



Date: 30 October 2019

Venue: Arcadia I, Armada Hotel (ROOM 1)

Time: 2.00 pm – 4.00 pm

Chairperson: Dr Abdel Baki, Qatar

2.00 - 2.15pm	SPE-1	Total Phenolic Content And Antioxidant Activity Of Pandanus Amaryllifolius By Soaking And Microwave-Assisted Extraction <i>Nurul Asyikin Md Zaki, Syafiza Abd Hashib, Umami Kalthum Ibrahim, and Putri Ani Narisa Ahmad Bakhtiar</i>
2.15 - 2.30pm	SPE-2	Mass Transfer Evaluation Of Substrate, Intermediate Products And Inhibitors In Membrane Bioreactor On Biogas Production <i>M Hidayat, I G Kurniawan, M A Prakosa, S Dökümcü, R Millati, and M N Cahyanto</i>
2.30 - 2.45pm	SPE-3	Development Of Recovery Technology Of Valuable Metals From Sea Water <i>J. San and K. Onoe</i>
2.45 - 3.00pm	SPE-4	Characterization of Expanded Perlite from Lamba, Albay, Bicol as an Adsorbent Medium and the Design of a Fixed-Bed Column for the Adsorption of Cd (II) and Pb (II) from Synthetic Rainwater <i>E C Datul, J M A Surot, J M B Toledo, and L D B Pestaño</i>
3.00 - 3.15pm	SPE-5	Extraction Of Silica From Rice Straw Using Alkaline Hydrolysis Pretreatment <i>Ayu Haslija Abu Bakar and Chong Jia Ni Carey</i>
3.15 - 3.30pm	SPE-11	Isobaric Vapor-Liquid Equilibrium Of Methanol + Glycerol Binary Mixture At 31.3 kPa <i>M A Batutah, K Kuswandi, and G Wibawa</i>
3.30 - 3.45pm	SPE-13	Nitrate Reduction Using Synthesized G-nZVI and G-nZVI-Cu Prepared from Optimized Extracted Polyphenols from Suganda Leaves <i>Vanessa Denise C. Aguilar, Jerome D.R. Fundano, Jeswino C. Legaspi, Darwin C. Mojica, Janselle Q. Tullao, Alister Mae A. Zafra, and Engr. Erison C. Roque</i>
3.45 - 4.00pm	AOI-26	Synthesis Of Tio ₂ /Go Nanocomposite For Methylene Blue Degradation <i>L. D. Kasmiarno, D. Floresyona, R. Raissa, and N. S. Pambudi</i>



Date: 30 October 2019

Venue: Arcadia II, Armada Hotel (ROOM 2)

Time: 2.00 pm – 4.00 pm

Chairperson: Prof Soudeteh, Iran

2.00 - 2.15pm	CRE-1	Recovery of Gold from Pregnant Thiourea Leaching Solution by Synergistic Extraction <i>Mohd Jumain Jalil, Haris Halimi Mohd Azam Zaki, Intan Suhada Azmi, Ariff Aminuddin Ahmad Zulkifli, and Muhammad Hazim Abu Bakar</i>
2.15 - 2.30pm	CRE-2	Overcome The Equilibrium Limitation In Para-Xylene Production By Using Reactive Distillation Method <i>Quy Phu Nguyen, Kim Trung Nguyen, Tuan Anh Nguyen, and Fuchino Tetsuo</i>
2.30 - 2.45pm	CRE-3	Simulation and Parametric Study of the Innovative Process to Produce High Purity Isopropyl Acetate with Ethylene Oxide Hydration as an Auxiliary Reaction <i>I G P Wiratama and V Novianty</i>
2.45 - 3.00pm	CRE-4	Kinetic study of epoxidation of Tung oil (<i>Reutealis trisperma</i> (Blanco) Airy Shaw) by peroxyacetic acid <i>E Budiayati, Budhijanto, A Budiman, and Rochmadi</i>
3.00 - 3.15pm	CRE-5	Bio-Hydrocarbon Production From Sorbitol Using Fe ₂ To Accelerate HI Regeneration Reaction <i>Rina Krisnayana, Subagjo, CB Rasrendra, and Tatang Hernas Soerawidjaja</i>
3.15 - 3.30pm	CRE-9	Microwave-assisted Acid Pretreatment of Sago Wastewater for Fermentable Sugar Production <i>Noor Illi Mohamad Puad, Ummul Madiah Mohd Rashidi, Azlin Suhaida Azmi, and Mohd Firdaus Abd Wahab</i>
3.30 - 3.45pm	CRE-32	Validation Of Mathematical Model Of Hydrotropic-Reactive Extraction Of Lignin <i>I Hartati, W B Sediawan, H Sulisty, M M Azis, and M Fahrurrozi</i>
3.45 - 4.00pm	CRE-11	Mechanism And Kinetic Model For Glycerolysis Of Shellac <i>D T Hartanto, Rochmadi, and Budhijanto</i>



Date: 30 October 2019
Venue: Arcadia III, Armada Hotel (ROOM 3)
Time: 2.00 pm – 4.00 pm
Chairperson: Dr Syamsul, USM

2.00 - 2.15pm	PCM-1	Offset-free control of a pH system using Multiple Model Predictive Control <i>A W Hermansson and S Syafie</i>
2.15 - 2.30pm	PCM-2	Designing Real Time Model Mobile Monitoring System For Model Predictive Control (MPC) In Nonlinear CSTR Control <i>Danny Hartanto Djarum and Zainal Ahmad</i>
2.30 - 2.45pm	PCM-3	Modeling And Simulation Of The Diameter Effects Of The Hollow Fiber Membrane On CO ₂ Absorption From Natural Gas <i>Nayef Ghasem</i>
2.45 - 3.00pm	PCM-4	A Design Method For The Integration Of Heat And Control In A Process Of Toluene Hydrodealkylation <i>Trung Kim Nguyen, Nguyen Khoi Phuc Nguyen, Thu Dinh Nguyen, Tuan-Anh Nguyen, and Fuchino Tetsuo</i>
3.00 - 3.15pm	PCM-11	Filters Design For Dynamic Estimation In Chemical Process Control <i>Siti Fatmawati and Marthen Luther Doko</i>
3.15 - 3.30pm	PCM-13	An MINLP Multi-Period Multi-Objective Optimization of Advanced Power Plant through Gasification of Municipal Solid Waste <i>A Syauqi and W W Purwanto</i>
3.30 - 3.45pm	PCM-14	Optimization and Analyzing of Subcritical Organic Rankine Cycle Using R1234ze(E) for Low and Medium Temperature Heat Source <i>O Rowshanaie, M Z M Tohir, F Mustapha, M E Ya'acob, and H Rowshanaie</i>
3.45 - 4.00pm	PCM-34	Comparison Study of Different Interval Numbers on Low-Density Polyethylene Process Optimization <i>A Azmi, S A Sata, F S Rohman, and N Aziz</i>



Date: 30 October 2019
Venue: Arista, Armada Hotel (ROOM 4)
Time: 2.00 pm – 4.00 pm
Chairperson: Dr Che Rosmani, UM

