Shahrooz Eftekhari, Abdulkareem Sh. Mahdi Al-Obaidi</i>	381
ME14	Sintering Study on Commercial Hydroxyapatite <i>Thomas Thaddeaus Jacob, Jeffrey Chin</i>	395
ME15	Two Stage Sintering of Hydroxyapatite-Forsterite Nanocomposite with Improved Mechanical Properties Mechanical Simulation and Review of a Selected Electrical Car <i>N. T. Saidy, Y. Sabzehmeidani, M. T. Hajibeigy</i>	412