Programme Details

Day 0 (5 August 2024/Monday)

TIME	EVENT	ROOM
1.00pm	IChemE VR Workshop	Feringghi I & II
3.00pm	Registration for PSE Asia	MAKAN KITCHEN FUNCTION ROOM LOBBY
3.00pm	WELCOME RECEPTION	MAKAN KITCHEN FUNCTION ROOM

Day 1 (6 August 2024/Tuesday)

TIME	ESPLANADE BALLROOM
9.00am - 9.20am	Opening Ceremony • Welcome Remarks by Ir. Prof Dr Dominic Foo, Organising Chairman of PSE Asia 2024 • Opening Speech by Ir. Prof Dr Jeffrey Chiang, President of The Institution of Engineers, Malaysia
9.20am - 12.00pm	**PLENARY SESSION - Chairman: Ir. Prof Dr Dominic CY Foo**
9.20am - 10.00am	Plenary Session 1 **Prof Fengqi You** *Nexus for Net Zero: Fueling and Refining Energy Decarbonization with Generative AI, Quantum Computing, and Blockchain*

Programme Details

Day 1 (6 August 2024/Tuesday) contd/..

TIME	ESPLANADE BALLROOM
10.00am - 10.30am	**TEA BREAK** *(Esplanade Ballroom Foyer)*
10.30am - 11.10am	Plenary Session 2 **Prof Thokozani Majozi** *A Process Integration Approach to CO2 Emissions Reduction and Resources Conservation: Recent Developments*
11.10am - 11.50am	Plenary Session 3 **Prof Iqbal M. Mujtaba** *Water-Energy-Food-Environment-Health Nexus: Opportunities for PSE Community*
11.50am - 12.00pm	PHOTOGRAPHY SESSION
12.00pm - 1.20pm	**LUNCH** (*Makan Kitchen*)

CONFERENCE SUB THEMES

	Artificial intelligence and big data
	Education in process systems engineering
	Industry applications
	Product and process design
	PSE for circular economy/sustainable processes

	Process integration and optimisation
	Process dynamics and control
	PSE for Process Safety & Operations
	Supply chain management
	Keynote speaker
	Industrial speaker

Programme Details

Day 1 (6 August 2024/Tuesday) Technical Session

PM	Room 1	Room 2	Room 3
Chair	Liew PY	Lee TS	Choong TSY
Co-Chair	Zulfan AP	Majozi T	Kong KGH
1:20 PM	Dr Zulfan Adi Putra	6368	2036
1:40 PM		4728	2764
2:00 PM	1148	3758	3303
2:20 PM	1356	9829	3785
2:40 PM	1426	A/P Dr Jia-Lin Kang	4673
3:00 PM	1548		4962
3:20 PM	Tea Break		
3:50 PM	1573	3848	Prof Zhang Lei
4:10 PM	1881	7987	
4:30 PM	5921	Mr Zhe Wu	5287
4:50 PM	2355		6695
5:10 PM	End		

6.00pm	**Coach departure for dinner at Park Royal Hotel**

Note: For those who wish to attend the dinner, kindlly register and make payment at Conference Secretariat counter

Keynote Speakers	Paper Title
Assoc Prof Dr Jia-Lin Kang	Physics-Informed Long-term Forecasting Models for Chemical Process Control
Prof Zhang Lei	Drug molecular design method using Artificial intelligence
Mr Zhe Wu	Advanced Machine Learning in Process Modeling and Control

Programme Details

Day 2 (7 August 2024/Wednesday) Technical Session

AM	Room 1	Room 2	Room 3
Chair	Denny N	Anwar A	Chong CH
Co-Chair	Lee JY	Tan J	Yamashita Y
9:00 AM	A/P Dr Frederick Tapia	9106	4751
9:20 AM		8929	5311
9:40 AM	2494	Dr Arnab Dutta	4464
10:00 AM	2736		3556
10:20 PM	Tea break & poster session		
10:50 AM	2772	4153	Dr Boram Gu
11:10 AM	3884	5153	
11:30 AM	6558	4572	0053
11:50 AM	5370	6130	5557
12:10 PM	2246	7433	4755
12:30 PM	Lunch		