2.00 - 2.15pm	SHE-1	Incineration Of Ammonia Wastewater And The Effect To Environment <i>A. A Rahim B Norman, B. Noorhidayah Bt Hussein, and C. Fadzrul Izwan B M Ali</i>
2.15 - 2.30pm	SHE-3	Treatment And Recycling Of Wastewater From Food Industry Using Fixed-Bed Adsorption on the Tertiary Stage <i>Ayu Haslija Abu Bakar and Priya Thaarani</i>
2.30 - 2.45pm	SHE-35	Simulation of Natural Gas Dispersion and Explosion in Vented Enclosure using 3D CFD FLACS Software <i>Juwari, Renanto Handogo, Teguh Cahyono, Mochamad Safarudin, Rendra Panca Anugraha, Fadhilatul Aulia, Nuvies Dwi Kurniaty, Muhamad Reza Habibi, and Muhammad Nuur Kharisma</i>
2.45 - 3.00pm	SHE-6	Experimental Study Of Batch Electrocoagulation Treatment Of Peat Water In Sarawak With Aluminium Electrodes <i>N Abdul Rahman, A Albania Linus, U J Gilan, E E Jihed, N K M F Kumar, A Yassin, and A Philip</i>
3.00 - 3.15pm	SHE-7	The Permit To Work In Relation With Occupational Accident At Petrochemical Plant <i>Nizar Jusoh, Mohamad Wijayanuddin Ali, Tuan Amran Tuan Abdullah, and Alias Husain</i>
3.15 - 3.30pm	SHE-25	The Effect of Flow Rate and NaCl Concentration on the Corrosion Behavior of Carbon Steel in NaCl Solutions Containing H ₂ S <i>Indah Dwi Rachmawati, Isdiriyani Nurdin, Pramujo Widiatmoko, Hary Devianto, Festi Irmayanti, and Samuel Saptohadi</i>
3.30 - 3.45pm	SHE-9	Immobilization Of Cadmium (Cd ²⁺) In Contaminated Soil Using Biochar Derived From Calophyllum Inophyllum (Bitaog) Seed Husks <i>J L Oblepias, T N Pana, M Villanueva, and M N Dimaano</i>
3.45 - 4.00pm	SHE-40	Adsorption of Ammonium Ions Using Activated Carbon Derived from Artocarpus odoratissimus Skin <i>S M Anisuzzaman, A Y Zahrim, M Rajin, S Saalah, N M Ismail, R Duraim, and D Krishnaiah</i>



Date: 30 October 2019
Venue: Atlanta East, Armada Hotel (ROOM 5)
Time: 2.00 pm – 4.00 pm
Chairperson: Dr Agus, Curtin University

2.00 - 2.15pm	AOI-2	Production of Tannin-based Natural Dye from Mangrove (Rhizophora mangle) Tree Bark Waste from Wood Chips Industry : A Feasibility Study <i>Aswati Mindaryani, E Rahayuningsih, D T Adriyanti, L D Parthasiwi, M S Widhiasih, and F Larasati</i>
2.15 - 2.30pm	AOI-4	Synthesis And Characterization Of Silver Nanoparticles As A Potential Sensor For Volatile Organosulfides For Visual Detection Of Postharvest Storage In Garlic <i>R K C Motol, C A Espineli, C M V Tapit, and C E Tiangco</i>
2.30 - 2.45pm	AOI-7	Oil Spill Removal Using Kenaf Core Fibers As Biosorbent Material <i>P Siwayanan, D G Ramachandran, R Jamaluddin, and S Ahmad</i>
2.45 - 3.00pm	AOI-8	Effect Of Alcohol/Water On Glycine Crystal Transition <i>H. Kokubu, Y. Shimada, and K. Onoe</i>
3.00 - 3.15pm	AOI-9	Leaching of REY From Non-Magnetic Coal Fly Ash With Acetic Acid <i>H Manurung, W Rosita, F Anggara, H B T M Petrus, and I M Bendiya</i>
3.15 - 3.30pm	AOI-10	Electrochemical Properties Of Ascorbic Acid And Folic Acid Under Acidic Solution <i>Noer Abyor Handayani, Elsa Anisa Krisanti, Yunita Sadeli, Sutrasno Kartohardjono, and Kamarza Mulia</i>
3.30 - 3.45pm	AOI-11	(Calamansi) Citrofortunella Microcarpa Rind Extract As Plant Derived Green Corrosion Inhibitor For Mild Steel In 1.0M HCl <i>Gian Carlo E. Arguelles, Mark Ceazar D. Torres, Brian James U. Wu, Jerry G. Olay, and Renato C. Ong</i>
3.45 - 4.00pm	AOI-12	Enhanced Production Of B-Carotene Suspensions Using Supercritical CO ₂ Via Naturally Occurring Z-Isomerization-Accelerating Catalyst <i>Yelin Zhang, Masaki Honda, Wahyudiono, Hideki Kanda, and Motonobu Goto</i>



Date: 30 October 2019

Venue: Atlanta West, Armada Hotel (ROOM 6)

Time: 2.30 pm – 4.00 pm

Chairperson: Dr Umi Fazara, UNIMAP

2.30 - 2.45pm	BIO-1	Comparative Study Between Avian Cell And Mammalian Cell In Production Of Influenza Vaccine Syariah Compliance <i>F N Aliya Mohamad Ros, Norliza Abd Rahman, Jarinah Mohd Ali, Nurina Anuar, Siti Rozaimah Bt. Sheikh Abdullah, and Amir Fazlim Bin Jusoh @ Yusoff</i>
2.45 - 3.00pm	BIO-2	The Numerical Estimation of Mass Transfer Coefficient of Oxygen in the Large-Scale Suspension Culture of iPS Cells <i>R Isobe, Y Kanemaru, A Sekimoto, Y Okano, and M Kino-Oka</i>
3.00 - 3.15pm	BIO-3	The Effect Of Uric Acid In The Detection Of Calcium Stones In Urine Through Turbidimetry Method <i>P A Bacani, J A Maglaqui, A A Tadeo, and E Quinto</i>
3.15 - 3.30pm	BIO-4	A Preliminary Study of Extraction and Purification Processes of Astaxanthin from Haematococcus pluvialis as a Natural Antioxidant <i>P R Dewati, Rochmadi, A Rohman, and A Budiman</i>
3.30 - 3.45pm	BIO-7	Biopolymeric Encapsulation Of Probiotics For Improved Release Properties In The Gastrointestinal Digestion System <i>N A Mohammad, D N A Zaidel, I I Muhamad, M A Hamid, H Yaakob, and Y M M Jusoh</i>
3.45 - 4.00pm	BIO-8	Characterization Of Chitosan From Extracted Fungal Biomass For Piezoelectric Application <i>F. B. Ahmad, M. H. Maziati Akmal, A. Amran, and M. H. Hasni</i>



Date: 30 October 2019
Venue: Arcadia I, Armada Hotel (ROOM 1)
Time: 4.15 pm – 6.30 pm
Chairperson: Dr Aileen, Philippines

