Poster Presentation

Session1 : Catalysis

CAP-1: A Study of Bimetallic PdCu Catalysts for Partial Hydrogenation of Fatty Acid Methyl Esters (FAMEs)
Chalita Pupairatchapong, Apanee Luengnaruemitchai, Nuwong Chollacoop

CAP-2: Multi-functionalized Mesoporous SBA-15 for Conversion of Glucose to 5-Hydroxymethylfurfural (HMF) in Aqueous System
Chanakan Trai-angkun, Apanee Luengnaruemitchai, Kajornsak Faungnawakij

CAP-3: A Study of Synthesis Conditions of TiO_2 Catalysts and Their Activity for Oxidative Steam Reforming of Methanol
Jareerat Chutirat, Apanee Luengnaruemitchai

CAP-4: Investigation of Fischer-Tropsch Synthesis Mechanism over Cobalt Catalyst by Kinetic Monte Carlo Simulation
Nuttawut Pugingna, Boonyarach Kitiyanan, Robert M. Ziff

CAP-5: Effect of 20 % Ethanol in Glycerol Feed for Catalytic Production of 1,2-Propanediol using 1 % Pd-$Cu_{0.3}Mg_{1.7}AlO$ Layered Double Oxide Catalyst without External H_2
Thanakorn Kumpradit, Sirirat Jitkarnka

CAP-6: Performance of Ethanol Dehydrogenation to Valuable Chemicals over Zr Partially-Substituted Layered Double Oxide Catalyst
Tuangrat Leungcharoenwattana, Sirirat Jitkarnka

CAP-7: Steam Reforming of LPG over Ce-doped Ni/Al_2O_3 Commercial Catalyst: Effect of Mercaptan on Ce-doped Ni/Al_2O_3
Kananon Vanboonyakit, Pongtorn Charoensuppanimit

CAP-8: Direct Synthesis of Light Olefins from CO_2 and H_2 over In_2O_3-Ga_2O_3 Admixed with SAPO-34.
Naphattanun Akkharaphatthawon , Thongthai Witoon

CAP-9: Hydrotreating of Oleic Acid over Heterogeneous Noble Catalyst.
Nutchada Kururatchaikun, Rungthiwa Methaapanon, Apinan Soottitantawat and Nuttapong Sodsai

CAP-10: Hydrogenolysis of Glycerol over Bimetallic on Alumina Catalyst
Parichart Konglek, Rungthiwa Methaapanon, Apinan Soottitantawat and Parephan Srisaarnt

CAP-11: Silica-supported TiO_2-ZrO_2 for Light-enhanced Adsorptive Desulfurization of Dibenzothiophene
Sukanya Thepwatee, Pawnprapa Pitakjakpipop, Watsamon Sukarasukon, Punnarai Leesakul

CAP-12: Graphitic Carbon Nitride/α-Manganese Oxide Nanowires as High-Performance Bifunctional Catalyst for Zn-Air Battery
Taksapohn Srimanoroth, Soorathep Kheawhom

CAP-13: Catalytic Conversion of Glucose into Glycerol using Catalysts.
Varissara Keeratihutthayakorn , Prasert Reubroycharoen, Tawatchai Charinpanitkul

CAP-14: DFT Calculation of Aldol Condensation between Furfural and 2-Butanone over MgO
Wilasinee Heebnak, Vudhichai Parasuk, Manaswee Suttipong

CAP-15: Effect of Acid Treatment on Carbon Content of Hydrochar from Hydrothermal Carbonization of Lignocellulosic Biomass
Sunalin Sattasathuchana, Boonyarach Kitiyanan, Pramoch Rangsunvigit, Pongtanawat Khemthong, Saran Youngjan, and Kajornsak Faungnawakij

Session 2 : Renewable Energy

REP-1: Production of Bio-jet Fuel from Palm Fatty Acid Distillate (PFAD) Over HZSM-12 Catalyst: Effect of Supported Metal (Ni and Co)
Ariya Eka Alel, Siriporn Jongpatiwut

REP-2: Effects of SDS, MES, L-leucine, and L-valine on Methane Hydrate Formation and Dissociation
Kimhak Neak, Santi Kulprathipanja, Pramoch Rangsunvigit

