

Chairman Asst.Prof.Dr. Rujikarn Nasanit and Dr. Chonlatep Usaku

Session 1 Link <https://zoom.us/j/5407590556>

Room Primary

Time	Track	Ref. NO.	Authors	Title	Remark
13.00-13.15	Yamaguchi University		Prof.Dr. Izumi Kumakiri	Application of Membrane Separation in Bio-ethanol Production	Keynote
13.15-13.30	Track1	O114-T1A	Ms. Janjira Tangsanthakun	Crystallization of Palm Olein under the Influence of Sucrose Esters	
13.30-13.45	Track1	O82-T1E	Asst.Prof.Dr. Nattapon Chantarapanich	Biomechanical Study of Midpalatine Suture and Miniscrews Affected by Maturation of Midpalatine Suture, Monocortical and Bicortical Miniscrew Placement in Bone-borne Rapid Palatal Expander: A Finite Element Study	
13.45-14.00	Track1	O91-T1E	Asst.Prof.Dr. Nattapon Chantarapanich	Biomechanical Performance between Single and Double Lag Screw Trochanteric Gamma Nail used to Stabilize Femoral Neck Fracture: A Finite Element Study	
14.00-14.15	Track1	O95-T1E	Asst.Prof.Dr. Nattapon Chantarapanich	Biomechanical Effect of Length and Diameter of Short Implant used in Splinted Prosthesis at Posterior Atrophic Maxilla of Aging Patient: A Finite Element Study	
14.15-14.30	Track1	O218-T1Pi	Dr. Theerawat Ranguphan	Coaction of Bio-sorption and Bio-filtration for the Remediation of Domestic and Agricultural Wastewater Contaminated with Heavy Metal	*
14.30-14.45	Track1	O23-T1A	Ms. Velisia Chandra Gunawan	Performance Analysis of Effective Microorganisms on Chicken Manure Composting	
14.45-15.00	Track1	O167-T1S	Mr. Pratchaya Muangrod	Effects of Wash Cycle on Physical and Chemical Properties of Rehydrated Jellyfish By-product and Jellyfish Protein Powder	Recorded VDO
15.00-15.30	Break and Poster Session				
15.30-15.45	Track1	O166-T1S	Mr. Wiriya Charoenchokpanich	Salt Reduction in Grade CD Salted Jellyfish (<i>Lobonema Smithii</i>) as Affected by a Mechanical Washing Machine	Recorded VDO**
15.45-16.00	Track1	O169-T1S	Mr. Nuttawut Morakot	Effect of Glucomannan and Potassium Sorbate on Quality and Shelf life of Fresh-cut Cantaloupe	
16.00-16.15	Track1	O79-T1E	Assoc.Prof.Dr. Samroeng Inglam	Effect of Implant Diameter and Cortical Bone Thickness on Biomechanical Performance of Short Dental Implant-Supported Distal Cantilever: A Finite Element Study	
16.15-16.30	Track1	O161-T1S	Ms. Supakorn Srirajan	Product Development of Rice Spaghetti Supplemented with Soy Protein, Dietary Fiber and Antioxidant from Durian Peel by Extrusion	
16.30-16.45	Track1	O168-T1S	Ms. Tanaporn Emrerak	Processed Flavors Derived from Combined Enzymatic Bromelain By-product Jellyfish Hydrolysate, Reducing Sugars (Glucose, Ribose) and Arginine	

Chairman Asst.Prof.Dr. Thosapon Katejanekarn, Assoc.Prof.Dr. Kasama Sirisomboon, Asst.Prof.Dr. Thibodin Sansawang, and Dr. Chatthanon Bhothikhun

