

Conference Programme

Day 1, Monday, 7th September 2026

TIME	PROGRAMME	VENUE
3.00 pm – 6.00 pm	Registration of participants	JC3 Hall, Level 1, University Building
END OF DAY 1		

Day 2, Tuesday, 8th September 2026

TIME	PROGRAMME	VENUE
8.00 am – 9.00 am	Registration and conference kit collection	JC3 Hall, Level 1, University Building
OPENING CEREMONY		
9.00 am – 9.10 am	National Anthem, Negaraku	JC3 Hall, Level 1, University Building
9.10 am – 9.50 am	Officiating Remarks by Prof. Abhimanyu Veerakumarasivam, Provost and Deputy Vice-Chancellor of Sunway University Welcoming Remarks by Prof. Nishanth Chemmangattuvalappil, Chairperson of SOMChE26 Welcoming Remarks by Prof. Ir. Denny Ng, Dean of Faculty of Engineering and Technology, Sunway University	
9.50 am – 10.10 am	Photography Session	
10.10 am – 11.10 am	Coffee Break + Onsite Poster Session	
11.10 am – 12.00 pm	Plenary Talk 1: Prof. Santanu Bandyopadhyay Indian Institute of Technology Bombay Sustainability Assessment: A Process Systems Engineering Perspective	JC3 Hall, Level 1, University Building
12.00 pm – 1.00 pm	Lunch	Gallery, Level 1, University Building
1.00 pm – 1.50 pm	Plenary Talk 2: Dr. Khalik Mohamad Sabil Petronas Research Sdn Bhd Beyond Intelligent Systems: The Mindset Driving Integrated Chemical Engineering for Global Challenges	JC3 Hall, Level 1, University Building
1:50 pm – 3.40 pm	Session 1	LT5

TIME	PROGRAMME	VENUE
	Session 2	LT6
	Session 3	LT7
3.40 pm – 4.10 pm	Coffee Break	
	Session 4	LT5
4:10 pm – 5.50 pm	Session 5	LT6
	Session 6	LT7
END OF DAY 2		

Day 3, Wednesday, 9th September 2026

TIME	PROGRAMME	VENUE
9.00 am – 9.50 am	Plenary Talk 3 Prof. Ir. Suzana Yusup Sunway University Redefining Chemical Engineering Education in the Era of Global Challenges: A paradigm shift'	JC3 Hall, Level 1, University Building
9.50 am – 10.20 am	Coffee Break	Gallery, Level 1, University Building
	Session 7	LT5
10.20 am – 12.30 pm	Session 8	LT6
	Session 9	LT7
12.30 pm – 1.30 pm	Lunch	Gallery, Level 1, University Building
1.30 pm – 2.00 pm	Book Launch	JC3 Hall, Level 1, University Building
	Session 10	LT5
2.00 pm – 4.00 pm	Session 11	LT6
	Session 12	LT7
4.00 pm – 4.45 pm	Closing Remarks	JC3 Hall, Level 1, University Building
END OF DAY 3		

Remarks:

1. Please note that the Conference Programme is based on Malaysia Time (UTC/GMT +8 hours)
2. This is the latest programme, and any subsequent changes will be updated from time to time
3. For further enquiry, please contact the SOMChE secretariat