4.15 - 4.30pm	SPE-16	Estimating Species Concentration In CO ₂ -Loaded Monoethanolamine Using Raman Spectroscopy <i>Ahmad Syukri Na'im Bin Mohd Hanafiah and Abdulhalim Shah Maulud</i>
4.30 - 4.45pm	SPE-17	Effect Of Surface-Etched Modification On Halloysite Nanotubes (HNTS) For Polysulfone Mixed Matrix Membrane In CO ₂ /CH ₄ Separation <i>J Jafa, S. M. Anissuzaman, C K Chiam, N Bolong, A R Razali, A F Ismail, and N M Ismail</i>
4.45 - 5.00pm	SPE-15	Capacitive Deionization Utilizing Activated Biochar – Manganese Dioxide (AB - MD) Nanocomposites For Desalination Applications <i>J Adorna Jr, M G Borines, and R-A Doong</i>
5.00 - 5.15pm	SPE-19	Microwave Assisted Extraction Of Lipid From Nannochloropsis Gaditana Microalgae Using [EMIM]Cl <i>S Rezaei Motlagh, R Harun, D R A Biak, and S A Hussain</i>
5.15 - 5.30pm	SPE-20	An Overview: Analysis Of Ultrasonic-Assisted Extraction's Parameters And Its Process <i>Ahmad Syahir, Sarina Sulaiman, Maizirwan Mel, Maizatunisa Othman, and Siti Zubaidah Sulaiman</i>
5.30 - 5.45pm	SPE-21	Gold Leaching from Printed Circuit Boards (PCBs) as one of the Urban Mine Resources using Thiosulphate: Optimization using Response Surface Methodology (RSM) <i>H B T M Petrus, A E Putra, H S A Gustiana, A Prasetya, I M Bendiyasa, and W Astuti</i>
5.45 - 6.00pm	SPE-22	Study Of Progressive Freeze Concentration And Eutectic Freeze Crystallization Technique For Salt Recovery <i>W N A Mazli, S Samsuri, and N A Amran</i>
6.00 - 6.15pm	SPE-26	Effect Of Stirring Rate And Freezing Time On The Percentage Of Recovery Of Residual Oil From Palm Oil Mill Effluent Via a Stirred Freeze Crystallizer <i>M. A. Mohamed Anuar, N. A. Amran, and M. S. H. Ruslan</i>
6.15 - 6.30pm	SPE-25	Comparative Study Of Total Phenolic Content And Total Flavonoid Content Extraction From Guava Juices By Progressive Freeze Concentration And Evaporation <i>M. A. Ahmad, N. S. M. Ghazali, S. Samsuri, and M. S. H. Ruslan</i>



Date: 30 October 2019
Venue: Arcadia II, Armada Hotel (ROOM 2)
Time: 4.15 pm – 6.30 pm
Chairperson: Dr Mahar, UM

4.15 - 4.30pm	CRE-29	Effect Of Urea Loading On The Anodic Synthesis Of Titania Nanotube Arrays Photoanode To Enhance Photoelectrochemical Performance <i>Tiur Elysabeth, Kamarza Mulia, and Slamet</i>
4.30 - 4.45pm	PEP-4	Sequential Optimization Of a Water-Based Polygeneration System In Ethylene Glycol Production <i>Triana Prihatin, Shuhaimi Mahadzir, and M. Ibrahim A. Mutalib</i>
4.45 - 5.00pm	PEP-16	Impact Of Biomass Upgrading Via Hydrothermal Treatment On Slagging And Fouling During Cofiring With Coal <i>Mi Yan, Dicka Ar Rahim, Herri Susanto, Rahmad Dennie Agustin Pohan, and Dwi Hantoko</i>
5.00 - 5.15pm	PEP-19	Sequential Thermal and Power Integration for Locally Integrated Energy Sector <i>P Y Lee, P Y Liew, and T G Walmsley</i>
5.15 - 5.30pm	PEP-20	Effect of DMPA Content on Colloidal Stability of Jatropha Oil-based Waterborne Polyurethane Dispersion <i>N S Nurdin, S Saalah, A T Lim, A Y Francis, L Abdullah, and S SaifulAzry</i>
5.30 - 5.45pm	PEP-21	Study Of Glycerolysis Of Lactic Acid <i>Suprihastuti S Rahayu, D M Putra, and A Hasna</i>
5.45 - 6.00pm	PEP-23	Black Liquor Droplet Swelling Model During Pyrolysis <i>J Wintoko, S Purwono, M Fahrurrozi, and B Soehendro</i>
6.00 - 6.15pm	PEP-29	Biogas Production From Cassava Waste: Effects Of Temperature And Concentration <i>P Kohmuean, N Boonrod, and A Wongkoblapp</i>
6.15 - 6.30pm	PEP-17	Fabrication of ZnO-SiO ₂ Nanocomposite Materials Prepared by a Spray Pyrolysis for the Photocatalytic Activity under UV and Sunlight Irradiations <i>K Kusdianto, W Widiyastuti, M Shimada, L Qomariyah, and S Winardi</i>



Date: 30 October 2019

Venue: Arcadia III, Armada Hotel (ROOM 3)

Time: 4.15 pm – 6.30 pm

Chairperson: Dr Fathiah, UM

4.15 - 4.30pm	PCM-17	Numerical Simulation of the Drying Kinetics of Sweet Potato to Prevent the Growth of the Fungi <i>Rhizopus oryzae</i> <i>F I V Obregon, M B C Silvano, J G Vicencio, and L D B Pestaño</i>
4.30 - 4.45pm	PCM-19	Modeling And Optimization Of Pilot-Scale Subcritical Water Extraction On Zingiber Zerumbet By Central Composite Design <i>Siti Nur Khairunisa Mohd Amir, Mariam Firdhaus Mad Nordin, Kamyar Shameli, Izzati Mohamad Abdul Wahab, and Mariani Abdul Hamid</i>
4.45 - 5.00pm	PCM-20	Optimization Of Fe(III) Ion Adsorption Using Aceh Activated Zeolite In Fixed Bed Column Using Response Surface Methodology <i>F. Redha, E. Munawar, and D. Darmadi</i>
5.00 - 5.15pm	PCM-22	Parametric And Optimization Studies For Biochar Production From Municipal Solid Wastes (MSW) Via Pyrolysis <i>Katrina Joy T. Castillo, Monet, Concepcion Maguyon-Detras, Veronica P. Migo, and Catalino G. Alfafara</i>
5.15 - 5.30pm	PCM-23	Model Predictive Control Of Vinyl Chloride Monomer Process By Aspen Plus Dynamics And MATLAB/Simulink Co-Simulation Approach <i>J Chinprasit and C Panjapornpon</i>
5.30 - 5.45pm	PCM-24	Dynamic Multi-Objective Optimization of Autocatalytic Esterification in Semi Batch by Using Control Vector Parameterization (CVP) and Non-Dominated Sorting Genetic Algorithm (NSGA-II) <i>F S Rohman and N Aziz</i>
5.45 - 6.00pm	PCM-26	Fouling Detection in Heat Exchangers using Extended Kalman Filter <i>S. Muenthong, S.Chattakarn, and V. Lersbamrungsuk</i>
6.00 - 6.15pm	PCM-28	Input/Output Linearizing Controller With Taylor Series Expansion For A Non-Minimum Phase Process By Hardware-In-The-Loop Approach <i>C Panjapornpon, I Kajornrungsilp, and C Rochpuang</i>
6.15 - 6.30pm		



Date: 30 October 2019
Venue: Arista, Armada Hotel (ROOM 4)
Time: 4.15 pm – 6.30 pm
Chairperson: Dr Juwari, Indonesia