Session 2 **Link** <https://zoom.us/j/3638365465>

Room Fauna

Time	Track	Ref. NO.	Authors	Title	Remark
13.00-13.15			Prof.Dr. Li Jian	The Integrated International Education of Mechanical Engineering based on OBE Methodology	Keynote
13.15-13.30	Track2	O112-T2E	Asst.Prof.Dr. Thibodin Sangsawang	Optimization for Biodiesel Production by Transesterification with Electrical Fields	
13.30-13.45	Track2	O155-T2P	Mr. Sivapong Phetsong	The Monitoring System for the 5-kW Solar Pumping System	
13.45-14.00	Track2	O192-T2S	Asst.Prof.Dr. Vichuda Mettanant	Energy Use and Thermal Comfort of People Living in Traditional Thai Houses	
14.00-14.15	Track2	O21-T2E	Assoc.Prof.Dr. Kasama Sirisomboon	Effects of In-bed Stoichiometric and Flue Gas Recirculation on Combustion and Environmental Performances of a Swirling Fluidized-bed Combustor	
14.15-14.30	Track2	O30-T2E	Mr. Chalakorn Chaowanapanit	Energy Consumption Reduction by High Solar Reflective Paint	
14.30-14.45	Track2	O80-T2S	Asst.Prof.Dr. Weeranut Intagun	Influences of Mixing Ratios on Leucaena Pellet Physical Properties by Using Fermented Cassava-rhizome	
14.45-15.00	Track2	O99-T2E	Dr. Chatthanon Bhothikhun	Closed-form Expressions of Generalized Conforming Triangular Finite Element for Thermal Bending Analysis of Thin Plate	
15.00-15.30	Break and Poster Session				
15.30-15.45	Track2	O128-T2P	Assoc.Prof.Dr. Pipat Chaiwiwatworakul	A Simulation Study of Radiant Chilled Ceiling with Dedicated Outdoor Air Systems for Office Buildings in Thailand	
15.45-16.00	Track2	O97-T2E	Assoc.Prof.Dr. Pipat Chaiwiwatworakul	A Field Survey of Thermal Comfort in Air-conditioned Space in Songkhla's Hot Humid Climate	*
16.00-16.15	Track2	O9-T2E	Dr. Yeek Chia Ho	Recent Advancement of Sustainable and Renewable Energy in Salinity Gradient for Power Generation	**
16.15-16.30	Track2	O216-T2P	Assoc.Prof.Dr. Prakorn Ramakul	Extraction of Lutein from Marigold Flower using Solvent Extraction	

Chairman Asst.Prof.Dr. Pat Sooksaeen, Dr. Mati Horprathum, and Dr. Kantida Pancharoen

Session 3 Link <https://zoom.us/j/4920461206>

Room Flavio

Time	Track	Ref. NO.	Authors	Title	Remark
13.00-13.15	National Electronics and		Dr. Mati Horprathum	Design and Engineering of Advanced Nanoscale Thin Films by Physical Vapor Deposition and Their Emerging Applications	Keynote
13.15-13.30	Track3	O187-T3P	Dr. Jennarong Tungtrongpairoj	Carbothermic Reduction of the Waste Chromium Oxide Rods from Thermal Spray Processes	
13.30-13.45	Track3	O197-T3P	Mr. Veerasak Songsujaritkul	Effect of Sintering Temperature and Cooling Rate on the Microstructure and Hardness of Fe-Cr-Mo-V-W-C Sintered Steel added with MoS ₂	
13.45-14.00	Track3	O200-T3P	Dr. Natkrita Prasoesopha	Mechanical Properties and Melt Flow Index of Poly (butylene succinate) Blended with a Small Amount of Natural Rubber Compound	
14.00-14.15	Track4	O104-T4P	Assoc.Prof.Dr. Duang-arthit Srimoon	A Wideband Printed Monopole Antenna with a Co-Planar Waveguide Feeding	
14.15-14.30	Track4	O157-T4Pr	Asst.Prof.Dr. Yutana Jewajind	Inverse Kinematics of Manipulator Robot using a Combined Cyclic Coordinate Descent and a Differential Evolution Algorithm.	
14.30-14.45	Track4	O109-T4P	Dr. Natapong Wongprommoon	Simulating Elliptic Low-pass Filter based on MOCCCII	
14.45-15.00	Track4	O201-T4P	Asst.Prof.Dr. Chiabwoot Ratanavilisagul	Modification Fitness Function of Particle Swarm Optimization to Improve the Cluster Centroid	
15.00-15.30	Break and Poster Session				
15.30-15.45	Track4	O84-T4P	Ms. Achara Phuagprapun	Magnetic Force Microscopy Characterization of Write Field Profiles of Magnetic Recording Heads Having a Pole-tip Protrusion	
15.45-16.00	Track4	O98-T4P	Assoc.Prof.Dr. Duang-arthit Srimoon	A Dual-Band Printed Dipole Antenna for Unidirectional Radiation	*
16.00-16.15	Track3	O110-T3P	Prof.Dr. Roland Loto	Corrosion Resistance Study of UNS A96110 Aluminum Alloy in Chloride-sulphate Solution	
16.15-16.30	Track3	O174-T3P	Prof.Dr. Roland Loto	Corrosion Inhibition Effect of 1-thia-3-azaindene on Type 304 Austenitic Stainless Steel in 3M H ₂ SO ₄ Solution	
16.30-16.45	Track3	O175-T3P	Prof.Dr. Roland Loto	Corrosion Inhibition Study and Statistical Data of Thymus Mastichina and Alicium Verum Oil on Low Carbon Steel in Dilute H ₂ SO ₄ and HCl Solution	
16.45-17.00	Track3	O51-T3P	Prof.Dr. Roland Loto	Zinc Electrodeposition of Mild Steel in the Presence of Ginger, Pomegranate and Celery Extracts	**
17.00-17.15	Track3	O185-T3P	Ms. Parina Nuket	Influence of Annealing Temperature on Structural Properties and Stability of CsPbBr ₃ /TiO ₂ Core/Shell	
17.15-17.30	Track4	O32-T4S	Ms. Dipanita Chakraborty	Washroom Sign Detection Using Convolution Neural Networks	
17.30-17.45	Track4	O33-T4S	Mr. Susanta Malakar	Detection of Text and Non-Text Signs Using Convolution Neural Networks	
17.45-18.00	Track4	O146-T4E	Ms. Phairin Thaisongkroh	Low-pressure Measurement using an Extrinsic Fiber-based Fabry-Perot interferometer for Industrial Applications	