Keynote Speakers	Paper Title
Assoc Prof Dr Frederick Tapia	Optimization and Decision-Making of Low-Carbon Technologies under Neutrosophic Environment
Dr Arnab Dutta	Computer-aided design of therapeutic peptides to combat antimicrobial resistance
Dr Boram Gu	A Mechanistic Approach to Predicting Rotating Packed Bed (RPB) Performance in Carbon Capture

Programme Details

Day 2 (7 August 2024/Wednesday) Technical Session

PM	Room 1	Room 2	Room 3
Chair	Fauzi Z	Phang SW	Tapia JF
Co-Chair	Wan YK	Viknesh A	Chen CL
2:00 PM	4321	Prof Hiromasa Kaneko	6086
2:20 PM	7047		8604
2:40 PM	0830	0178	8720
3:00 PM	7160	0341	9796
3:20 PM	Tea break & poster session		
3:50 PM	Dr Eduardo Luna-Ortiz	7800	5443
4:10 PM		9724	5879
4:30 PM	3406	A/P Ir. Dr Viknesh Andiappan	6759
4:50 PM	7492		4006
5:10 PM	0005	2981	6703
5:30 PM	End		

Day 2 posters			
1990	4245	1362	1610
7821	1289	0498	0631
3333			

Keynote Speakers	Paper Title
Prof Hiromasa Kaneko	Direct Inverse Analysis of Machine Learning Models in Chemo-, Materials, and Process Informatics
Assoc Prof Ir. Dr Viknesh Andiappan	Decision-making Tools for Energy Sector Decarbonisation - The Past, Present and Future

Programme Details

Day 3 (8 August 2024/Thursday) Technical Session

AM	Room 1	Room 2	Room 3
Chair	Yang M	Deng C	Li Z
Co-Chair	Mujtaba I	Xiang D	Yu BY
9:00 AM	Ir. Razmahwata Mohamad Razalli	1273	4475
9:20 AM		1074	3675
9:40 AM	3607	4457	0191
10:00 AM	Tea break & poster session		
10:20 PM	9830	5650	2061
10:50 AM	3362	Ir. Rafil Elyas	7637
11:10 AM	1915		3782
11:30 AM	0526	2988	5522
11:50 AM	3391	3775	3189
12:10 PM	6880	7008	7932
12:30 PM	Lunch		

PM	Room 1	Room 2	Room 3
Chair	Rafil	Lam HL	How BS
Co-Chair	Razmawata	Liao Z	Sun J
2:00 PM	Dr Shahrul Azman Zainal Abidin	4063	1952
2:20 PM		6080	3322
2:40 PM	6018	9712	8354
3:00 PM	7080	1963	3910
3:20 PM	7626	9961	2675
3:40 PM	Closing Ceremony		
4:00 PM	Tea break		
5:00 PM	End		