Session Breakdown

Day 2, Tuesday, 8th September 2026

Session 1 – LT5

TIME	PRESENTATION TITLE	PAPER ID	PRESENTER
1.50 pm – 2.20 pm	Computer Aided Molecular Design of Deep Eutectic Solvents: Challenges and Opportunities	Keynote speaker	Dr. Jecksin Ooi <i>Heriot-Watt University Malaysia</i>
2.20 pm – 2.40 pm	Computational Design of Natural Deep Eutectic Solvent (NADES) to Enhance Skin Penetration of Clotrimazole for Fungal Infections	SOMChE35.181	Assoc Prof. Azizul Azri bin Mustaffa <i>Universiti Teknologi Malaysia</i>
2.40 pm – 3.00 pm	Predicting the Formation of Room-Temperature Liquid Deep Eutectic Solvents using Interpretable Rough Set Machine Learning	SOMChE35.135	Dr. Jecksin Ooi <i>Heriot-Watt University Malaysia</i>
3.00 pm – 3.20 pm	Computer-Aided Molecular Design of Renewable and Thermally Stable Hydrocarbon Base Oils: A Quasi-PAO Approach for Sustainable Lubricants	SOMChE35.177	Ms Lim Xiao Syuen <i>Sunway University</i>
3.20 pm – 3.40 pm	Sustainable Carbon Dioxide Capture from Flue Gas Using Ionic Liquids: Process Development and Performance Assessment	SOMChE35.199	Dr. Kanti Kumar Athankar <i>IPS Academy, Institute of Engineering & Science Indore (M.P.), India</i>
END OF SESSION 1			

Session 2 – LT6

TIME	PRESENTATION TITLE	PAPER ID	PRESENTER
1.50 pm – 2.20 pm	Parametric and Kinetic Analysis of Tin Oxide Catalysed Polycondensation of Glycerol with Sebacic Acid	Keynote speaker	Prof. Chin Sim Yee <i>University Malaysia Pahang Al-Sultan Abdullah</i>
2.20 pm – 2.40 pm	Development and Experimental Study of an Alginate-Based Hydrogel Agent for Extinguishing Class A and Class B Fires	SOMChE35.170	Mr. Jerell Hoh Shi Heng <i>Xiamen University Malaysia</i>
2.40 pm – 3.00 pm	Synthesis of Polymer Supported Catalyst: Polystyrene-Hydrazone-Nickel Complex as Catalyst for Carbon-Carbon Coupling Reaction	SOMChE35.164	Dr. Nur Rahimah Binti Said <i>Universiti Teknologi MARA</i>
3.00 pm – 3.20 pm	Functional Robustness of Multi-stimuli-responsive Self-repairing Polyethersulfone (PES) Membrane for Water Filtration	SOMChE35.159	Dr. Wong Eng Cheong <i>MILA University</i>
3.20 pm – 3.40 pm	Effect of UV degradation on the Material Characterization and Mechanical Performance of Recycled PET Bottle Filament for Fused Filament Fabrication	SOMChE35.190	Mr. Mohammad Ashraf Bin Nursal <i>Universiti Brunei Darussalam</i>
END OF SESSION 2			

Session 3 – LT7

TIME	PRESENTATION TITLE	PAPER ID	PRESENTER
1.50 pm – 2.20 pm	<i>Materials that Heal: Engineering Bio-Inspired Nanocomposites for Medical Applications</i>	Keynote speaker	Dr. Lim Siew Shee <i>University of Nottingham Malaysia</i>
2.20 pm – 2.40 pm	Size and Charge Selective Filtration Performance of a Self-healing Chitosan/Polyacrylamide-Coated Polyethersulfone Membrane	SOMChE35.158	Ms. Koh Yung Xin <i>Universiti Tunku Abdul Rahman</i>
2.40 pm – 3.00 pm	Three-Dimensional Graphene Oxide Composite for Zinc-Nickel Adsorption	SOMChE35.165	Ms. Eve Lai Qin Yi <i>University of Nottingham Malaysia</i>
3.00 pm – 3.20 pm	Deep Eutectic Solvents as a Sustainable Platform for Synthesis of Magnetic Graphene Oxide-COF Adsorbent for PAH Adsorption	SOMChE35.143	Ms. Nurul Imanina binti Zameran <i>Universiti Kebangsaan Malaysia</i>
3.20 pm – 3.40 pm	Sustainable Extraction of Nanocrystalline Cellulose through Box-Behnken Optimized Choline Chloride-Oxalic Acid Deep Eutectic Solvent	SOMChE35.136	Ms. Menaga A/P Thmil Selvan <i>Universiti Malaysia Perlis</i>
END OF SESSION 3			