REP-3: Effect of Surface Pretreatments on the Catalyst Coating and Catalytic Performance of Pd/TiO_2 in Microscale-based Reactor for the Production of Bio-hydrogenated Diesel
Kongpat Jirapisaisuk, Siriporn Jongpatiwut, Yuttanant Boonyongmaneerat

REP-4: The Effect of $FeCl_3$ Addition on the Process Performance of a Two-Stage UASB System
Monchupa Lertpattanapong, Sumaeth Chavadej

REP-5: Ionic Liquid Pretreatment of Vetiver Grass for Fermentable Sugar Production
Pattarawan Ampunsang and Apanee Luengnaruemitchai

REP-6: Electrochemical performance of double-perovskite Sr2FeTi1-x(Nb, V)xO6-δ materials for IT – SOFC
Ausa Potong, Soamwadee Chaianansutcharit

REP-7: Recovery of MnO_2 from Spent Alkaline Battery by Precipitation and Hydrothermal Techniques
Kamonpan Manowilaikun,Julamanee Wachiradecha,Suttida Chaumket,Rojana Pornprasertsuk

REP-8: Iron Fiber as Anode Current Collector for Secondary Zinc-Nickel Battery
Kridsada Jirasattayaporn, Soorathep Kheawhom

REP-9: Pyrolysis of Waste Palm Oil from Empty Fruit Bunch using Coal Fly Ash Catalyst
Kuntima Niyakit, Tharapong Vitidsant

REP-10: Superstructure Development of Processing Pathway for The Empty Fruit Bunch of Palm
Nusara Plodprong, Sirikanya Singcuna ,Pongtorn Charoensuppanimit

REP-11: Preparation of MnO_x/N-Doped Carbon Nanofibers
Saowaluk Soonthornkit, Rojana Pornprasertsuk

REP-12: Synthesis of P-doped graphitic carbon nitride and reduced graphene oxide composite for oxygen reduction reaction
Songthai Phuanngluam, Soorathep Kheawhom, Chutimon Satirapipathkul

REP-13 Continuous Production of Biodiesel from Palm Oil using a Dolomite Extrudate Catalyst in Fixed Bed Reactors
Tanakit Jamjumrus, Prapan Kuchonthara, Prasert Reubroycharoen, Chawalit Ngamcharussrivichai, Tharapong Vitidsant

REP-14 Conversion of Palm Olein to Biojet Fuel over Nickel Supported on Beta and Hy Zeolites
Thanawat Sukanan , Prasert Reubroycharoen

REP-15 Triacetin Production by Acetylation of Glycerol with Acetic Acid over Aluminium Oxide
Thanida Charoennetisart, Rungthiwa Methaapanon, Apinan Soottitantawat

REP-16 Effects of Cellulose and Lignin on Bio-crude Production by Hydrothermal Liquefaction of Biomass
Usanisa Chantarawongpaisan, Prapan Kuchonthara

Session 3 : Surfactant, Separation and Environment

SEP-1: Carboxylate Extended Based Microemulsions for Enhanced Oil Recovery Application Through the HLD Concept: Effect of Polyethylene Oxide (EO) and Polypropylene Oxide (PO) Groups
Bagas Yoga Pradhana, Ampira Charoensaeng, Uthaiporn Suriyapraphadilok, Ben Shiau

SEP-2: Methane and Carbon Dioxide on Aluminium Based MOFs and Zirconium Based MOFs
Orawee Lamoonkit, Santi Kulpratipunja, Chalita Ratanatawanate, Pramoch Rangsunvigit

SEP-3: Green-house Gas Storage through Enhanced Hydrate Formation – Effects of Promoters on Gas Uptake and Induction Time
Thiphakorn Absuwan, Santi Kulprathipanja, and Pramoch Rangsunvigit

SEP-4: Purification of Lactic Acid by using a Cost-Effective Adsorbent: Studying of Adsorption Isotherm for Scale-up Production
Chonlada Naksa-nguan, Sujitra Wongkasemjit, Thanyalak Chaisuwan

SEP-5: Removal of Mixed VOCs of Benzene, Toluene, and Xylene by Using Catalytic Corona Discharge System.
Issaree Tantiprapa, Sumaeth Chavadej