4.15 - 4.30pm	SHE-11	Development Of Low-Cost Aerobic Bioreactor For Decentralized Grey Water Treatment <i>A Paramesti, B A Damarjati, A Widyaparaga, Deendarlianto, A Mindaryani, L Marbelia, and W Budhijanto</i>
4.30 - 4.45pm	SHE-13	Optimization Of Progressive Freeze Concentration On Stormwater Purification Via Response Surface Methodology <i>F H Ab Hamid, S A Salim, and M S Mat-Shayuti</i>
4.45 - 5.00pm	SHE-14	The Steps in Preventing, Monitoring and Removing of Fouling Scale on Operation of Evaporator <i>Zainus Salimin, Lilis Kistriyani, and Ratiko</i>
5.00 - 5.15pm	SHE-15	Bio-Remediation Of Palm Oil Mill Effluent (POME) Using Aspergillus Niger Immobilized On Coconut Husk And Free Cell Fermentation <i>P Thegarathah, J Jewaratnam and K Simarani</i>
5.15 - 5.30pm	SHE-17	A Comparative Study of Conventional Aerator and Microbubble Generator in Aerobic Reactors for Wastewater Treatment <i>Lisendra Marbelia, Athina Wan Noor, Asa Paramesti, Bimo A. Damarjati, Adhika Widyaparaga, Deendarlianto, Muhammad R. Bilad, and Wiratni Budhijanto</i>
5.30 - 5.45pm	SHE-18	Adsorption Of Copper, Nickel And Chromium Ions Using Silica Aerogel Synthesized By Ambient-Pressure Drying And Modified With EDTA <i>B Pornchuti, B Pongpattananurak, D Sutthiard, and P Singtothong</i>
5.45 - 6.00pm	SHE-19	Chromium Removal From Chrome-Tannery Effluent After Alkaline Precipitation By Adsorption Using Municipal Solid Waste-Derived Activated Biochar <i>Julienne Eris L. Parañaque, Monet Concepcion Maguyon-Detras, Veronica P. Migo, and Catalino G. Alfafara</i>
6.00 - 6.15pm	SHE-23	Nutrient Recovery From Slaughterhouse Wastewater <i>S Sreyvich, H T B M Petrus, and C W Purnomo</i>
6.15 - 6.30pm	SHE-24	Ammonium Ion Removal using Activated Zeolite and Chitosan <i>N N Safie and A Y Zahrim</i>



Date: 30 October 2019
Venue: Atlanta East, Armada Hotel (ROOM 5)
Time: 4.15 pm – 6.30 pm
Chairperson: Dr Fahrurrozi, Indonesia

4.15 - 4.30pm	AOI-13	Utilization Of Corn Cob Waste As An Alternative Composite Material Of Motorcycle Non-Asbestos Brake Lining <i>Sukirman, S Ma'mun, A Fahruli, and R E Yulpando</i>
4.30 - 4.45pm	AOI-15	Preparation Of Cationic Polyurethane Dispersion And Its Effectiveness As Denim Dye Fixing Agent <i>M. Sundang, C. S. Sipaut, and S. Saalah</i>
4.45 - 5.00pm	AOI-16	Effect Of ZnCl ₂ On Properties Of Graphene Produced From Palm Empty Fruit Bunch <i>I F Sukmana, P Widiatmoko, I Nurdin, Devianto, and T Prakoso</i>
5.00 - 5.15pm	AOI-17	Synthesis Of Precipitated Silica From Bagasse Ash As Reinforcing Filler In Rubber <i>M Sholeh, R Rochmadi, H Sulistyo, and B Budhijanto</i>
5.15 - 5.30pm	AOI-18	Photocatalytic Degradation Of Atrazine Herbicide Using Nano-Hydroxyapatite From Cow Bone Synthesized Via Simulated Body Fluid <i>Rugi Vicente Rubi, Erison Roque, Francis Dela Rosa, Rey Martin Estoque, Gerald Olvido, Patricia Jane Perey, Jabin Sta. Teresa, and May Anne Tesalona</i>
5.30 - 5.45pm	AOI-20	New Monopolar Arrangement Of Electrodes To Enhance The Production Of Magnetite Nanoparticles In An Electrochemical Cell <i>H Setyawan, P Nurlilasari, and W Widiyastuti</i>
5.45 - 6.00pm	AOI-21	Effect Of Different Bleaching Reagents And Process Sequences On The Properties Of Steam-Exploded Empty Fruit Bunch (EFB) Fiber <i>M A F Supian, S Mohamad, K N M Amin, S S Jamari, J Zakaria, M F Ali, and S F S Mohamad</i>
6.00 - 6.15pm	AOI-22	UV-Shielding Biodegradable Films Based on Carboxymethyl Cellulose Filled with Henna Extracts <i>N Danmatam and D Pattavarakorn</i>
6.15 - 6.30pm	AOI-23	Preparation and Properties of Phase Change Material by Microencapsulation of Lauric Acid for Thermal Regulation <i>M K Gecain and R L De Leon</i>



Date: 30 October 2019

Venue: Atlanta West, Armada Hotel (ROOM 6)

Time: 4.15 pm – 6.30 pm

Chairperson: Dr Anisuzzaman, UMS

4.15 - 4.30pm	BIO-14	Acetate switch in <i>Methanococcus maripaludis</i> <i>C.H. Vo, I.A. Karimi, and M. Kraft</i>
4.30 - 4.45pm	BIO-10	Effect of Pore Size of Monofilament Woven Filter Cloth as Supporting Material for Dynamic Membrane (DM) Filtration on Performance using Aerobic Membrane Bioreactor Technology (MBR) <i>Mahat. S.B., Omar. R., Ling. L.J., Mohd Idris A.I., Che Man. H., Mustapa Kamal S.M., and Idris. A.</i>
4.45 - 5.00pm	BIO-11	The Optimal Condition on the Growth of Green <i>Haematococcus Pluvialis</i> as one of the Future Natural Resources <i>Judy Retti Witono, Alvin Gunadi, Herry Santoso, Arry Miryanti, and Angela J. Kumalaputri</i>
5.00 - 5.15pm	BIO-12	Determination of Diffusion Coefficients and Antioxidant Activities of Ascorbic Acid in Guava Juice using Cyclic Voltammetry <i>K. B. A. Ang, C. M. Lee, H. M. O. Yu, M. Uy, A. N. Soriano, and N. P. Dugos</i>
5.15 - 5.30pm	BIO-13	Performance of Stored Electrolyzed Seawater for Disinfection of <i>Pseudomonas aeruginosa</i> <i>Michelle Joan C. Ferrer, Ryan Kenneth L. Lim, Russell Dillon A. Cue, Arnel B. Beltran, Regina G. Damalerio, and Marigold O. Uba</i>
5.30 - 5.45pm	BIO-15	Evaluation Of <i>Spirulina Platensis</i> In Bicarbonate-Based Integrated Carbon Capture And Algae Production System Utilizing Different Culture Media <i>C C Batac, N S Gathercole, A F Maravilla, and A B Beltran</i>
5.45 - 6.00pm	BIO-16	Bioethanol Production From Microalgae <i>Chlorella Sorokiniana</i> Via Simultaneous Saccharification And Fermentation <i>N J Tatel and C Madrazo</i>
6.00 - 6.15pm	BIO-17	Microencapsulation of Riboflavin (Vitamin B2) using Alginate and Chitosan : Effect of Alginate and Chitosan Concentration upon Microcapsule Diameter <i>YC. Danarto, Rochmadi, and Budhijanto</i>
6.15 - 6.30pm	BIO-18	Microparticles of <i>Ganoderma lucidum</i> Extract Generated by Electrospraying <i>Siti Machmudah, Dwi Setyorini, Sugeng Winardi, Wahyudiono, Hideki Kanda, and Motonobu Goto</i>



Date: 31 October 2019
Venue: Arcadia I, Armada Hotel (ROOM 1)
Time: 11.15 am – 12.30 am
Chairperson: Prof Sanggono, Indonesia