Session 4 – LT5

TIME	PRESENTATION TITLE	PAPER ID	PRESENTER
4.10 pm – 4.30 pm	Rainwater Harvesting and Smart Water Treatment Integration in a Tropical Net-Zero Carbon Building: A Living Laboratory Case Study at Sunway University	SOMChE35.195	Dr. Karen Kong Gah Hie <i>Sunway University</i>
4.30 pm – 4.50 pm	Assessing Component Cost Contributions in Emerging Technologies Using AHP	SOMChE35.154	Mr. Mohamad Akmal Mohmad Zaki <i>Heriot-Watt University Malaysia</i>
4.50 pm – 5.10 pm	Superstructure-Based Mathematical Modelling for Design and Optimisation of Palm Oil Refinery Effluent Wastewater Treatment Plants	SOMChE35.147	Mr. Ryan Soh Zhe Hse <i>University of Nottingham Malaysia</i>
5.10 pm – 5.30 pm	Supply-Reduction Optimization and Resource Allocation in Net Zero Industrial Complexes	SOMChE35.201	Mr. James David A. Abiog <i>De La Salle University</i>
5.30 pm – 5.50 pm	Optimising Resource Allocation Trade-offs for an Integrated Decarbonisation Strategy Across the Food-Energy-Water-Waste Nexus	SOMChE35.176	Ms. Cheng Xin Hui <i>Swinburne University of Technology Sarawak</i>
END OF SESSION 4			

Session 5 – LT6

TIME	PRESENTATION TITLE	PAPER ID	PRESENTER
4.10 pm – 4.30 pm	Fabrication of Alginate-Based Membrane with Antimicrobial Properties for Wound Healing Application	SOMChE35.133	Assoc. Prof. Lim Siew Shee <i>University of Nottingham Malaysia</i>
4.30 pm – 4.50 pm	MSLA-Fabricated PEGDA-HEMA/Chitosan Hybrid Monoliths for Efficient Congo Red Adsorption	SOMChE35.173	Ms. Ashreen Norman <i>Heriot-Watt University Malaysia</i>
4.50 pm – 5.10 pm	Liquid Biphasic Flotation as a Novel Strategy for Efficient Extraction of Betalains from Beetroot	SOMChE35.174	Mr Abdirahman Yasin Ibrahim <i>UCSI University</i>
5.10 pm – 5.30 pm	Comparative Study of Extraction Methods and Phytochemical Characterization of Senna Alata Essential Oil	SOMChE35.206	Ts. Dr. Nabihah binti Abdullah <i>University College TATI</i>
END OF SESSION 5			

Session 6 – LT7

TIME	PRESENTATION TITLE	PAPER ID	PRESENTER
4.10 pm – 4.30 pm	Elucidating the Roles of Organic Matter Chemical Traits and Degradation Dynamics as Drivers of Microbial Priming	SOMChE35.180	Mr. Teoh Jin <i>Taylor's University</i>
4.30 pm – 4.50 pm	Rapid and Precise Method for Microplastic Analysis in Malaysian Bottled Water	SOMChE35.129	Ms. Lim En Qi <i>AMTEC, UTM</i>
4.50 pm – 5.10 pm	Bioelectricity Generation from Fruit Waste in a Dual-Chamber Microbial Fuel Cell	SOMChE35.168	Ms Koh Ee Ling <i>Universiti Tunku Abdul Rahman</i>
5.10 pm – 5.30 pm	CO ₂ Capture and Sequestration: Principles and Simulation of a Supersonic Gas Conditioning System	SOMChE35.141	Mr. Xavier Henry <i>Sunway University</i>
5.30 pm – 5.50 pm	Experimental optimisation of post-combustion membrane contactor CO ₂ capture - gas-in-tube vs gas-in-shell configuration	SOMChE35.134	Dr. Hue Seng Hoe <i>Petronas Research Sdn Bhd</i>
END OF SESSION 6			

