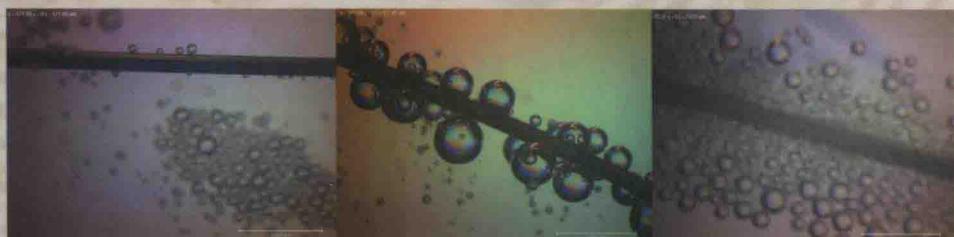


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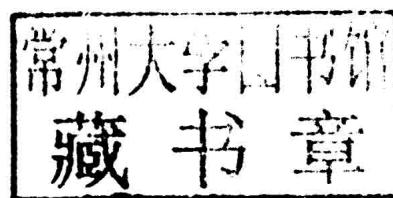
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Edited by

**Abdul Hadi, Fazlena Hamzah
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Material Science Technology and Global Sustainability

Edited by
Abdul Hadi
Fazlena Hamzah
Miradatul Najwa Mohd Rodhi

PREFACE

This volume contains the papers accepted to the International Conference on Global Sustainability and Chemical Engineering (ICGSCE), 2014. ICGSCE is a three day International Conference organized by Faculty of Chemical Engineering, University Technology MARA, Malaysia during 20th-22nd August 2014 at Mid Valley City Kuala Lumpur. It provides a platform for scientists and academicians from University and Industry all over the world to promote, share and discuss various new issues and developments in different areas of Chemical Engineering aspects in terms of global sustainability. The goal of this conference is to explore the diversity of researches ranging from fundamental to applied researches being undertaken in the identified fields which have the potential to impact on global sustainability. New ideas can be developed as a key outcome of the conference for meeting the challenges encountered in the individual process for meeting the global sustainability.

We received 300 manuscripts to be presented during the conference and of those submissions, eventually 138 papers were selected and accepted to be published under Trans Tech Publications after a thorough two-phase reviewing process with External Reviewers and Editorial Board depending on the subject matter of the paper. After the peer-review process, the submitted papers were selected on the basis of originality, significance, and clarity for the purpose of the conference. The main conference themes and tracks were: (1) Advanced Materials Research; (2) Bio and Chemical Materials, Technologies and Applications; (3) Oil and Gas Research; (4) Modelling, Simulation and Control; (5) Environmental and Green Technologies. All accepted papers received either an oral or a poster presentation at the conference. For this conference, about 250 papers were selected to be presented during parallel session. While as, 50 papers were presented in the form of a poster. These proceedings are evidence of the resulting high-quality and exciting program.

Many people worked together in organizing ICGSCE 2014 and ensuring its success. ICGSCE 2014 would not have been possible without the strong support from numerous organizations and individuals. The efforts and support provided by all the authors, reviewers, sponsors, invited speakers, members of the advisory board and organizing team comprising students and faculty volunteers and all others who have contributed to the successful organization of this conference, are gratefully acknowledged. Many more people spent many hours on ICGSCE 2014 – many more than we could possibly acknowledge in this short preface. But we hope that they found their involvement just as interesting and fun as we did.