11.15 - 11.30am	SPE-23	Simulation Of The Drying Process Of Polysaccharide Extract Solution In a Spray Dryer <i>Tantular Nurtono, Widiyastuti Widiyastuti, Annie Mufyda Rahmatika, Siti Machmudah, and Sugeng Winardi</i>
11.30 - 11.45am	SPE-27	Review: A Comparison of Conditions for The Extraction of Vegetable and Essential Oils Via Microwave-Assisted Extraction <i>Mohd Haffizi, Sarina Sulaiman, Dzun Noraini Jimat, and Azura Amid</i>
11.45 - 12.00 pm	SPE-28	Effect Of Addition Of Dodecyl Trimethyl Ammonium Bromide Surfactant Toward Recovery Of Bitumen From Asbuton With Modified Hot Water Process Method <i>Y N Ariq, F A Rahmatika, M F Susanto, Susianto, A Altway, and Z L Rinanda</i>
12.00 - 12.15 pm	SPE-29	Assessment Of Patterned Membrane In A Tilted Panel Filtration System For Fouling Control In Activated Sludge Filtration <i>Wan Nur Aisyah Wan Osman, MR Bilad, and Shafirah Samsuri</i>
12.15 - 12.30 pm	SPE-31	Retention of Bioactive Compound in the Concentration of Centella Asiatica Extract through Progressive Freezing <i>N. A. Amran, N. H. Mohd Rafee, and S. Samsuri</i>



Date: 31 October 2019
Venue: Arcadia II, Armada Hotel (ROOM 2)
Time: 11.15 am – 12.30 am
Chairperson: Prof Kheireddine

11.15 - 11.30am	CRE-26	Lactic Acid Production from High Concentration of Invert Sugar in Semi-Batch Reactor <i>R Sirisangsawang and P Kitchaiya</i>
11.30 - 11.45am	CRE-30	Preliminary Modified Biodiesel Production By Coupling Reactive Distillation With A Steam Reformer Via Aspen Plus® <i>C Treeyawetchakul</i>
11.45 - 12.00 pm	CRE-32	Validation Of Mathematical Model Of Hydrotropic-Reactive Extraction Of Lignin <i>I Hartati, W B Sediawan, H Sulisty, M M Azis, and M Fahrurrozi</i>
12.00 - 12.15 pm	CRE-37	Parameters Study On The Production Of Isoamyl Acetate Via Milli-Reactor In A Solvent-Free System <i>Nuraini Mansor, Rajaviknesswaran Singaravelan, and Syamsul Rizal Abd Shukor</i>



Date: 31 October 2019

Venue: Arcadia III, Armada Hotel (ROOM 3)

Time: 11.15 am – 12.30 am

Chairperson: Dr Norliza, UKM

11.15 - 11.30am	PCM-29	A Mixed Integer Nonlinear Programming Approach For Integrated Bio-Refinery And Petroleum Refinery Topology Optimization <i>Ahmed Mahmoud and Jaka Sunarso</i>
11.30 - 11.45am	PCM-30	Multi-Objective Optimization for Combined Heat Power Operations considering Flexibility, Costs and Environmental Emissions <i>Lok Wei Jen, Ng Lik Yin, and Viknesh Andiappan</i>
11.45 - 12.00 pm	AOI-3	Process Development of Saxagliptin Intermediate – Production of 2S-cis-4,5-Methanoprolineamide at the Kilo-scale <i>A. Ya Lin, Tnay, and B. Eiji Nishimura</i>
12.00 - 12.15 pm	PCM-33	Electrospinning of PLA with DMF: Effect of Polymer Concentration On The Bead Diameter Of The Electrospun Fibre <i>Ainaa Amirah Md Zubir, M P Khairunnisa, Nur Atiqah Surib, J NorRuwaida, Abd Halim bin Md Ali, and M Rashid</i>
12.15 - 12.30 pm	PCM-35	Optimization Of Methanol Production Via CO ₂ Hydrogenation: Comparison Of Sampling Techniques For Process Modeling <i>P Borisut and A Nuchitprasittichai</i>



Date: 31 October 2019
Venue: Arista, Armada Hotel (ROOM 4)
Time: 11.15 am – 12.30 am
Chairperson: Dr Norhuda, MJIIT

11.15 - 11.30am	SHE-26	The Effect of Leachate Recirculation on The Greenhouse Gases Emission from Municipal Solid Waste (MSW) Landfill in Tropical Climate Region <i>Q H Ali, S R Sugihen, E Munawar, and Adisalamun</i>
11.30 - 11.45am	SHE-28	Exergy analysis and energy utilization in the transportation sector of the Philippines <i>R J Q Buenafe, R A P Lomeda, R R C Rivera, C L Tagalog, and A N Soriano</i>
11.45 - 12.00 pm	SHE-32	Phosphorus Recovery From Septage Treatment Plant Sludge By Struvite Formation With Alkaline Hydrolysis As Pre-Treatment <i>C K L Nochefranca, Z K C Oyson, A B San Pedro, C M Pausta, R Damalerio, M B Promentilla, A B Beltran, D Saroj, and A H Orbecido</i>
12.00 - 12.15 pm	BIO-6	Preliminary Study On The Treatment Of Textile Effluent Using Ascomycotina Fungus <i>Letendrea Helminthicola</i> BAMF1 <i>Ira Puspita Sari and Khanom Simarani</i>
12.15 - 12.30 pm	BIO-21	Synthesis of Bioactive Glass using Cellulose Nano Fiber Template <i>M Sarmast. Sh, S George, C. AB Dayang Radiah, N Abdullah, and S Kamarudin</i>



Date: 31 October 2019

Venue: Atlanta East, Armada Hotel (ROOM 5)

Time: 11.15 am – 12.30 am

Chairperson: Dr Hanee, UM

11.15 - 11.30am	AOI-27	Synthesis and Modification of Metal Nanoparticles by Plasma over an Aqueous Solution under Pressurized Argon <i>Wahyudiono, Hiroki Kondo, Motoki Yamada, Noriharu Takada, Siti Machmudah, Hideki Kanda, and Motonobu Goto</i>
11.30 - 11.45am	AOI-30	A Hydrophobic Cellulose Aerogel From Coir Fibers Waste For Oil Spill Application <i>M Fauziyah, W Widiyastuti, and H Setyawan</i>
11.45 - 12.00 pm	AOI-31	MnO ₂ Nanoparticles Prepared By Alternating Monopolar Arrangement Electrolysis And Their Electrochemical Performances <i>Widiyastuti, Heru Setyawan, Mahardika F. Rois, Hariyati Purwaningsih, and Puspita Nurlilasari</i>
12.00 - 12.15 pm	AOI-42	The Effect Of Hydrophobic Particles On Evaporation Rate In A Solar Steam Generation System <i>Tomomi Hasegawa and Wuled Lenggoro</i>
12.15 - 12.30 pm	AOI-41	Unravelling the Swelling Behaviour and Antibacterial Activity of Palm Cellulose Nanofiber-based Metallic Nanocomposites <i>Janarthanan Supramaniam, See Kiat Wong, Bey Fen Leo, Loh Teng Hern Tan, Bey Hing Goh, and Siah Ying Tang</i>



Date: 31 October 2019

Venue: Atlanta West, Armada Hotel (ROOM 6)