Chairman Asst.Prof.Dr. Sujin Wootthichaiwat and Dr. Narit Triamnak

Session 4 Link <https://zoom.us/j/5822503275>

Room Magenta

Time	Track	Ref. NO.	Authors	Title	Remark
13.00-13.15	Track5	O142-T5S	Asst.Prof.Dr. Sujin Wootthichaiwat	Application of Data Clustering in Improving Efficiency of Shipment Arrangement: A Case Study of Snack Manufacturer in Thailand	
13.15-13.30	Track5	O162-T5S	Asst.Prof.Dr. Supakit Rooppakhun	The Influence of Suspension Parameters on a Tilt Angle of Passenger Bus for the Stability Test	
13.30-13.45	Track5	O65-T5Pi	Asst.Prof. Jarut Kunanoppadol	Low Cost Medical Bed: Kano's Model	
13.45-14.00	Track5	O96-T5S	Asst.Prof. Dechaphan Ratsasabasart	Predictors of Behavior Factors of Industrial Waste Management: A Case Study at Bangplee Industrial Estate	
14.00-14.15	Track5	O181-T5Pi	Mr. Thammawit Prasert	Thai Coconut Price Forecasting using ARIMA Model	Recorded VDO
14.15-14.30	Track5	O25-T5Pi	Mr. Yuqiang Wei	Optimized Critical Chain Method in Scheduling Management of Pipeline Project	**
14.30-14.45	Track5	O180-T5Pi	Mr. Natdanai Iamsupa	A Mathematical Model for Single Plant Ready-mixed Concrete Dispatching Problems with Order Rejection	
14.45-15.00	Track5	O186-T5Pi	Ms. Kanitha Sangjanse	Traffic Signal Modeling Using Simulation Technique	
15.00-15.30	Break and Poster Session				
15.30-15.45	Track5	O189-T5Pi	Ms. Panitta Pholdee	Hybrid Algorithm for Bin Packing Problems in Construction Material Store	
15.45-16.00	Track5	O190-T5Pi	Mrs. Sirima Sawasdee	Mitigation of Fuel Consumption and Pollutant Emission for Vehicle Routing Problem	
16.00-16.15	Track5	O24-T5Pi	Mr. Chenggong Feng	The Cost of Quality Reduction on a Cross Country Pipeline Construction Project	
16.15-16.30	Track5	O42-T5S	Ms. Tippawan Nasawan	Determining Inventory Replenishment Policy For Major Component In Assembly-to-order of Cooling System Manufacturing	

Chairman Prof. Dr. Suttichai Assabumrungrat and Asst. Prof. Dr. Worapon Kiatkittipong