With our warmest regards

Dr Abdul Hadi
Miradatul Najwa Mohd Rodhi
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Table of Contents

| | |
|-----------|------|
| Preface | v |
| Committee | vi |
| Sponsors | viii |

Chapter I: Advanced Materials Research

| | |
|--|----|
| A Potential Hybrid TiO₂ in Photocatalytic Seawater Desalination R. Isha and N.H. Abd Majid | 3 |
| A Review of Advance Nanotechnology against Pavement Deterioration C.M. Nurulain, P.J. Ramadhansyah and A.H. Norhidayah | 9 |
| Characterization and Mechanical Properties of Epoxidized Palm Oil/Epoxy Resin Blend Z.S. Alsagayar, A.R. Rahmat, A. Arsal, A. Fakhari and A. Khalili..... | 13 |
| Comparison of Starch Fiber Filled-Polyvinyl Alcohol and Native Starch Filled-Polyvinyl Alcohol under Tensile Analysis M.S. Shahrul Nizam, N. Mohd, Z. Omar and N. Saadon..... | 19 |
| Curing and Mechanical Properties of Bio-Based Hybrid Thermoset Resins from Unsaturated Polyester and Acrylated Epoxidized Palm Oil A. Fakhari, A.R. Rahmat, M.U. Wahid, A. Khalili and Z.S. Alsagayar | 23 |
| Degree of Hardening of Epoxy-Modified Mortars without Hardener in Tropical Climate Curing Regime N.F. Ariffin, M.W. Hussin, A.R. Mohd Sam, M.A. Rafique Bhutta, N.H. Abdul Shukor Lim and N.H. Abd Khalid | 28 |
| Development of Hydrophobic Microporous Isotactic Polypropylene Membrane for Membrane Contactor Application W.J. Wan Zulaisa Amira and A.R. Sunarti | 36 |
| Effect of Blend Compositions on Mechanical Properties of Irradiated Titanium Dioxide (TiO₂)/Polyvinyl Chloride (PVC)/Epoxidized Natural Rubber (ENR) Nanocomposites N.A. Ramlee, S.S. Mohammad Hanapiyah, F.N. Suhaimi, C.T. Ratnam and S. Appadu | 43 |
| Fabrication of Organic and Inorganic-Based Nanowires: An Overview M.I. Mohamed Jaafar and M.A. Hashim..... | 50 |
| Investigation of Heat Treated Electrodeposited CoNiFe on Microstructure and Hardness N.A. Resali, K.M. Hyie, M.N. Berhan and C.M. Mardziah..... | 56 |
| Effect of Ceramic Powder on Mortar Concrete M. Samadi, M. Warid Hussin, A.R. Mohd Sam and H.S. Lim | 62 |
| Kevlar Reinforcement in Treated Kenaf Composites: Tensile and Impact Properties N.H. Bakar, K.M. Hyie, A. Kalam, Z. Salleh, N. Inang and F. Dualis | 68 |
| Low Velocity Impact of Aluminium Foam - Glass Fibre Reinforced Plastic Sandwich Panels M.F. Ismail, A. Jumahat, N. Ahmad and M.H. Ismail | 74 |
| Mechanical Properties of Non-Cement Polymer Grout S.M. Nuria, A.B.A. Rahman, N.A.K. Hafizah, Y. Ahmad, A. Adnan and M.H. Osman | 80 |
| Physical Properties of Porous Concrete Paving Blocks with Different Sizes of Coarse Aggregate A.H. Nur Hidayah, M.N. Hasanan and P.J. Ramadhansyah | 86 |