Day 3 posters			
7929	2995	4124	4700
2820	9364	6290	4617
6815			

Oral Presentations

Paper ID Number	Author	Title of Paper
0005	Md Alquma Haider, Dominic C. Y. Foo and Nitin Dutt Chaturvedi	Optimized Targeting Algorithm for Multiple Utilities in a Batch Process
0053	Riezqa Andika and Akbar Maulana	Towards Greener Agriculture: Evaluating the Energy Extraction Limits of Pressure-Retarded Osmosis in Hydroponics
0178	Ibnu Maulana Hidayatullah, Shakila Keilani Andina Putri Giri and Aulya Rahman Arevin	Process Simulation and Economic Analysis of Calcium Gluconate Production from Empty Oil Palm Bunches using Gluconobacter oxydans
0191	Hao Lyu	High-Performance Computing Method for Complex Process Optimization
0341	Harry Laing, Anthony Browne, Chris O'Malley and Mark Willis	Optimising energy schedules for an Advanced Anaerobic Digestion site
0526	Jing Yang, Boon Haw Koh, Yin Yin Jaime Lim and Siang-Meng Ivan Sin	Process Safety Digitalisation: An Enabler for Dynamic Real-time, Digital, Intelligent Safety Case
0830	Xiaodong Hong, Xuan Dong, Zuwei Liao, Congjing Ren, Yao Yang, Jingdai Wang and Yongrong Yang	An adaptive partition linearization global optimization algorithm and its application on HEN optimization
1074	Zong Yang Kong, Tiffany Ang, Hao-Yeh Lee, Ákos Orosz, Ferenc Friedler and Bing Shen How	Evaluation of different control strategies for n-best heat recovery networks
1148	Junqing Xia and Yoshiyuki Yamashita	Predicting Nanoparticle Solubility by Incorporating Deep Learning Model with Principle of Similarity
1273	Seen Ye Lim, Nishanth Chemmangattuvalappil, Vui Soon Chok, Denny Kok Sum Ng, Amna Qaisar, Lik Yin Ng and Pui Vun Chai	Design of Entrainer for Recovery of Palm Process Residue using Computer-Aided Framework with Economic Considerations
1356	Tzu-I Su, San-Jang Wang and David Shan-Hill Wong	Optimization of the cyclization reaction of chlorohydrin and sodium hydroxide
1426	Leap Wun Yip, Yu-Chi Yeh and Jui-Yuan Lee	Interplant Water Integration Design of Eco-industrial Parks for the Optimization of Regeneration Unit Configurations
1548	Junjie Liu, Huichan Hwang and Hideyuki Matsumoto	Micro-kinetics modeling of NOx adsorption on Pd/Beta zeolite based on probabilistic parameter searching method.
1573	Wenhao Yu, Minglei Yang and Jingyi Lu	Research on integrated refinery planning and product blending scheduling
1881	Lili Ma, Rui Wang, Dongmei Liu, Sibei Ji, Li Zhou, Xu Ji and Li Dong	Integrated Optimization of Process Capacity and Scheduling of a “Green Ammonia” Plant Driven by Renewable Energies

Oral Presentations

Paper ID Number	Author	Title of Paper
1915	Ryuto Tanaka and Masaru Noda	Identification and Suppression Methods of Sequential Alarms during Plant Operation
1952	Bryan Wei Ren Wah, Peng Yen Liew, Takeshi Mizunoya, Lian See Tan and Helmut Yabar	Circular Economy of PET Bottles in Malaysia through Life Cycle Assessment
1963	Muhammad Aimen Isa, Azuria Camalia Kamel, M Alwee Abu Taleb, Muzzahhir M Hadzir, Mahesvaran Pamusamy and Dr. Tuan Mohammad Yusoff Shah Tuan Ya	HTRI and Computational Fluid Dynamics (CFD) Analysis of Leak for Double Pipe Feed/Effluent Heat Exchanger
2036	Apri Wahyudi, Natthapong Sueviriyapan and Uthaiporn Suriyapraphadilok	Incorporating bond-level features and atom-level features in Molecular Graph Neural Network for enhanced COSMO σ-profile prediction
2061	Xinyang Sun and Miao Guo	Supply Chain Simulation and Optimisation under Circular Economy
2246	Wu Bing-Rung, Jui-Yuan Lee and Dominic Chwan Yee Foo	Simultaneous Heat Integration and Scheduling of Batch Processes
2355	Jing Jiao, Linlin Liu and Jian Du	Coupled scheduling of power plants and carbon capture considering waste heat recovery and solar energy
2494	Basil James Santos, Raymond Girard Tan, Michael Francis Benjamin and John Frederick Tapia	Optimization of an Integrated Plastic Recycling Network under Process Inoperability
2675	Bing Shen How, Tiffany Ang, Selena Kian Yii Song, Adrian Chun Minh Loy, Ákos Orosz and Ferenc Friedler	Incorporating Graph-theoretic based Computer-aided Tool into Chemical Engineering Syllabus
2736	Fauzi Yusupandi, Reni Yuniarti, Mustafa Mustafa, Muhammad Kamal, Aulia Wulan Sari and Ibnu Maulana Hidayatullah	Homogenous extractive distillation system for the separation of phenol-cyclohexanone -cyclohexanol azeotropic mixtures using heavy entrainers
2764	I-Yen Wu, Jia-Lin Kang, Yu-Jeng Lin, Yuan Yao and David Shan-Hill Wong	Developing a Health Index for Estimating Remaining Useful Life Using Empirical Mode Decomposition and Slow Feature Analysis
2772	Wei Jyun Wang, Chong Wei Ong, Denny K.S. Ng and Cheng-Liang Chen	Synthesis of Biomethanol (bio-MeOH) from Palm Oil Mill Effluent (POME) for Sustainable Biodiesel Production
2981	Jie Xiao	Integrated Process and Product Modeling of Spray Drying for Functional Particle Production: A Multiscale Approach
2988	Minji Kim and Sang Hwan Son	Fundamental modeling of a microbial electrosynthesis system to convert CO2 into acetate