SEP-6: Combined Life Cycle Analysis and Material Flow Analysis as a Tool for End of Life Options of Used Lubricating Oils
Komsan Toeipomthong, Ampira Chareonsaeng, Uthaiporn Suriyapraphadilok, Sutha Khaodhiar

SEP-7: Evaluation of Environmental Impacts for End of Life Treatment of Non-metallic Part from Waste Printed Circuit Boards (PCBs) through Enhanced using Life Cycle Assessment (LCA)
Warisara Rungsitikul, Sutha Khaodhiar, Ampira Charoensaeng, Manit Nithitanakul

SEP-8: Combined Material Flow analysis and Life Cycle Analysis for End of Life of Petroleum Waste Management
Putthita Chongchongprasert, Sutha Khaodhiar, Ampira Charoensaeng

SEP-9: Novel Microemulsion Formation by the Hydrophilic-Lipophilic Deviation Concept using Carboxylate based Extended surfactants for EOR Application.
Suchawadee Kumkhuntod, Uthaiporn Suriyapraphadilok, Ben Shiau, Ampira Charoensaeng

SEP-10: CO_2 and CH_4 Adsorption/Seperation on Synthesized Zeolite from Naturial Diatomite
Sanfun Limprapaipong, Pitak Laoratanakul, Uthaiporn Suriyapraphadilok

SEP-12: Extraction of Moringa Oleifera Seed Waste from Cold-pressed Process by Supercritical CO_2
Pichaya Munkong, Ruengwit Sawangkeaw, Winatta Sakdasri, Somkiat Ngamprasertsith

Session 4 : Process and System Engineering

PSP-1: Enumeration Method for Optimal Design of Fired Heaters
Issara Intararit, Uthaiporn Suriyaprapahadilok, Andre L. H. Costa, Miguel Bagajewicz

PSP-2: Stochastic Optimization for Petrochemical Supply Chain
Kan Rungphanich, Kitipat Siemanond

PSP-3: Heat Exchanger Network Design/Retrofit
Siwat Valeekiatkul, Kitipat Siemanond

PSP-4: Dynamics Model and Control System of Carbon Dioxide Capture in Fluidized Bed Using Computational Fluid Dynamics
Chonnikan Tirapanichayakul, Benjapon Chalermsinsuwan, Pornpote Piumsomboon

PSP-5: Carbon Dioxide Capture on K_2CO_3/Al_2O_3 sSorbent Prepared in Base Condition
Jaruwan Charoenchaipet, Pornpote Piumsomboon, Benjapon Chalermsinsuwan

PSP-6: Process Design and Evaluation of Molten Carbonate Fuel Cell Incorporated with Chemical Looping Air Separation System
Kanokporn Kobkuwittaya, Prapan Kuchonthara

PSP-7: Effects of Time Mixing on Physical and Mechanical Properties of Brake Pads
Kasidet Rupiyawet, Kritsana Kaewlob, Pornapa Sujaridworakun, Wantanee Buggakupta

PSP-8: Computational Fluid Dynamics Simulation of Stage Fluidized Bed Riser: Effect of Stage Configuration on System Hydrodynamics
Krittin Korkerd, Chaiwat Soanuch, Pornpote Piumsomboon, Benjapon Chalermsinsuwan

PSP-9: Grinding Process Development for the Improvement of Brake Pad Surface Flatness
Savita Chaysakul, Thiti Bovornratanaraks, Tonphong Kaewkongka

PSP-10 Computational Fluid Dynamics Model of Circulating Fluidized Bed Reactor for Carbon Dioxide Capture from Different Sources
Tanaporn Benjaprakairat, Benjapon Chalermsinsuwan, Pornpote Piumsomboon

PSP-11 Dynamic Simulation and Control System for Chemical Looping Combustion
Thanapat Wanotayaroj, Benjapon Chalermsinsuwan, Pornpote Piumsombon

PSP-12 The Effect of Hot Molding Parameters on Porosity of Brake Friction Materials
Thanaporn Wilairat, Nattawut Saechin, Wantanee Buggakupta, Pornapa Sujaridworakun

PSP-13 Effect of Cold-Pressing Process for the Production of Brake Pad with Uniform Density
Jittrathep Sukultanasorn, Thiti Bovornratanaraks, Nattawut Saechin