| | |
|---|-----|
| Polymer-Starch Blend Biodegradable Plastics: An Overview | 93 |
| A.M. Mohd Amin, S. Mohd Sauid and K.H. Ku Hamid..... | |
| Preliminary Study of HDPE/Kenaf/MMT Nano-Hybrid Biocomposite: Performance of HDPE/Kenaf Biocomposite | 99 |
| M.A. bin Ya'acob, K.H. Ku Hamid, S. Akhbar and M.F. Abdul Rahman | |
| Processing of Injection Moulded of Synthesized HAp by Single Step Wick-Debinding and Sintering | 105 |
| N.H.M. Ali, I. Subuki and M.H. Ismail..... | |
| Processing of Porous Copper by Powder Metallurgy Route with Different Types of Space Holder Materials (SHMs) | 110 |
| R. Siti Athirah, M. Mazlan, N. Amalina, J. Aidah and M.H. Ismail | |
| Properties of Ni-Rich NiTi Alloys Produced by Powder Metallurgy Route | 116 |
| R. Razali, Z. Abdullah, I. Subuki, M.H. Ismail and N. Muhamad | |
| Tensile Properties and Degradability of Polyvinyl Alcohol and Starch Succinate Blend | 122 |
| M.M.F. bin Mohamed and R. Mohamed..... | |
| The Effect of Natural Rubber and Plasticizer Addition on the Mechanical Properties of <i>Tacca leontopetaloides</i> Starch Based Polymer | 127 |
| N.F. Abdul Ghafar, N.S. Ab Aziz, N.S. Mohd Makhtar and M.N. Muhd Rodhi..... | |
| Utilization of Nano Silica as Cement Paste in Mortar and Porous Concrete Pavement | 135 |
| M.Y. Mohd Ibrahim, P.J. Ramadhansyah, H. Mohd Rosli, M.H. Wan Ibrahim and M.N. Fadzli..... | |
| Mesoporous SnO₂ by Nanocasting Route Using Various Silica Templates for Gas Sensing Application | 140 |
| J. Juhari, M.Z. Abu Bakar and A.Z. Abdullah | |
| Nanoemulsion: Formation, Characterization, Properties and Applications - A Review | 147 |
| I. Nor Bainun, A. Nur Hashimah and S.S.A. Syed-Hassan..... | |
| Cementitious Materials Usage in Self-Compacting Concrete: A Review | 153 |
| A.F. Hamzah, M.H. Wan Ibrahim, N. Jamaluddin, R.P. Jaya and N.E. Zainal Abidin | |
| The Effects of Particle Size and Viscosity on Settling Behaviour and Rheological Performance of Isopropyl Laurate Drilling Fluid | 161 |
| S. Abdullah, A. Azizi, E. Yahya, A. Sauki, G. Nurul Aimi, S.K. Jamaludin and A.R. Mohamad Daud | |
| Stabilised Ceramic Dust as Potential Sustainable Construction Components | 168 |
| M.R. Raffe, M.N. Rahmat and N. Ismail | |

Chapter II: Bio and Chemical Engineering Materials, Technologies and Applications

| | |
|--|-----|
| <i>Aspergillus niger</i> ATCC 16404 Producing Pectinase Couple to Polysulfone/Pluronic Membrane Ultrafiltration for Momordica Charantia Juice Clarification | 177 |
| N.A. Mohd Rais, N. Idris, S.F. Abdul Manaf, H. Habibun, R. Raslan, N.F. Mat Sahari, M.Z. Shahruddin and F. Hamzah | |
| <i>Epipremnum pinnatum</i> Activity on Chick Pancreatic Lipase | 182 |
| F. Hamzah, F.H. binti Mohd Yusop, S.F. Abdul Manaf and A. Yahya | |
| A Conceptual Reactor Design Based on Combination of Pressure Leaching - Electrochemical Deposition Techniques for Study of Gold Recovery from e-Waste | 187 |
| A.I. Nazri, N.I. Basir and M.N. Murat | |
| A Review: Pharmacological Properties of <i>Aquilaria</i> spp. | 193 |
| V.A. Jok, N. Che Radzi and K.H. Ku Hamid..... | |