Oral Presentations

Paper ID Number	Author	Title of Paper
3189	Adeline Shu Ting Tan, Viknesh Andiappan, Sin Yong Teng, Jui Yuan Lee, Yat Choy Wong, Sue Lin Ngan and Bing Shen How	Optimal pathways for plastic waste integration in the oil and gas industry: A graph-theoretic approach
3303	Sho Takaoka, Zhenzhong Zhang, Yoichi M. A. Yamada and Hiromasa Kaneko	Design of Polymeric Ni Catalysts and Experimental Conditions in Suzuki-Miyaura Type Cross-Coupling Reactions by Machine Learning
3322	Shu Yao Wong, Yick Eu Chew, Viknesh Andiappan, Shyam Lakshmanan, Dominic C. Y. Foo	Techno-economic and carbon footprint analyses of steam Rankine cycle
3362	Kota Sahara and Yoshiyuki Yamashita	Incorporating Uncertainty in Chemical Process Modeling with Bayesian Neural Networks
3391	Hikaru Kiyomoto, Yuka Sakai and Yasuki Kansha	Development of an energy harvesting wireless temperature sensor using magnetic moment change
3406	Xiaowei Song, Yaling Nie, Min Zhu, Yibo Zhang, Xin Xiao, Yong Xu, Xinyang Xiong, Jun Zhou and Xiaoling Song	Optimizing Compressor Air Network Configurations for Enhanced Energy Efficiency
3556	Asim Ur Rehman	Plant Operational Reliability Assessment Using Dynamic Simulation
3607	Masaharu Fujioka, Yusuke Hayashi and Hirokazu Sugiyama	A model-based approach to determining feasible parameter ranges of freezing processes for stem cell-derived spheroids
3675	Chutithep Rochpuang and Junghui Chen	Hierarchical Reinforcement Learning for Power Optimization and Setpoint Tracking in Organic Rankine Cycle Systems
3758	Nuradibah Adnan, Robin Smith and Nan Zhang	Process Modelling of Refrigeration Cycle for Low-temperature Distillation
3775	Rei Tamaki, Yusuke Hayashi, Yuki Uno, Masahiro Kino-Oka and Hirokazu Sugiyama	An exploration cycle of cryoprotective agents for stem cell manufacturing using computer-aided molecular design approaches
3782	Xin Hui Cheng, Bing Shen How, Irene Moser and Viknesh Andiappan	A strategic framework for macroscale energy transition planning towards low carbon future
3785	Jinxin Wang, Feng Xu, Kei Sakurai, Yuka Sakai, Hisashi Takahashi, Shunsuke Sabu, Ruizi Zhang, Hiroaki Kanayama, Daisuke Satou and Yasuki Kansha	Development of a dual inputs system for rapid temperature uniformization in a vessel
3848	Renanto, Rendra Anugraha, Juwari, Hugo and Bernardus Brata	MEA Absorber-Stripper System Control Simulation using MPC