Time: 11.15 am – 12.15 am

Chairperson: Prof Zainal, USM

11.15 - 11.30am	AOI-36	Sulfur Copolymers (SDIB) From Inverse Vulcanization Of Elemental Sulfur (S ₈) For Polymer Blend <i>Ronaldo P Parreño Jr, Ying-Ling Liu, and Arnel B Beltran</i>
11.30 - 11.45am	AOI-37	Synthesis of Phenol Formaldehyde Resin with Paraformaldehyde and Formalin <i>Nuruldiyanah Kamarudin, Dayang Radiah Awang Biak, Zurina Zainal Abidin, Francisco Cardona, and Mohd Sapuan Salit</i>
11.45 - 12.00 pm	AOI-38	Effect Of Forming Temperature On Properties Of Biocoke From Palm Oil Residues <i>Peeradej Saiserm Sak and Jintawat Chaichanawong</i>
12.00 - 12.15 pm	SPE-6	Solvent Extraction And Stripping Of Transition Metals From Aqueous Media With Deep Eutectic Solvent As Extractant <i>P D Ola, Y Kurobe, and M Matsumoto</i>



Date: 31 October 2019
Venue: Arcadia I, Armada Hotel (ROOM 1)
Time: 1.45 pm – 3.00 pm
Chairperson: Dr Farid, UNIMAS

1.45 - 2.00pm	SPE-32	Preparation of Highly Hydrophobic PVDF-HFP Membrane with Anti-Wettability Characteristic <i>M J Toh, P C Oh, and M I S Mohd Shaufi</i>
2.00 - 2.15pm	SPE-33	A Critical Review On Microwave, Fluidised-Bed And Convective Air-Drying Of Low Rank Coals: The Water Diffusivity On Coals <i>Jasper J X Chan and C H Chong</i>
2.15 - 2.30pm	SPE-34	Fabrication of Polythiourea-Copper Complex Composite Membrane and its Anti-fouling Property <i>M T Margarito, A B Beltran, MA Promentilla, A Orbecido, B Basilia, R Damalerio, and U Bigol</i>
2.30 - 2.45pm	SPE-37	Comparing The Performance Of Low-Grade Nickel Ore And Limestone For Treatment Of Synthetic Acid Mine Drainage <i>D J A Fabella, K A N Sadol, C O Turingan, A B B Beltran, R D Alorro, and A H Orbecido</i>
2.45 - 3.00pm	SPE-7	Absorption of CO ₂ in Aqueous Blend of Methyldiethanolamine and Arginine <i>Ahmed Gomaa Talkhan, Mustafa. N. Nasser, Muftah H. El-Naas, Abdelbaki Benamor, S. A. El-Tayeb, and S. M. El-Marsafy</i>



Date: 31 October 2019

Venue: Arcadia II, Armada Hotel (ROOM 2)

Time: 1.45 pm – 3.00 pm

Chairperson: Dr Awanis, UM

1.45 - 2.00pm	CRE-13	Characterization and Catalytic Activity of γ -Al ₂ O ₃ -ITB on Methanol Dehydration <i>A Ardy, J Rizkiana, M L Gunawan, and H Susanto</i>
2.00 - 2.15pm	CRE-40	Selective Short Chain Carboxylic Acid Production over Fe: Zeolite Nanoparticles from CO ₂ Hydrogenation Reaction <i>Nurazni Amat Bahari and Wan Nor Roslam Wan Isahak</i>
2.15 - 2.30pm	CRE-41	Kinetic Study Of Low-Density Polyethylene Waste Pyrolysis Using Kaolin As Catalyst <i>Emi Erawati, Hamid, and Danik Martenda</i>
2.30 - 2.45pm	CRE-23	Exsolution Of Nickel Alloys Anchored Nanoparticles On Perovskite Oxides For CO Oxidation <i>W K Wan Ramli, E Papaioannou, D Naegu, and I S Metcalfe</i>
2.45 - 3.00pm	CRE-34	Use Of Metal Mesh To Assist The Multi-Phase Reaction In A Microreactor <i>P Charoenpong and V Pavarajarn</i>



Date: 31 October 2019
Venue: Arcadia III, Armada Hotel (ROOM 3)
Time: 1.45 pm – 3.00 pm
Chairperson: Dr Tan, UM

1.45 - 2.00pm	PCM-36	Dynamic Modeling: The Influence Of The Improved Solid Elutriation Correlation On The Two-Phase Mathematical Model Of Polyolefin Polymerization In Gas-Phase Fluidized Bed Reactor <i>M F Atan and M A Hussain</i>
2.00 - 2.15pm	PCM-37	Hybrid Fuzzy-Disturbance Observer For Estimating Disturbance In Styrene Polymerization Process <i>A. M. Shamsul Bahrin and J. Mohd Ali</i>
2.15 - 2.30pm	PCM-38	Implementation of Model Predictive Control in Tracking Dynamic Optimal Profiles of Semi Batch Autocatalytic Esterification Reactor <i>F S Rohman, D Muhammad, and N Aziz</i>
2.30 - 2.45pm	PCM-40	Computational Fluid Dynamics Simulation of Fluidized Bed Dryer for Sago Pith Waste Drying Process <i>Abdul Mu'im Abdul Nasir, Masli Irwan Rosli, Mohd Sobri Takriff, Nur Tantiyani Ali Othman, and Vinotharan Ravichandar</i>
2.45 - 3.00pm	PCM-42	Intermolecular Interaction of Tween 80, Water and Butanol in Micelles Formation via Molecular Dynamics Simulation <i>Junaidi Zakaria, Syamsul Rizal Abd Shukor, and Khairunisak Abd Razak</i>



Date: 31 October 2019
Venue: Arista, Armada Hotel (ROOM 4)
Time: 1.45 pm – 3.00 pm
Chairperson: Dr Fazly, UM

1.45 - 2.00pm	SHE-33	A Comparison Of The Acid Mine Drainage (AMD) Neutralization Potential Of Low Grade Nickel Laterite And Other Alkaline-Generating Materials <i>C. Turingan, G. Singson, B. Melchor, R. Alorro, A. Beltran, and A. Orbecido</i>
2.00 - 2.15pm	SHE-34	Effect of Coolant Temperature and Stirring Rate in the Separation of Oil from Bilge Water using a Stirred Freeze Crystallizer <i>S. N. A. Mustapha, N. A. Amran, and S. Samsuri</i>
2.15 - 2.30pm	SHE-36	Integrated Life Cycle Assessment-Analytic Hierarchy Process (LCA-AHP) With Sensitivity Analysis Of Phosphorus Recovery From Wastewater In Metro Manila <i>Carla Mae J. Pausta, Luis F. Razon, Aileen H. Orbecido, Devendra P. Saroj, and Michael Angelo B. Promentilla</i>
2.30 - 2.45pm	SHE-37	Life Cycle Assessment of Refuse Derived Fuel (RDF) for Municipal Solid Waste (MSW) Management: Case Study Area Around Cement Industry, Cirebon, Indonesia <i>T T Anasstasia, E Lestianingrum, R B Cahyono, and M M Azis</i>
2.45 - 3.00pm	SHE-10	Combined Natural And Chemical Coagulants To Remove Fluoride From Wastewater <i>V L Chee, C H Chong, C M Choo, and Thomas S Y Choong</i>



Date: 31 October 2019

Venue: Atlanta East, Armada Hotel (ROOM 5)