| | |
|--|-----|
| A Study on Absorption Coefficient of Sustainable Acoustic Panels from Rice Husks and Sugarcane Bagasse | 198 |
| F. Zuhaira Ismail, M.N. Rahmat and N.M. Ishak | |
| Rubber Tree Clone Breed Identification Based on Latex Spectrum Properties | 204 |
| N.E. Abdullah, H. Hashim, N.K. Madzhi, M.S. Sulaiman, F.A. Ismail and K.M. Hanafiah..... | |
| An Overview on Degree of Dispersion: Conformational Molecular Structure-Interaction Force Relationship of Adsorbed Additive | 210 |
| H. Husin, Z. Hassan, N. Mohd Taib, K.H. Ku Hamid and S. Mat Yusuf | |
| Analysis of Antioxidant Activity and Total Phenolic Content in <i>Garcinia mangostana</i> Using Response Surface Methodology | 217 |
| U.K. Ibrahim, A.S. Mahamad Husin and R. Mohd Salleh..... | |
| Biosorption of Nickel by <i>Elaeis guineensis</i> Fruit Fiber | 223 |
| S.N.I. Nor-Azemi, F.A. Fuadi and S.S.A. Syed-Hassan | |
| Characterization and Identification of Isolated Microorganism from Agricultural Soil for Degradation of Cellulose Based Waste | 230 |
| N.S.A. Abdullah, S.F. Abdul Manaf, N.S. Ab Aziz, F. Hamzah and N. Idris | |
| Characterization of Automotive Paint Sludge (APS) for Chemical/Energy Recovery via Microwave Assisted Pyrolysis | 236 |
| Z. Januri, N.A. Rahman, S.S. Idris, S. Matali and S.F. Abdul Manaf..... | |
| Chemical Activation of Durian Shell Activated Carbon: Effects of Activation Agents | 242 |
| W.N. Wan Mahmood, R. Samsuddin and R.R. Raja Deris..... | |
| Comparative Study on Adsorption of Pb(II) Ions by Alginate Beads and Mangrove-Alginate Composite Beads | 248 |
| S.N.A. Abas, M.H.S. Ismail, S.I. Siajam and M.L. Kamal | |
| Comparison on Oil Yield of <i>Phoenix dactylifera</i> Seed Oil Extraction by Supercritical Carbon Dioxide and Solvent Extraction Method at 50°C | 255 |
| N.A. Aris, I. Norhuda and I.S. Adeib..... | |
| Determination of Chemical Species in MDEA – Carbon Dioxide – Water System by Raman Spectroscopy | 261 |
| H. Suleman, M.Z. Shahid, A.S. Maulud, Z. Man and M.A.B. Khalil..... | |
| Determination of Compounds inside Inoculated <i>Aquilaria malaccensis</i> Leaves by Soxhlet Extraction | 267 |
| K.H. Ku Hamid, N.S. Mustafar, P.M. Yusof, S.S. Mohammad Shawal, M. Musa and M.N. Muhd Rodhi | |
| Effect of Carbon and Nitrogen Ratio, Mineral Solution & Inoculum Size in the Production of Xylanase Using Oil Palm Leaf | 273 |
| I. Norazlina, K.H. Ku Halim, S.F. Abd Manaf and M.A. Abu Bakar | |
| Effect of Drying Temperature and Time on Antioxidant and Total Phenolic Content in <i>Garcinia mangostana</i> Pericarp | 279 |
| U.K. Ibrahim, E.A. Austin and R. Mohd Salleh | |
| Effect of Fluid Invasion to Formation Resistivity | 285 |
| W.Z. Wan Bakar, A. Sauki, M.H. Abd Halim and N. Mohd Taib..... | |
| Effect of Maltodextrin in Production of Spray Dried Kaffir Lime | 296 |
| N.M.B. Ibrahim, N.B.A. Rahman and S.B.A. Hashib..... | |
| Effect of Voltage towards Bubble Formation on Stainless Steel in Aqueous Suspension during Electrophoretic Deposition | 300 |
| R.A. Abdol Aziz, N.F. Abu Bakar, E.R. Mohd Shaufi and N.H.A. Samsuri..... | |
| Enzymatic Hydrolysis of Lignocellulosic Oil Palm Empty Fruit Bunch (EFB) | 305 |
| Q.A. Pahlawi, N.F. Ghazali, K. Mohd Hanim and N.A. Nik Mahmood..... | |