Day 2, Tuesday, 8th September 2026

Session 7 – LT5

TIME	PRESENTATION TITLE	PAPER ID	PRESENTER
10.20 am – 10.50 am	<i>Engineering Ecosystem: Matching Chemical & Bioreactor Solutions to Your Process Needs</i>	Keynote speaker	Mr. Johnny Lau IKA
10.50 am – 11.10 am	Demand-Reduction Inoperability Modelling in Net Zero Industrial Clusters	SOMChE35.203	Mr. Mac Joseph B. Rosales De La Salle University
11.00 am – 11.30 am	Graphical Screening of Industrial Decarbonization Options	SOMChE35.151	Prof. Dominic Foo University of Nottingham Malaysia
11.30 am – 11.50 am	Investment and Operational Optimisation of a Dual Carbon Capture with Bioenergy System Using Advanced Control Strategies	SOMChE35.169	Dr. Norhuda Abdul Manaf Universiti Teknologi Malaysia
11.50 am – 12.10 pm	Multivariate Statistical Approach for Low-Carbon Strategy Optimization in Palm Oil Mills	SOMChE35.161	Mr. Edbert Gervais de Liyis Universiti Teknologi Malaysia
12.10 pm – 12.30 pm	Comparative Process Simulation and Mass Balance Analysis of an Algae Bio-CCU System Integrated with Gas- and Coal-Fired Power Plants Using SuperPro Designer	SOMChE35.210	Ms. Nur Atikah Syahirah binti Mohd Desa TNB Research Sdn. Bhd
END OF SESSION 7			

Session 8 – LT6

TIME	PRESENTATION TITLE	PAPER ID	PRESENTER
10.20 am – 10.50 am	<i>Advancing lubrication with esters: bridging sustainability and performance</i>	Keynote speaker	Dr. Yen Yee Chong Oleon Port Klang
10.50 am – 11.10 am	Establishing the Economic Value of Empty Fruit Bunch to Inform Valorisation Pathways in Palm Oil Mills	SOMChE35.208	Ms. Hemavathi Silvamany SD Guthrie Research Sdn Bhd
11.00 am – 11.30 am	Hydrothermal operations of palm empty fruit bunch fibers for value added products	SOMChE35.126	Assoc Prof. Suchithra Thangalazhy-Gopakumar University of Nottingham Malaysia
11.30 am – 11.50 am	Investigating the Effects of Ultrasound Stimulation to Optimise Microalgae Growth and Biomass Composition for Biofuels	SOMChE35.188	Ms. Cheah Zhi Wei Monash University Malaysia
11.50 am – 12.10 pm	Evaluation of Household Food Waste Co-composting with Biochar	SOMChE35.160	Assoc. Prof. Lau Phei Li University of Nottingham Malaysia
12.10 pm – 12.30 pm	Mechanistic Elucidation of Microbial Priming via Coupled Cybernetic and Population Balance Modelling of Organic Matter Degradation Dynamics	SOMChE35.183	Mr. Joel Yow Sun Ee Taylor's University
END OF SESSION 8			

Session 9 – LT7

TIME	PRESENTATION TITLE	PAPER ID	PRESENTER
10.20 am – 10.50 am	<i>Evaluation of total suspended solids removal in coal mine wastewater by chemical and electrochemical methods</i>	Keynote speaker	Assoc. Prof. Gulnaziya Issabayeva <i>Universiti Tunku Abdul Rahman</i>
10.50 am – 11.10 am	An Innovative Approach to Enhanced Oil Recovery from Oily Wastewater Using Coalescing Technology and Recycle Stream Integration	SOMChE35.209	Mrs. Eunice Ong May Hoong <i>OLEOLOGY Asia Sdn Bhd</i>
11.00 am – 11.30 am	Influence of Inoculum Source on Biogas Production and Kinetic Behaviour during Anaerobic Digestion of Food Waste	SOMChE35.194	Mr. Loh Wai Hong <i>University of Nottingham Malaysia</i>
11.30 am – 11.50 am	Co-digestion of Rabbit Manure with Food Waste for Biogas Production in Anaerobic Batch Digestion Process	SOMChE35.197	Ir. Dr. Ayu Haslija Abu Bakar <i>Sunway University</i>
11.50 am – 12.10 pm	A Review of Methane Yield from Anaerobic Digestion of Food Waste in Tropical Asia	SOMChE35.157	Mr. Ivan Chong Zhao Jer <i>University of Nottingham Malaysia</i>
12.10 pm – 12.30 pm	Evaluation of Menthol:Lauric Acid Hydrophobic Deep Eutectic Solvent in The Removal of Malachite Green from Water	SOMChE35.179	Mr. Sim Wei Jun <i>Universiti Tunku Abdul Rahman</i>
END OF SESSION 9			