Oral Presentations

Paper ID Number	Author	Title of Paper
3884	Wenjin Zhou, Linlin Liu and Jian Du	Dynamic Transportation Model for Cost Estimation in Simultaneous Heat Exchanger Network Synthesis with Variable Stream Conditions
3910	Chi-Jui Lee and Bor-Yih Yu	Evaluating the One-Pot Methanolysis of PET Enabled by CO2 Hydrogenation
4006	Yen-Feng Lu, Yu-Jing Kuo and Yu-Jeng Lin	Evaluating Pressure Swing Adsorption and Chemical Absorption Processes for CO2 Capture from Blast Furnace Top Gas
4063	Sunwoo Kim, Jieun Jang, Jonghun Lim, Jeonghun Kim, Il Moon and Junghwan Kim	Development of a SWRO–Solar-driven desalination–PRO hybrid system
4153	Yuta Sakai and Hiromasa Kaneko	Prediction of pesticide activity using molecular scaffolds by machine learning and proposal of new scaffolds
4321	Sungmin Lee, Jeongdong Kim, Youngkeun Kim, Il Moon and Junghwan Kim	Optimal planning of modular green methanol synthesis process: scenario-based performance assessment
4457	Cindy Lai Yeng Lee, Zhe Wu, Boon Haw Koh and Ivan Siang Meng Sin	Introducing Digitalization Tools and Skillsets for Process Safety Education
4464	Nurul Husna Mohd Yusoff, Wei Jen Chew, Chien Hwa Chong and Yoke Kin Wan	Artificial intelligence in color classification of 3D - printed enhanced adsorbent in textile wastewater
4475	Chan Kim and Jong Min Lee	Physics-Informed Neural Network-Based Surrogate Modeling for Chemical Processes
4572	Haruki Ochiai and Hiromasa Kaneko	Construction of predictive model for biodegradability of materials over time
4673	Njideka Chima-Amaeshi, Chris O'Malley, Mark Willis and Paul Winstone	Using machine learning to classify and predict marine fuel oil with unusual wax appearance temperature
4728	Weibin Xu and Le Wu	Modular Methanol Production: Multi-period Multi-objective Supply Chain Design and Optimization
4751	Dun-Yi Ke and Yuan Yao	Analyzing Plating Thickness Distribution in PCB Manufacturing: A Global/Local Simulation Approach for Copper Plating Processes
4755	Pengwei Liao and Siyu Yang	Hydrogen production systems from renewable sources considering uncertainty: a multi-time scale operation strategy