| | |
|---|-----|
| Evaluation of CO₂ Sequestration by Microalgae Culture in Palm Oil Mill Effluent (POME) Medium | 311 |
| A.D. Ahmad, J. Salihon and D.G. Tao..... | |
| A Review: Extraction of Platinum Spent Catalyst Using Palm Oil Leaf as Reducing Agent | 317 |
| M.R.T. Khairol Anwar, N.A. Zamanhuri, J. Jai and N.M. Yusof..... | |
| Fatty Acid Methyl Ester (FAME) Production from Waste Cooking Oil | 322 |
| N. Saadon, N.A. Mohd Yusof, N. Razali, M. Mat Yashim and A.K. Roslan | |
| Fruit-Milk Powder: A Review of Spray Drying Technology | 328 |
| M.U.H. Suzihaque, A. Norafiqah and A.R. Norekanadirah..... | |
| Isobutanol Production and Alcohol Tolerance by Yeast Wild Strain | 334 |
| A.R. Nor and A.R. Roshanida..... | |
| Kinetic Parameters of Biomass Pyrolysis – Comparison between Thermally Thick and Fine Particles of Biomass | 340 |
| M.I.B. Saringat, A.M. Som, N. Talib and M. Asadullah | |
| Microencapsulation of Essential Oils Application in Textile: A Review | 346 |
| F.R. Abdul Aziz, J. Jai, R. Raslan and S. Istikamah | |
| Microwave Drying Characteristics and Antidiabetic Properties of <i>Aquilaria subintegra</i> and <i>Aquilaria malaccensis</i> Leaves | 352 |
| S. Yunus, N.A. Md Zaki and K.H. Ku Hamid | |
| Monitoring of Chemical Speciation of DEA – CO₂ – Water System by Raman Spectroscopy | 358 |
| M.Z. Shahid, H. Suleman, A.S. Maulud, M.A.B. Khalil and Z. Man | |
| Nutrient Removal of POME Using POME Isolated Microalgae Strain, <i>Characium</i> sp. | 364 |
| T.B. Tamil Selvam, R. Renganathan and M.S. Takriff..... | |
| Optimization of DMC Transesterification Based Biodiesel Production | 370 |
| N.A. Mohd Ali and N. Aziz | |
| Palladium Extraction Using Emulsion Liquid Membrane Process – Stability Study | 376 |
| N.F. Mohamed Noah, N. Othman, S.K. Bachok and N.A. Abdullah..... | |
| Potential Antipyretic Agents from Plants: An Overview | 382 |
| S.K.N. Afiffudden, H. Alwi and K.H. Ku Hamid | |
| Predicting Blast Overpressure Caused by Vapour Cloud Explosion at External Vicinity of Chemical Processing Plant | 388 |
| A.M. Ahmad, Z. Abdul Rashid, A.B. Alias, M.S. Bani, R. Hashim and N.S. Yusoff..... | |
| Rapid Expansion of Supercritical Fluids for Particle Formation from Pharmaceutical Compounds: A Review | 398 |
| N.A. Zainuddin, I. Norhuda, I.S. Adeib and S.H. Sarijo..... | |
| Recovery of Residual Crude Palm Oil (RCPO) from Oil Palm Decanter Cake (OPDC) Using D-Limonene | 405 |
| N. Sahad, A. Md Som, A.S. Baharuddin, M.N. Mokhtar, Z. Busu and A. Sulaiman | |
| Flow Injection Analysis Nitrite Sensor Based on Reduced Graphene Oxide Modified Electrode | 411 |
| N. Zainudin, M.M. Yusoff and K.F. Chong..... | |
| Screening of Carbamazepine-Ibuprofen Co-Crystal Formation Using Non-Stoichiometric and Stoichiometric Methods | 417 |
| S. Abd Rahim, N.A. Rosli and S.S. Mohd Khalid | |
| Sea Mango Activated Carbon Preparation and Characterization for Dye Removal | 422 |
| S. Sumathi, W.L. Chong, M.J.K. Bashir, C.A. Ng and K. Ramesh | |
| Solid Oil Particles Formation of Ginger Rhizome Using Rapid Expansion Supercritical Carbon Dioxide Solution (RESS) as an Environmentally Friendly Method | 428 |
| N.A. Zainuddin, I. Norhuda, I.S. Adeib and S.H. Sarijo..... | |