Session 10 – LT5

TIME	PRESENTATION TITLE	PAPER ID	PRESENTER
2.00 pm – 2.20 pm	Data-Driven Process Safety Analytics Using Multimodal Machine Learning on OSHA Severe Injury Reports	SOMChE35.146	Dr. Senthil Kumar Arumugasamy <i>University of Nottingham Malaysia</i>
2.20 pm – 2.40 pm	A Statistically Informed Machine Learning Framework for Robust Air Quality Forecasting	SOMChE35.139	Mr Xin Ming Tan <i>Sunway University</i>
2.40 pm – 3.00 pm	Enhancement of Energy Efficiency for Chilled Water Networks in Existing University Building	SOMChE35.211	Dr. Dalila Alias <i>Sunway University</i>
3.00 pm – 3.20 pm	Carbon-constrained multiple energy resources targeting with supply limits using the Pinch analysis approach	SOMChE35.193	M. U. Ashna <i>Indian Institute of Technology Bombay</i>
3.20 pm – 3.40 pm	Oil Palm Bioenergy in Malaysia's National Energy Transition Roadmap: A Fuel Diversification Approach for Climate Resilience	SOMChE35.137	Mr. Clarence Lau Yii Fang <i>Swinburne University of Technology Sarawak</i>
3.40 pm – 4.00 pm	Modeling Energy Trade-Offs Enables Prediction of Dynamic Switching of Metabolic States in the Polyhydroxyalkanoate Cycle of <i>Pseudomonas putida</i>	SOMChE35.140	Ms. Marcelina Alexandra Wibowo <i>Taylor's University</i>
END OF SESSION 10			

Session 11 – LT6

TIME	PRESENTATION TITLE	PAPER ID	PRESENTER
2.00 pm – 2.20 pm	Sustainable Valorisation of Moringa oleifera and Palm Kernel Expeller for Poultry Feed	SOMChE35.178	Dr. Ong Sze Pheng <i>University of Nottingham Malaysia</i>
2.20 pm – 2.40 pm	Effect of Salt and Sugar Additives on Okra Protein Functionality and Cake Hardness	SOMChE35.185	Ms. Low Suk Khe <i>Xiamen University Malaysia</i>
2.40 pm – 3.00 pm	Green Extraction of Semi-Polar Volatile Compounds from Salvia Officinalis Leaves	SOMChE35.152	Ms. Hooi Soong Ling <i>Sunway University</i>
3.00 pm – 3.20 pm	Investigating the Impact of Initial Concentration and Cycle Frequency on the Efficiency of Progressive Freeze Concentration	SOMChE35.212	Assoc. Prof. Mazura Jusoh <i>Universiti Teknologi Malaysia</i>
3.20 pm – 3.40 pm	Production of Cookies from Composite Wheat and Plantain Flour using Peanut Paste as a Fat Replacer	SOMChE35.148	Prof. Sunday Boladale Alabi <i>University of Uyo</i>
END OF SESSION 11			