Oral Presentations

Paper ID Number	Author	Title of Paper
4962	Haider Altaf, Babji Srinivasan and Rajagopalan Srinivasan	Evaluating shared mental model using eye tracking and voice data analytics
5153	Yuta Wakutsu and Hiromasa Kaneko	Analysis of the relationship between molecules and odors using information from olfactory receptors
5287	Yu Chiao Chu and David Shan Hill Wong	Predicting Molecule Features with Graph-based Deep Learning Quantitative Structure Properties Relation
5311	Hong Huang, Chang He and Xiantai Zhou	An integrated framework for modeling and optimization of chemical reactors based on Physics-Informed Neural Networks
5370	Shunsei Yayabe, Junu Kim, Yusuke Hayashi, Keisuke Shibukawa, Kazuya Okamoto, Hayao Nakanishi and Hirokazu Sugiyama	Kinetic modeling of drug substance flow synthesis using Stevens oxidation considering phase transfer catalyst and slug flow
5443	Rendra Panca Anugraha, Renanto Renanto, Juwari Juwari, Muhammad Yusuf Bakhtiar and Annisa Nurul Islami	A Techno-Economic Analysis of Green Ammonia Synthesis Utilizing Hydroenergy in Indonesia
5522	Yick Eu Chew, Bing Shen How, Jaka Sunarso, Irene Moser and Viknesh Andiappan	Optimisation of Smart Energy Systems in Reducing Carbon Footprint for Cement Industry Operations
5557	Mengxiang Zhu, Liantao Zhao and Dong Xiang	Design, modeling, and system evaluation of coal-fired power generation coupling with green hydrogen for electricity and methanol co-production processes
5650	Muhammad Aimen Isa, Azuria Camalia Kamel, M Alwee Abu Taleb, Muzzahhir M Hadzir, Shahrulizwan Abd Hamid, W M Najib W Ismail, Rozilawati A Latip, Adibah Kasuan and M Fauzi Abidin	Installation New Low-Pressure Flare Knock Out Drum for an Existing Liquefied Natural Gas Regasification Plant
5879	Ruka Ando and Hiromasa Kaneko	Prediction of acetylcholinesterase inhibitory activity and affinity with UDP-glucuronyltransferase, and development of models for design of new acetylcholinesterase inhibitors
5921	Atsushi Endo and Hideyuki Matsumoto	Conceptual design of continuous flow systems based on superstructure optimization focused on separation module
6018	Hui Won Lee, Sang Hwan Son and Shi Kyung Yoon	Mathematical modeling of multi-stage fluidized bed reactors for hydrogen-based iron-making

Oral Presentations

Paper ID Number	Author	Title of Paper
6080	Congjing Ren, Zhengliang Huang, Yun Shuai, Yao Yang, Tao Sheng, Yongrong Yang and Jingdai Wang	Acoustic detection of two-phase flow parameters in chemical industry applications
6086	Somang Shin and Sang Hwan Son	Unsteady state firebox-tube coupled model for calculating carbon emissions in a naphtha pyrolysis process with coke formation.
6130	Ming-Chun Fang, Psalm Josiah Tan and Jeffrey D. Ward	Efficient estimation of crystal filterability using the discrete element method and the Kozeny-Carman equation
6368	Kosuke Nemoto, Sara Badr, Yusuke Hayashi, Yuki Yoshiyama, Kozue Okamura, Mizuki Morisasa, Junshin Iwabuchi and Hirokazu Sugiyama	Hybrid modeling of CHO-MK cell cultivation for monoclonal antibody production using automated bioreactor equipment
6558	Karen Gah Hie Kong, Xiaodong Hong, Jingyuan Sun, Congjin Ren, Yao Yang, Zuwei Liao, Jingdai Wang and Yongrong Yang	Unlocking the power of surplus renewables in P2X energy planning
6695	Ziqing Guo, Jingxing Gao, Yachao Dong and Jian Du	Integrated Chemical Production Planning and Scheduling with Machine-Learning based Production Capacity Range considering Renewable Energy System
6703	Cindy Lai Yeng Lee	Empowering Chemical Engineering Students with Sustainable Development Skills
6759	Min Zhu, Yaling Nie, Yibo Zhang, Gang Yang, Yunsha Wang, Jianhua Chen, Xin Xiao, Boyong Wang and Changqing Zhou	Gasification and Fischer-Tropsch synthesis of Biomass for Sustainable Aviation Fuel Production: A Case Study of a Demonstration Plant in Southeastern China
6815	Thomas Shean Yaw Choong, Fan Li and Siti Nurul Ain Md. Jamil	Kinetic Evaluation of Crystal Violet Dye Decolorization from Aqueous Solution by Advanced Oxidation Processes
6880	Wonhyeok Choi, Youngseok Bak, Ho Seong Lee, Dongwoo Lee, Gobong Choi, Hyuncheol Ryu and Jong Min Lee	Safe and Optimal Renewable Hydrogen Production from Solar Curtailment through Integration of Reinforcement Learning and Model Predictive Control
7008	Chun Deng, Ruihang Zhang, Kun Li, Bei Liu, Changyu Sun and Guangjin Chen	Novel Light Hydrocarbon Recovery Process via Porous Slurry
7047	Chong Wei Ong and Cheng-Liang Chen	Integrated Renewable Electricity Supply Chain: Engineering, Economic, and Environmental Analysis for International Energy Transition