Session 5 : Biomedical and Green Polymers

BGP-1: Cytotoxicity against Cancer Cells of Chitosan Oligosaccharides Prepared by Electrical Discharge Plasma
Chattaporn Prommool, Ratana Rujiravanit, Sewan Theeramunkong, Nagahiro Saito

BGP-2: Deposition of Silver Nanoparticles on Cellulose, Nanosilica and Zeolite by Electrical Discharge Plasma
Teeranun Srihirunthanon, Ratana Rujiravanit, Nagahiro Saito, Takeshi Hagio

BGP-3: Developement of Bacterial Cellulose Composites Reinforced with Nanocarbon-Coated Cotton Fabric
Sutaphat Hongkerd, Ratana Rujiravanit

BGP-4: Effect of Emulsion Aqueous Phase Content and Amount of Hydroxyapatite (Hap) On Morphology of Polyhipes
Nunthawan Kwangsawart, Jitima Preechawong, Manit Nithitanakul

BGP-5: Drug Release Behavior of Dexamethasone from Chemical Binding of Chitosan on Magnetic/PLGA Nanoparticles-aptamer for Biomedical Application.
Pakkamon Jarruwale, Kittima Bootdee, Manit Nithitanakul

BGP-6: Encapsulation of Curcumin with PLGA Nanoparticle loaded in Poly(vinyl alcohol) Electrospun for Wound Dressing application
Potchanee Reanwilas, Kittima bootdee, Manit Nithitanakul

BGP-7: Development of Magnetically Actuated Thermoresponsive in Hybrid Nanocomposite of Bacteria Cellulose Hydrogel
Vaneua Vivattananukull and Hathaikarn Manuspiya

BGP-8 Antibacterial Hydroxyapatite Granules through Mangosteen Extract Impregnation
Sonthaya Chaiarwut, Jitti Niyompanich, Pongpol Ekabutr, Prasit Pavasant, Pitt Supaphol

BGP-9 New Approach for Green Synthesis of Gold Nanoparticles using latex from stem of *Cryptolepis buchanani* (Thao En On)
Kittiphong Thongsuk, Urarika Luesakul, Sakchai Laksee, Nongnuj Muangsin

BGP-10 Facile Preparation of Whey Protein-Modified Magnetic Nanoparticles as Adsorbents for Methylene Blue
Kwandee Chamchoy, Thitirat Inprasit, Chutima Vanichvattanadecha, Penwisa Pisitsak

Session 6 : Polymer Engineering and Processing

PPP-1: The Controlled Release of Nitrogen Incorporate into Biodegradable Polymer Blends
Luksamon Pratumma, Sutep Charoenpongpool, Manit Nithitanakul

PPP-2: Reinforcement of Hydrogel Structure by Calcium Carbonate particles for Enhanced Oil Recovery Application
Tuch Subanchong, Uthaiporn Suriyapraphadilok, Ampira Charoensaeng, Benjamin Shiau

PPP-3: Bio based Thermoplastic Vulcanizate Foam: Natural rubber and Polybutylene Succinate Blend
Jedtarin Charoenta, Chanchai Thongpin

PPP-4: Effect of Screw Speed on Morphology and Properties of In-Situ Fibrillation PLA/PE Blend
Kantapong Samleekaew, Chanchai Thongpin

PPP-5 Influrence of Rotor Speed on Polycarprolactone (PCL)/Natural Rubber (NR) Blend Using Phenolic Curing System
Nylar Chantanapho,Chanchai Thongpin

PPP-6 Carbon Nanotube/Polymer Composite Membrane for CO_2 Capture via a Membrane Gas Absorption Process
Suphitchaya Srisodsai and Chalida Klaysom

Session 7 : Smart and Advanced Materials

SMP-1: Development of pH-Sensor in Smart Packaging Derived by Hybrid Nanocomposite of Bacterial Cellulose Nanocrystals based Surface-Doped Chromophore
Chaninya Makiad, Visuta Engkagul, Christoph Weder, Hathaikarn Manuspiya

SMP-2: Preparation of Nanoporous Carbon Electrodes for Applications in Supercapacitors
Chanlika Yoksiri, Sujitra Wongkasemjit, Thanyalak Chaisuwan