| | |
|--|-----|
| Solubility of Carbamazepine-Succinic Co-Crystal in Ethanolic Solvent System | 434 |
| N.A. Ramle, S. Abd Rahim, O. El-Hadad and N. Anuar | |
| Study of CO₂ Solubility in Brine under Different Temperatures and Pressures | 440 |
| H. Hamidi, N.F.A. Mohd Atib, A. Azdarpour and E. Mohammadian | |
| Synthesis and Characterization of Cassava Starch Nanocrystals by Hydrolysis Method | 446 |
| N.S. Md Shahrodin, A.R. Rahmat and A. Arsal..... | |
| Synthesis of Cocoa Butter Equivalent from Formulated Hard Palm Oil Mid-Fraction and Canola Oil Blends | 453 |
| R. Mutia, D.N. Abang Zaidel and I.I. Muhamad | |
| Tar Elimination from Producer Gas by Using <i>In Situ</i> Catalytic Reforming of Tar | 459 |
| N.H. Malek, M. Asadullah and A. Sauki | |
| The Effects of Soaking on Rice Granules for <i>Bedak sejuk</i> Production | 465 |
| M.A.A. Dzulfakar and N. Tan Kofli | |
| Total Phenolic Content and Antioxidant Activity of Local Fruit Wastes in Malaysia | 471 |
| U.K. Ibrahim, M.I.S. Yusof, K.A.A. Zamil, N. Kamarrudin, S.N.S. Maqsood-Ul-Haque and S.R. Ab Rashid..... | |
| Ultrasound-Assisted Extraction of Natural Dye from Exocarp and Mesocarp of <i>Cocos nucifera</i> | 477 |
| F.Z. Asma, M.H. Rodiah, M.Y. Aziah, M.N. Norakma and I. Nurhafizah..... | |
| Removal of Carbon Dioxide by Emulsion Liquid Membrane Containing Blended Amine | 481 |
| S.B. Mohd Najib and K.S.N. Kamaruddin..... | |
| Reusability of Fenton Sludge to Reduce COD and Color on Palm Oil Mill Secondary Effluent (POMSE) | 486 |
| N.S. Ahmad Shahrifun, N.N. Ab'lah, H. Hussain, A. Aris, Q. Omar and N. Ahmad..... | |
| Flooding with Biopolymer from Microbes Derived from Mushroom and Cabbage to Enhance Sweep Efficiency in Enhanced Oil Recovery | 492 |
| E. Yahya, N.H. Alias, T.A. Tengku Mohd, G. Nurul Aimi and T.S. binti Taju Ariffin | |
| Morphology of L-Alanine Crystal, Associated with its Interaction with Glycine Additive: A Molecular Modelling and Experimental Study | 498 |
| M.F. Othman, N. Anuar and N.F. Abu Bakar | |
| Racemic Ibuprofen Morphology: Molecular Modelling and Experimental | 504 |
| Z. Lukman, N. Anuar and N. Abdul Rahman | |
| Influence of <i>Gigantochloa ligulata</i> Nutrient on <i>Lactobacillus delbrueckii</i> for Textile Wastewater Decolorization | 511 |
| R. Nur Hazirah, C.R. Nurhaslina, M. Mirza Azri and A. Noor Syafiqah | |
| Production of Biodiesel from Cooking Oil Using CaO Catalyst | 518 |
| M. Mohamad, N. Ngadi and N.S. Lani | |
| Chemical Compound Evaluation of Polylactic Acid from L(+)-Lactic Acid Monomer Obtained through Cassava Fermentation by <i>Rhizopus oryzae</i> | 523 |
| W.N.A. Wan Daud, A.A. Ishak, S. Abd Hashib and M.N. Muhd Rodhi | |
| Degradation of Phenol from Glove Factory's Effluent by Zn/TiO₂ Photocatalyst | 528 |
| M.S. So'aib and N. Mazlan | |
| Effect of Calcinations Temperature on Physical Properties of Zeolite ZSM-5 Produced from Natural Granite | 534 |
| K.H. Ku Hamid, K.N. Ismail, A. Jamaludin, M.A. Zainudin, M.S. Md Nasruddin and M. Musa | |
| Effect of Plasticizers on Tapioca Starch-Based Biofilms via Blown Film Extrusion Process | 539 |
| R.R. Ali, W.A.W.A. Rahman, H. Hasbullah, R.M. Kasmani, N. Ibrahim, A.N. Sadikin and U.A. Asli | |