Oral Presentations

Paper ID Number	Author	Title of Paper
7080	Gabriel Fernando Talero Rojas, Yu Hui Kok, Yuka Sakai and Yasuki Kansha	Comparison of the yield of light olefins between Japanese cedar and waste cardboard via gasification, methanol synthesis, and Methanol-to-Olefins
7160	David Wong	Technoeconomic Analysis of Carbon Dioxide Emission Abatement by Electrification by Heat Pump Assisted DIstillation
7433	Yamato Nakanishi, Nobuyuki N. Matsuzawa, Hiroyuki Maeshima, Tatsuhito Ando and Hiromasa Kaneko	Prediction of Reorganization Energy from Chemical Structures Using Graph Convolutional Neural Networks
7492	Jaya Prasanth Rajakal, Lik Yin Ng and Denny Ng	Techno-Economic Analysis of Integrated Palm Oil Mills with e-Methanol Production
7626	Yinghua Jiang, Ningfei An and Zhangfa Tong	Operation optimization of battery energy storage system with multiple SOC intervals
7637	Zhiwei Li	Optimal design of biomass-to-methanol supply chain under certainty
7800	Hiroki Horiuchi and Yoshiyuki Yamashita	Robust Soft Sensors in Chemical Process Using PFD-Guided Graph Convolutional Networks
7987	Koichi Fujiwara and Kaito Katayama	Updating Process Fault Detection Model based on Transfer Learning
8354	Baowei Niu, Leqi Gu, Xuefeng Mao, Lili Wang, Li Xia, Xiaoyan Sun and Shuguang Xiang	Material and Energy Flow Analysis-Based Strategy for Calculating Carbon Emissions from Chemical Process Equipment
8604	Wei-De Wang, Chong Wei Ong, Shiang-Tai Lin and Cheng-Liang Chen	Analysis and Simulations of Selective Catalytic Reduction (SCR) in Honeycomb Reactor for NOx Removal Process
8720	Heng Yi Teah, Yi Jing Chan, Mohd Amran Bin Mohd Yusof, Xin Yun Kiew, Yuichiro Kanematsu and Yasunori Kikuchi	Understanding Life Cycle Greenhouse Gas Accounting for Waste-to-Energy Systems: a Case of POME-to-Electricity
8929	Bol Ram, Zainal Ahmad and Norazwan Md Nor	Utilization of Aspen DMC3 in Process Control of Crude Distillation Unit (CDU)
9106	DhanarajTurunawarasu, Jaka Sunarso, Bing Shen How, Viknesh Andiappan and Eduardo Luna-Ortiz	Multi-solution Heat Exchanger Network Synthesis for Energy-Efficient Cryogenic CO2 Capture in Pre-combustion and Oxy-fuel Combustion Applications
9712	Muhammad Aimen Isa, M Alwee Abu Taleb, Azuria Camalia Kamel, Muzzahhir M Hadzir, W M Najib W Ismail and M Syafiq Hafifi Kamisan	Depressuring Requirements Study at Hydrocarbon (HC) Lines at Refinery and Petrochemical Plant