Session 5 Link <https://zoom.us/j/5341709165>

Room Vermillion

Time	Track	Ref. NO.	Authors	Title	Remark
13.00-13.15	Kumamoto University, Japan		Prof.Dr. Tetsuya Kida	Energy Applications of Graphene Oxide Nanosheet Membranes	Keynote
13.15-13.30	Special T	O83-STA	Prof.Dr. Tetsuya Kida	Carbon-based Membrane Reactor using Graphene Oxide Nanosheets	
13.30-13.45	Special T	O100-STA	Dr. Siti Zullaikah	A One-step Production of Biodiesel from Intact Wet Microalgae Using a Non-catalytic Subcritical Water-ethanol Mixture and Deep Eutectic Solvent	
13.45-14.00	Special T	O102-STA	Afifatul Jannah	Optimization of a Non Catalytic In situ Process to Produce Fatty Acid Ethyl Esters and Ethyl Levulinate from Rice Bran Using a Subcritical Water-ethanol Mixture	
14.00-14.15	Special T	O103-STA	Mr. Shunsuke Kimura	Graphene Oxide-based Catalytic Process for Upgrading Algal Bio-oil under Supercritical Carbon Dioxide	
14.15-14.30	Special T	O147-STA	Ms. Manami Shimoyoshi	Single Particle Fluorescence ON/OFF Switching of CsPbBr ₃ Quantum Dots Ybridized with Photochromic Diarylethene	
14.30-14.45	Special T	O70-STA	Mr. Juvyneil Echon Cartel	In-Situ Fatty Acid Ethyl Ester Production from Wet Mahogany (Swietenia Macrophylla) Seed using Supercritical Carbon Dioxide and Azeotropic Ethanol	
14.45-15.00	Special T	O73-STA	Mr. Jonas Karl Christopher Nuevas Agutaya	Optimization and Mechanistic Studies of the Conversion of Glucose to HMF in the Supercritical CO ₂ -subcritical H ₂ O-isopropanol System	
15.00-15.30	Break and Poster Session				
15.30-15.45	Special T	O75-STA	Ms. Miyu Nakamura	Conversion of Algal Biopolymers into Useful Products by GO-immobilized Enzymes Activated by Microwave	
15.45-16.00	Special T	O77-STA	Mr. Takeshi Shinkai	Highly Sensitive Detection of Acetone and Ethanol under Humid Conditions using Well-aligned ZnO Nanorod Films	
16.00-16.15	Special T	O78-STA	Mr. Yuji Akaishi	Photoreversible Luminescence Switching of CsPbBr ₃ Nanocrystals using Photochromic Diarylethene	**
16.15-16.30	Special T	O35-STP	Ms. Warisara Woranuch	Extruded CaO Catalyst for Biodiesel Production via Transesterification	

Chairman Dr. Mutsee Termatanan and Dr. Nutchapon Chotigkrai

Session 6 Link <https://zoom.us/j/2614436517>

Room Tempera

Time	Track	Ref. NO.	Authors	Title	Remark
13.00-13.15			Assoc.Prof.Dr. Chin Kui CHENG	Innovative Methods to Treat Palm Oil Mill Effluent	Keynote
13.15-13.30	Track2	O54-T2P	Mr. Lee Zhang Sheng	Hydrothermal Treatment of Palm Oil Mill Effluent (POME) under Oxidative and Non-oxidative Conditions	
13.30-13.45	Track2	O105-T2E	Prof.Dr. Tomohiko Tagawa	Micro-Raman Spectroscopic System for in Situ Evaluation of Fube Wall Type Catalyst	
13.45-14.00	Track2	O125-T2A	Prof.Dr. Tsuyoshi Imai	Hydrogen Sulfide Reduction by Conductive Concrete with MFCs Strain (<i>Proteus</i> spp.)	
14.00-14.15	Track2	O144-T2A	Dr. Haruyuki Ishii	Facile Syntheses of Functional Nanoparticles via Environmentally-friendly Processes	
14.15-14.30	Track2	O36-T2A	Dr. Yoshitaka Matsumoto	Seasonal Change of Water Quality in River Located at Volcanic Mountain, Japan	
14.30-14.45	Track2	O29-T2P	Dr. Man Kee Lam	The Potential of Attached Growth of Microalgae on Solid Surface for Biomass and Lipid Production	
14.45-15.00	Track2	O127-T2E	Dr. Mardawani Mohamad	Extraction of Gallic Acid from <i>Chromolaena</i> sp. using Ultrasound-assisted Extraction	
15.00-15.30	Break and Poster Session				
15.30-15.45	Track2	O26-T2E	Mr. Wai Hong Leong	Microalgal-bacterial Culture for Wastewater Treatment and Microbial Biomass Generation to Produce Lipid-based Biofuel-implications of Ladening Municipal Wastewater	
15.45-16.00	Track2	O183-T2E	Dr. Mutsee Termatanun	Mo and Mn Co-doping for Isoproturon Degradation under Visible Light	
16.00-16.15	Track2	O210-T2A	Mr. Juvyneil Echon Cartel	One-step (Trans) Esterification of Mahogany (<i>Swietenia Macrophylla</i>) Seed Lipid using Supercritical Carbon Dioxide	**
16.15-16.30	Track2	O159-T2Pi	Ms. Araya Srisuwansakda	Effect of Catalyst-assisted Hydrothermal/Organosolv Process for Fractionation of Parawood	
16.30-16.45	Track2	O160-T2Pi	Ms. Namfon Chaipet	Efficiency of Protein Extraction from Palm Kernel Cake via Different Chemical Extraction Methods	