| | |
|---|-----|
| Electrical Properties and Morphology of Electrodeposited Cobalt-Nickel-Iron on Flexible Printed Circuits | 545 |
| A. Ahmad, K.M. Hyie, N.R. Nik Roselina, F. Munir, C.S. Li and S. Saidin..... | |
| Electrochemical Properties of Electrodeposited MnO₂ Nanoparticles | 550 |
| G.A.M. Ali, M.M. Yusoff and K.F. Chong..... | |
| Electrodeposition as an Alternative Route to Prepare Nanostructured Lead-Free Solder Alloy: A Short Review | 554 |
| S.M. Yusof, M.A. Hashim, J. Jai and A. Hadi | |
| Green Synthesis of Silver Nanoparticles Using Elaeis Guineensis from Palm Leaves: Influence of pH in Reaction Kinetic | 560 |
| N.A. Ramli, J. Jai, N. Mohd Yusof and N.A. Zamanhuri | |
| Role of Temperature and pH on the Dye Degradation Using Magnetic Nanoparticles Augmented Polymeric Microcapsule | 566 |
| M.S. Osman, L.P. Kong, N.A. Zamanhuri and J.K. Lim | |
| Morphological Analysis of Photodegradable Polyethylene Films for Agricultural Use | 571 |
| N.A. Mohd Yusak, R. Mohamed, M. Mohamed and S.S.A. Talib | |
| Properties of Mortar Containing High Volume Palm Oil Biomass Waste | 578 |
| N.H. Abdul Shukor Lim, M. Warid Hussin, A.R. Mohd Sam, M.A. Rafique Bhutta, N.F. Ariffin, N.H. Abd Khalid and M. Samadi | |
| Self-Assembly of Peptide Amphiphiles: Molecularly Engineered Bionanomaterials | 586 |
| H. Shamsudeen and H.L. Tan | |
| Study on Best Parameters and pH Solution on Water Absorbency of Rice Husk Superabsorbent Polymer Composite | 594 |
| N.A. Reduan and S. Ghazali | |
| Synthesis of Hydroxyapatite via Sol-Gel Dip-Coating Method on Ceramic Support | 599 |
| N. Ibrahim, R. Zaiton and M.A. Askalani | |
| Synthesis of Silver-Copper Nanoparticles via Polyol Method: Effect of Reaction Time and Temperature | 605 |
| N. Hikmah, N. Faeqah and A. Hadi | |
| Thermal Property of Eutectic Molten Salts by Using Thermogravimetric Analyzer (TGA) | 611 |
| F. Subari, S. Asmah Jefire, A. Zawawi, H. Faiz Maksom and M. Afizan Aziz..... | |

Chapter III: Oil and Gas Research

| | |
|---|-----|
| Drilling Fluid Design for Shale Gas Drilling | 617 |
| M.S. Zazarli Shah, A. Sauki, W.Z. Wan Bakar, N.A. Ghazali and A. Azizi | |
| Effect of Preheating the Gasifying Inlet Air on the Hydrogen Output in Oil Palm Fronds Gasification | 625 |
| F.M. Guangul, S.A. Sulaiman and A. Ramli | |
| Hydrogen Storage in Modified Kenaf | 631 |
| N.J. Farahhin and K.S.N. Kamarudin | |
| Interfacial Tension Dependence on Nanoparticle Surface Modification for Stabilization of CO₂ Foam in EOR: An Overview | 638 |
| T.A.T. Mohd, A. Harun, G. Nurul Aimi, N. Alias and E. Yahya | |
| Wettability Modifier for Enhanced Oil Recovery in Carbonate Reservoir: An Overview | 643 |
| N. Azreen Jilani, N. Hashimah Alias, T. Amran Tengku Mohd, N. Aimi Ghazali and E. Yahya | |