SMP-3: Silver Nano Polymer Composite Membrane for Optical Sensing of Sulfide Ion Through In situ and Ex situ Technique
Muhammad Bagus Arif Stephan Thierry Dubas

SMP-4: Development on "Hom Thong" Banana's Packaging for Export by Sea Transportation
Nithinai Rangsiwutisak, Hathaikarn Manuspiya

SMP-5: Development of ZnO Nanoparticles-deposited High Efficiency Air Filters by Applying Plasma Technology
Pawida Piyachat, Ratana Rujiravanit, Nagahiro Saito

SMP-6: Electrochemical Aptasensor based on Anti-BPA Aptamer-Gold Nanoparticles Modified Screen-Printed Carbon Electrode for Bisphenol A Determination
Phumin Moonsan, Pongpol Ekabutr, Anyarat Watthanaphanit, Pitt Supaphol

SMP-7: Surface Modification of UHMWPE Using Chemical Treatment for application in Metal Floccuation and antimicrobial resistance from Waste Water
Varote Vatesoonthornthep, Pongpol Ekabutr, Pitt Supaphol

SMP-8: Copper Hybrid Metal-Organic Decomposition Inks using Co-solvent for Conductive Pattern
Chaiwat Klaewwigkij, Soorathep Kheawhom

SMP-9: Preparation and Thermochromism of Polydiacetylene/Zinc(II)ion/Silica Nanocomposite
Chanachon Kaewlin, Rakchart Traiphol, Nisanart Traiphol

SMP-10: Preparation of Bismuth Ferrite as Photo-Supercapacitors Application
Husna Haromae, Prasit Pattananuwat

SMP-11: Effects of Recycling Dust Composition on Performance of Brake Pad
Kanokwan Chanadusakorn, Kritsana Kaewlob, Prasert Reubroycharoen

SMP-12: Effect of cotton fibers on carbon/carbon composite xerogels electrode for using in EDLCs
Kasawan Sirichan, Palang Bumroongsakulsawat, Suttichai Assabumrungrat, Kriangsak Kraiwattanawong

SMP-13: Color-transition Behaviors of Polydiacetylene-based Nanocomposite with Zinc Oxide Nanocrystals
Natthakan Prakobkaew, Rakchart Traiphol, Nisanart Traiphol

SMP-14: Enhancement of Photocatalytic Performance of Traditional TiO_2 by Silver Deposition through Chemical Reduction at Room Temperature
Tanaporn Narkbuakaew and Pornapa Sujaridworakun

SMP-15: Synthesis and Characterization of Cr-doped $NaTaO_3$ Photocatalysts
Tuangphorn Prasitthikun, Pornapa Sujaridworakun

SMP-16: Preparation of Polypyrrole Coated Zinc Anode Elctrode for Inhibition Corrosion of Secondary Zinc Ion Battery
Weerapong Nuanwat, Prasit Pattananuwat

SMP-17: Synthesis of NaA Zeolite from Prachin Buri Kaolin Using Secondary Growth and Hydrothermal Technique
Neeranut Kuanchertchoo, Wutthinan Suksawaeng, Chayada Sunthornwuttinan, Worapot Chaoon, Warunee Fangtawanit

SM-P-18: DOX-conjugated Polymeric Micelles for pH-triggered Drug Release in Cancer Cells
Yuwaporn Pinyakit, Suda Kiatkamjornwong, Voravee P. Hoven

Session 8 : Conductive and Electroactive Polymers

CPP-1: Quaternized Graphene oxide(Q-GO)/ Quaternized Polybenzimidazole (Q-PBI) Composite Membrane for Glucose Fuel Cell
Pongthorn Kunanupatham, Sairung Changkhamchom and Anuvat Sirivat

CPP-2: Development of Electromagnetic interference (EMI) Shielding Fabrics
Sirapob Tavon, Kawee Srikulkit

CPP-3: Simultaneous Determination of Dopamine, Uric Acid, and Ascorbic Acid by Using Screen Printed Carbon Electrode Modified with Platinum Nanoparticles/Polydopamine/ Reduced Graphene Oxide (Ptnps/PDA/RGO) Nanocomposite
Pijika Mool-amkha, Kontad Ounnunkad, Surin Saipanya, Napaporn Youngvises, Adisorn Tuantranont, Chanpen Karuwan, Jaroon Jakmunee