Session 12 – LT7

TIME	PRESENTATION TITLE	PAPER ID	PRESENTER
2.00 pm – 2.20 pm	Palm Oil-Based Tocotrienols Double Emulsion Encapsulation Using Needle-Based Microfluidic Device	SOMChE35.149	Prof. Ren Yong <i>University of Nottingham Ningbo</i>
2.20 pm – 2.40 pm	Tailoring Lateral Sizes of Ionic Liquid Functionalized Graphene Oxide in Pebax Mixed Matrix Membrane for Efficient Carbon Capture	SOMChE35.184	Dr. Tan Peng Chee <i>Xiamen University Malaysia</i>
2.40 pm – 3.00 pm	Binary Adsorption of Calcium and Cobalt onto Porous Graphene-based Composite	SOMChE35.167	Prof. Lee Lai Yee <i>University of Nottingham Malaysia</i>
3.00 pm – 3.20 pm	Regeneration and Reuse of Activated Carbon for Dye Adsorption under Ambient Conditions Using Dilute Chemical Solutions	SOMChE35.162	Dr. Anis Suhaila Shuib <i>Universiti Teknologi PETRONAS</i>
3.20 pm – 3.40 pm	Application of Graphene Oxide Aerogel for the Continuous Removal of Iron and Aluminium	SOMChE35.166	Prof. Gan Suyin <i>University of Nottingham Malaysia</i>
3.40 pm – 4.00 pm	Hepatotoxicity of Gold Nanoparticles in HepG2 Cells Dependent on Size: Mechanistic Assessment of Oxidative Stress, Apoptotic Cell Death, and Cytotoxicity	SOMChE35.204	Dr. Priyadarshini Mohapatra <i>Alliance University, Bengaluru, India</i>
END OF SESSION 12			

Poster Session

PRESENTATION TITLE	PAPER ID	PRESENTER
Multi-Period Demand-Side Planning of Quality-Constrained Carbon Credit Procurement Using Pinch Analysis	SOMChE35.155	Ms. Rachel Yii Xi En <i>Swinburne University of Technology Sarawak Campus</i>
Managing Conflicting Goals between Carbon Trading Stakeholders using Quality-Driven Carbon Credit Pinch Analysis	SOMChE35.156	Ms. Delia Cheng Yi Shi <i>Swinburne University of Technology Sarawak Campus</i>
Temperature-inferred stoichiometric ratio control in extractive-reactive distillation	SOMChE35.132	Mr. Xuan Liang Choo <i>Sunway University</i>
Process Simulation and Validation of a 750 MW Malaysian CCGT Power Plant for Flexible Operation Under Energy Transition Challenges	SOMChE35.182	Ms. Siti Sorfina Johari <i>TNB Research</i>
Process Integration of Dark Fermentation and Microbial Electrolysis Cell to Enhance Hydrogen Production from Palm Oil Mill Effluent	SOMChE35.142	Mr. Yong Kai Yu <i>Sunway University</i>
Prediction and Optimisation of Food Waste Anaerobic Digestion Using Artificial Neural Network and Genetic Algorithm	SOMChE35.198	Assoc. Prof. Chan Yi Jing <i>University of Nottingham Malaysia</i>
Liquid-Liquid Extraction for the Separation of Binary Mixture Composed of Acetonitrile and Benzene with Emim-Based Ionic Liquids	SOMChE35.130	Dr. Ianatul Khoiroh <i>University of Nottingham Malaysia</i>
Comprehensive Kinetic, Isotherm and Thermodynamic Analysis of an Adsorption System in Aqueous Media	SOMChE35.200	Dr. Amal Benhathat <i>M'Hamed Bougara University of Boumerdes UMBB</i>
Design of Optimal Lubricants through Computer-Aided Approach	SOMChE35.213	Mr. Chong Xian Zhuang <i>Sunway University</i>
Thermo-Mechanical Analysis of Fire-Exposed Type C LNG Tanks: Evaluation of BLEVE-Related Failure Conditions	SOMChE35.171	Ms. Ibtehal Mohamed Abuzaid <i>University of Doha for Science and Technology</i>
Consequence Modelling and Sensitivity Analysis of Alternative Fuel Releases in Maritime Storage and Transfer Systems	SOMChE35.163	Ms. Iman Mazin Alogaili <i>University of Doha for Science and Technology</i>
Ionic Liquid-Driven Synthesis of Barium Sulphate Nanoparticles Using 1-Ethyl-3-methylimidazolium Chloride	SOMChE35.192	Dr. Megawati Zunita
Colorimetric Detection of Lead (Pb ²⁺) In Synthetic Blood Serum Using Sodium Rhodizonate: Development of A Rapid Point-Of-Care Screening Method	SOMChE35.196	Athar Shihab
Light-Tunable Activation Barriers in Bimetallic Plasmonic Photocatalysis	SOMChE35.202	Dr. Kishan Menghrajani
END OF SESSION		