| | | |
|---|---|-----|
| The Characteristic Study of Oil Palm Kernel Expeller as Lost Circulation Material in Water Based Drilling Mud (WBM) | N.A. Ghazali, M.Z.M. Jaih, T.A.T. Mohd, N.H. Alias, A. Azizi and E. Yahya | 648 |
| Simulation of Oxygen-Steam Gasification for Hydrogen Production from Date Pits | A.A. Al-Ghamdi and A. Inayat | 654 |
| Effect of Solvent Evaporation Time on CO₂/CH₄ Gas Performance for Poly(Lactic) Acid Membranes | W.N.R. Jami'an, H. Hasbullah, F. Mohamed, A.R.A. Rani, M.F.K. Saman, N. Yusof and N. Ibrahim | 660 |
| Energy Efficient Distillation Columns Design for Retrofit NGLs Fractionation Process | M.F. Mustafa, N.A.F. Abdul Samad, K.A. Ibrahim, N. Ibrahim and M.K.A. Hamid | 667 |
| Engine Performance Investigations of Palm Oil, Jatropha Oil and Waste Cooking Oil as Alternative Fuel | S. Yunus, N. Yusoff, M.F.F.A. Khaidzir, S.K. Alias, F.R. Wong, S.A. Latip and A.A. Rashid | 674 |
| Microencapsulation Methods of Volatile Essential Oils - A Review | M. Abd Manaf, J. Jai, R. Raslan, I. Subuki and A.N. Mustapa..... | 679 |
| Online Gas Chromatography of Hydrogen and Methane Production from Palm Oil Mill Effluent (POME) Using High Frequency Ultrasonic Atomization: A Preliminary Study | S.R. Abd Rahman, K.H. Ku Hamid, R. Alias and N. Abd Wahid | 684 |
| Polymer Gelled Technology to Improve Sweep Efficiency in Enhanced Oil Recovery: A Literature Review | N. Achim, N. Hashimah Alias, N. Aimi Ghazali, M. Najwa Muhd Rodhi, T. Amran Tengku Mohd and E. Yahya..... | 690 |

Chapter IV: Modelling, Simulation and Control

| | | |
|---|--|-----|
| A Review on Empirical Modelling of CO₂ Solubility in Absorption Process | Z. Abdullah and S.N. Abu Bakar | 697 |
| Application of Taguchi Optimization Method in Improving the Selectivity of Dihydroxystearic Acid | S.K. Jamaludin, K.H. Ku Hamid, H. Abu Hassan, A. Md Som, Z. Maurad and A. Azizi..... | 703 |
| Aspen Plus Simulation of Ultrasound Assisted Distillation for Separating Azeotropic Mixture | T. Mahdi, A. Ahmad, A. Ripin, M.M. Nasef and O. Oladokun..... | 710 |
| Enhanced Fuzzy Logic Controller for Simulated HE Temperature Control System | M.A. Ahmad, A.A. Ishak and K.N. Ismail..... | 715 |
| Graphical Technique for Root-Cause Analysis in Inherent Safety Assessment | S. Izayanni Ahmad, H. Hashim and M.H. Hassim | 723 |
| Neural Wiener Based Model Predictive Control (NWMPC) for MTBE Catalytic Distillation Using Reduced Sequential Quadratic Programming (RSQP) | S. Sudibyo, M.N. Murat and N. Aziz..... | 733 |
| Simulation Work for the Control of Blood Glucose Level in Type 1 Diabetes Using Hovorka Equations | N.F. binti Mohd Yusof, A. Md Som, S. Abdulbari Ali and A.L. binti Abdul Halim Anuar..... | 739 |
| Application of Response Surface Methodology for Optimization of Methylene Blue Removal by <i>Casuarina equitifolia</i> Leaves Powder | N. Mohd, W.H. Wan Osman, M.S.N. Salleh, S.F. Syed Draman, N.S. Abd Kahar and M.N. Zulkifli | 745 |