Time: 1.45 pm – 3.00 pm

Chairperson: Dr Jega, UM

1.45 - 2.00pm	PEP-40	Rheological Study Of Oil Palm Trunk Waste As Viscosifier Agent On Water-Based Mud <i>Husna Hayati Binti Jarni, Mohd Firdaus Bin Sariman, Arina Binti Sauki, Wan Zairani Binti Wan Bakar, and Tengku Amran Bin Tengku Mohd</i>
2.00 - 2.15pm	AOI-43	Synthesis and Characterization of Fe ₃ O ₄ Nanoparticles Using Different Experimental Methods <i>Nafis Mahmud, Mustafa S. Nasser, Muftah H. El-Naas, Muneer M. Ba-Abbad, Abdul Wahab Mohammad, Said Mansour, and Abdelbaki Benamor</i>
2.15 - 2.30pm	BIO-23	Optimization Of Enzyme Assisted Extraction Of Palm Oil Rich In Antioxidant Capacity <i>Hemavathi Silvamany, Jamaliah Md Jahim, and Ahmad Jaril Asis</i>
2.30 - 2.45pm	AOI-32	Mesoporous Silica Nanoparticles As Vehicles For Drug Delivery <i>I M Adristya, A D Suryaningtyas, J Wijaya, F C Pangestu, S B Hartono, L H Soewignyo, and W Irawaty</i>
2.45 - 3.00pm	BIO-9	Production Of Enzymes From Pineapple Crown And Coffee Husk By Solid State Fermentation <i>Noraziah Abu Yazid and Ainur Razanah Roslan</i>



Date: 31 October 2019

Venue: Atlanta West, Armada Hotel (ROOM 6)

Time: 2.15 pm – 3.00 pm

Chairperson: Dr Iskandar, UM

2.15 - 2.30pm	PEP-26	Barium Sulfate Scale Dissolution Using Ethylenediaminetetraacetic Acid (EDTA) <i>Sazali, R.A., Awang Kechik, N.I., Yahya, E., and Mat-Shayuti, M.S.</i>
2.30 - 2.45pm	PEP-27	Effect Of Glucose Concentration And Cultivation Days On Chlorella Vulgaris Growth Via Immobilization Technique For Biodiesel Production <i>N R Abu Sepian, N H Mat Yasin, and N Zainol</i>
2.45 - 3.00pm	SPE-30	Membrane Fouling Control In Forward Osmosis For Dewatering Of Chlorella Vulgaris <i>S N Hidayah, M R Bilad, S M Hizam, N I M Nawawi, E L A Rampun, Muthia Elma</i>



Date: 31 October 2019
Venue: Arcadia I, Armada Hotel (ROOM 1)
Time: 3.15 pm – 5.15 pm
Chairperson: Dr Badrul, UM

3.15 - 3.30pm	PEP-2	Effect of Gasification Temperature on Synthesis Gas Production and Gasification Performance for Raw and Torrefied Palm Mesocarp Fibre <i>N H A Halim, S Saleh, and N A F A Samad</i>
3.30 - 3.45pm	PEP-5	Investigation Of Water-Flooding Activity Using Radiotracer Technology In Commercial Core-Flood Set Up <i>N Othman, I M Saa'id, A Ahmed, N H Yusof, R Yahya, M A S Mohd Yunos, E M S Engku Chik, M R Shari, H Hassan, and A A Mahmood</i>
3.45 - 4.00pm	PEP-7	Production And Characterization Of Biodiesel From Annona Muricata Seed Oil <i>J R Avendaño, S Canlas, M Falalimpa, and M N Dimaano</i>
4.15 - 4.30pm	PEP-8	Thermogravimetric Analyses (TGA) Of Three Oil Palm Biomass Pyrolysis: Kinetics And Reaction Mechanisms <i>Megan Soh, Jiuan Jing Chew, and Jaka Sunarso</i>
4.30 - 4.45pm	PEP-10	The Optimization Of Natural Gas Utilization Network In Single Region Using Pinch Analysis Method <i>R P Anugraha, Annasit, A Altway, Juwari, and Renanto</i>
4.45 - 5.00pm	PEP-13	Agile Solar Roof Tile Hvac <i>S Sinha, N Abdul Manaf, K Pethe, M Tri Luu, D Milani, A Abbas</i>
5.00 - 5.15pm	PEP-15	Acetalization Of Glycerol With Acetone To Produce Solketal As Fuel Additives Using Amberlyst-15 Catalyst <i>H. Sulisty, E. N. Huda, T. S. Utami, W. B. Sediawan, S. S. Rahayu, and M. M. Azis</i>



Date: 31 October 2019
Venue: Arcadia II, Armada Hotel (ROOM 2)
Time: 3.15 pm – 5.30 pm
Chairperson: Dr Usman, UM

3.15 - 3.30pm	CRE-14	Life Cycle Assessment Of Ethylene Production From Empty Fruit Bunch <i>R Akmalina and M G Pawitra</i>
3.30 - 3.45pm	CRE-15	Effect Of Reaction Parameters On Lipase-Catalyzed Kinetic Resolution Of (RS)-Metoprolol <i>Asiah Zulkifli, Mariani Rajin, Sariah Abang, S.M Anissuzzaman, and Azlina Harun@ Kamaruddin</i>
3.45 - 4.00pm	CRE-16	Electrospray Synthesis And Photocatalytic Activities Of ZnO-SiO ₂ Composites Particles <i>L Qomariyah, W widiyastuti, K Kusdianto, T Nurtono, D Anggoro, and S Winardi</i>
4.15 - 4.30pm	CRE-17	Kinetic Analysis on Reduction of Carbon-Infiltrated Porous Hematite by Curve Fitting Method <i>K Abe, A Kurinawan, K Ohashi, M Sanada, T Nomura, and T Akiyama</i>
4.30 - 4.45pm	CRE-18	Kinetic Study of Simultaneous Ethanol Decomposition and Reduction of Low-grade Iron ore at Transient Temperature <i>A Kurniawan, K Abe, M Sanada, T Nomura, and T Akiyama</i>
4.45 - 5.00pm	CRE-19	Size-Selective Treatment of Polypropylene Particles in a Plasma Cyclone Reactor <i>H. Sekiguchi, S. Kodama, K. Ishikawa, and K. Miyazaki</i>
5.00 - 5.15pm	CRE-22	Aspen Plus Simulation-Based Parametric Study Of Benfield Process Using Hot Potassium Carbonate Promoted By Diethanolamine <i>L W W Ngu, A Mahmoud, and J Sunarso</i>
5.15 – 5.30pm	CRE-24	Wetted Wall Photocatalytic Reactor for Methylene Blue Degradation <i>Amornpon Boonying, Artith Kasempremsak, Supunee Junpirom, and Aroonsri Nuchitprasittichai</i>



Date: 31 October 2019
Venue: Arcadia III, Armada Hotel (ROOM 3)
Time: 3.15 pm – 5.30 pm
Chairperson: Dr Fairus, UM

3.15 - 3.30pm	SPE-10	Comparative Study Of Heat Pump Assisted Distillation Column And Its Application For Pressure Swing Distillation Process <i>Dyah Retno Sawitri and Arief Budiman</i>
3.30 - 3.45pm	PCM-43	Aiding Alarm Rationalization By Automatic Identification Of Various Sequential Patterns In Large Volume Of Alarm And Event Log Data <i>Kaushik Ghosh and Gokula Krishnan Sivaprakasam</i>
3.45 - 4.00pm	PCM-44	Exploring The Implementation Barriers Of Eco-Toilet System In The Philippines Using Decision-Making Trial And Evaluation Laboratory (DEMATEL) Approach <i>J J J Ignacio, C F Malolos, N I Mendoza, J Lantin, A H Orbecido, and M A B Promentilla</i>
4.15 - 4.30pm	PCM-45	Synthesis of Bio-Hydrogen Network from Landfill Gas <i>Sadaf Hemmati, Chee Hoong Lee, Darren Yu Lun Chong, M. Mostafa Elnegihi, Dominic C. Y. Foo, and Bing Shen How</i>
4.30 - 4.45pm	PCM-46	Artificial Neural Network Topology Optimization using K-Fold Cross Validation for Spray Drying of Coconut Milk <i>Jesse Lee Kar Ming, Farah Saleena Taip, Mohd Shamsul Anuar, Samsul Bahari Mohd Noor, Zalizawati Abdullah</i>
4.45 - 5.00pm	PCM-47	Process Simulation Of The Pilot Scale Bioethanol Production From Rice Straw By Aspen <i>Hysys Phung K Le, Tin D T Le, Quan D Nguyen, Viet T Tran, and Phong T Mai</i>
5.00 - 5.15pm	PCM-31	Optimization of Agitation and Kinetic Studies on Proanthocyanidin Compound Extraction from Red Sorghum Grains in Agitated Vessel <i>D Y Susanti, W B Sediawan, M Fahrurrozi, and M Hidayat</i>
5.15 – 5.30pm	PCM-27	Stabilization of Quadruple-Tank Process with Time Delay via Tracking-Error Control in Relaxing Port-Hamiltonian Structure <i>Thanh Sang, Nguyen, Chee Keong, Tan, Ngoc Ha, Hoang, and Mohd Azlan, Hussain</i>



Date: 31 October 2019
Venue: Arista, Armada Hotel (ROOM 4)
Time: 3.15 pm – 5.15 pm
Chairperson: Dr Izzudin, UM

3.15 - 3.30pm	SHE-39	Acute Toxicity Assessment Of Heavy Metals Combination Using Microtox m500 Instrument <i>Amirul Ashraf bin Abdul Razak and Dzulkarnain bin Zaini</i>
3.30 - 3.45pm	SHE-30	Sustainability Assessment Of Levulinic Acid And Succinic Acid Production From Empty Fruit Bunch <i>R H Hafyan, L Bhullar, Z A Putra, M R Bilad, M D H Wirzal, and N A H M Nordin</i>
3.45 - 4.00pm	SHE-41	Effect Of Biocover Thickness On Methane Oxidation Rate Of Landfill Gas Emission From Municipal Solid Waste Landfill In Tropical Climate Region <i>Yusnan, F. Razi, and E. Munawar</i>
4.15 - 4.30pm	SHE-42	Evaluation of Hydrocarbon Gas Dispersion and Explosion in a Gas Processing Plant <i>D Rismayasari, Y W Budhi, J Rizkiana, T Cahyono, and Khairunnisa</i>
4.30 - 4.45pm	SHE-43	Cogeneration System For Energy Saving And CO ₂ Emission Reduction: A Case Study Of Textile Factory <i>P Sommani, T Krittametaporn, and A W Lothongkum</i>
4.45 - 5.00pm	SHE-47	Adsorption Of 4-Nitrophenol From Wastewater Using Sea Mango (<i>Cerbera odollam</i>) Based Activated Carbon <i>Nurul Zufarhana Zulkurnai, Nor Wahidatul Azura Zainon Najib, Umi Fazara Md Ali, and Tan Ru Shien</i>
5.00 - 5.15pm	BIO-19	Evaluation of different carbonate sources for bicarbonate- based integrated carbon capture and algae production system using <i>Spirulina platensis</i> <i>C C Batac, N S Gathercole, A F Maravilla, and A B Beltran</i>



Date: 31 October 2019

Venue: Atlanta East, Armada Hotel (ROOM 5)

Time: 3.15 pm – 5.30 pm

Chairperson: Dr Ching, UM

3.15 - 3.30pm	PEP-11	The Effect of Clay Content in the Adsorption of Surfactant by Reservoir Rock in the Enhanced Oil Recovery Process <i>L Nurmayanti, S Y P Dewi, B Murachman, and S Purwono</i>
3.30 - 3.45pm	PEP-28	Pyrolysis and Carbon Dioxide Gasification Kinetics of Pine Cones and Lignite Blends <i>Janica Y. Ang, Perry C. Dee, Amos B. Tan, and Vergel C. Bungay</i>
3.45 - 4.00pm	PEP-30	Process Design and Steady State Simulation of Natural Gas Dehydration Using Triethylene Glycol (TEG) to Obtain The Optimum Total Annual Costs (TAC) <i>N Kharisma, P S D Arianti, S A Affandy, R P Anugraha, Juwari, and Renanto</i>
4.15 - 4.30pm	PEP-31	Surface Modified Silica Nanoparticles With Hexytrimethoxysilane For Carbon Dioxide Foam Stabilization In Enhanced Oil Recovery <i>Tengku Amran Tengku Mohd, Azwan Harun, Noor Fitrah Abu Bakar, Muhammad Shafiq Mat Shayuti and Mohd Zaidi Jaafar</i>
4.30 - 4.45pm	PEP-33	Application Surfactant-Polymer Flooding For Improving Oil Recovery In The Indonesian Oil Field <i>W Hasokowati, Rochmadi, S Purwono, B Murachman, J Wintoko, A T Yuliansyah, and M M Azis</i>
4.45 - 5.00pm	PEP-36	Kinetic Analysis Of Co-Pyrolysis Of Biomass/Sorbent Mixtures At Different Ratios <i>A R Ariffen and N Yusoff</i>
5.00 - 5.15pm	PEP-38	Optimization of Small-Scale Natural Gas Liquefaction using Nitrogen Expander with Precooled Cycle <i>M A Henryawan and W W Purwanto</i>



Date: 31 October 2019

Venue: Atlanta West, Armada Hotel (ROOM 6)

Time: 3.15 pm – 5.15 pm

Chairperson: Dr Iskandar UM

3.15 - 3.30pm	CEE-6	Study and Experimental Setup of Liquid-Solid Fluidization in Rangsit University <i>S. Chunsawang and W. Ekasilp</i>
3.30 - 3.45pm	CEE-1	Early Intervention of Process Simulation and Automation Teaching in Chemical Engineering <i>Fadzrul Izwan Muhd Ali, Zulfan Adi Putra, Farah Syamim Anwar, Zalina Harun, Haslinda Zabiri, and Shahrul Azman Zainal Abidin</i>
3.45 - 4.00pm	CEE-3	The Development Of An Iron Detection Method Based On Ammonium <i>Nadine Jenina A. Gallardo, Gemma Fae T. Monakil, Sheena I. Surla, and Edna C. Quinto</i>
4.15 - 4.30pm	CEE-4	Amine-based Carbon Dioxide Absorption: The Effect of Ionic Strength on the Protonation Constant of Monoethanolamine and Its Temperature Dependency <i>S Ma'mun, P K Setiawan, and E Indrayanto</i>
4.30 - 4.45pm	CEE-7	Role Of Operator Training Simulator (OTS) In Capability Building Towards The Fourth Industrial Revolution (IR 4.0) <i>A. Hasnor Hassaruddin Hashim, and B. Noorhidayah Hussein</i>
4.45 - 5.00pm	CEE-8	Conceptual Design of a Process Plant for the Production of Natural Dye from Merbau (Intsia bijuga) Bark <i>E Rahayuningsih, A Mindaryani, D T Adriyanti, L D Parthasiwi, P Adina H, and E Dyah A</i>