Oral Presentations

Paper ID Number	Author	Title of Paper
9724	Shiya Gu, Yachao Dong and Jian Du	Optimal design of hydrogen-blended natural gas pipeline network considering separation systems
9796	Yuichiro Kanematsu, Heng Yi Teah and Yasunori Kikuchi	Sustainable International Biomass Resource Sharing and Utilization from a Life Cycle Assessment Perspective; A Case of Palm and Wood
9829	Masayoshi Matsubara, Ryo Sasaki, Jun P. Takahara, Shinji Moritake, Yasuyuki Harada and Hiromasa Kaneko	Optimization of dynamic manufacturing process for carbon materials using a genetic algorithm
9830	Irvy Ai Xia Teh, Hao-Yeh Lee, Zong Yang Kong and Jaka Sunarso	Controllability assessment of hybrid heat-integrated configuration for an ideal indirect reactive distillation process
9961	Mahar Diana Hamid, Mohd Fauzi Zanil and Mohamad Anwar Ahmad	Future of Machinery Safety using Artificial Intelligence (AI) in Malaysia

Poster Presentations

Paper ID Number	Author	Title of Paper
0498	Yeon Ji Choi, Ji Eun Lee and Kyungtae Park	4-bed VPSA process for Xenon purification from semiconductor waste gas
0631	Jiahao Huang and Le Wu	Process Design and Analysis of a Net-Zero Carbon Emissions FCC Unit Integrating Co-Processing Technique with Green Hydrogen and Electricity
1289	Xuequn Chong, Lanyu Li and Xiaonan Wang	Multi-Scale Optimization and Evaluation Framework for Chemical Park Operations
1362	An Hung Tseng and Bor Yih Yu	Techno-Economic and Safety Analysis of Acrylic Acid Production from Crude Glycerol: A Comparative Study of Acrolein and Allyl Alcohol Pathways
1610	Yu-Yang Chien, Jia-Lin Kang, David Shan Hill Wong and John Di Yi Ou	Catalyst Deactivation of an Esterification Production Process
1990	Yu-Ying Chen, Zong Yang Kong, Vincentius Surya Kurnia Adi and Hao-Yeh Lee	Insights into flexible single distillation column design using Aspen Plus and Aspen Plus Dynamics

Poster Presentations

Paper ID Number	Author	Title of Paper
2820	Shenjie Li, Minglei Yang and Jingyi Lu	Control-Oriented Modeling for Industrial Propylene Polymerization Process based on Physics-Informed Neural Network
2995	Chuei-Tin Chang	Fast Computation of Dynamic Flexibility Index Using Improved Vertex Method Based on Parallel Genetic Algorithm
3333	Chiah Yoke Yi, Shuhaimi Bin Mahadzir	New Dimensionless Parameters For The Optimal Design of Multistage Vapor Compression Refrigeration Systems
4124	Chuei-Tin Chang	Optimal Design and Maintenance of Standby Mechanisms for Actuators in Continuous Processes
4245	Bawornpong Pornchuti, Yuttana Phoochahan, Prarana Padma, Suchada Ruengrit and Pravit Singtothong	Application of Batch Adsorption Data in Packed Column Design for Competitive Adsorption of Copper, Nickel, and Chromium Ions
4617	Mohd Fauzi Zanil, Zainal Ahmad and Syamsul Rizal Abd Shukor	Optimal Rules base development in Type-2 Fuzzy Logic for Stochastic Chemical Control System
4700	Azlyana Ismail, Vinod Muneesesparan, Tin Sin Lee and Soo-Tueen Bee	Effect of carbon dioxide production in direct methanol fuel cell
6290	Hung-Pang Chen, David Shan-Hill Wong and Cheng Huang Chou	Data Rectification of a Recycle Heated Continuous Stirred Tank Reactor by Heat and Energy Balance
6815	Thomas Shean Yaw Choong, Fan Li and Siti Nurul Ain Md. Jamil	Kinetic Evaluation of Crystal Violet Dye Decolorization from Aqueous Solution by Advanced Oxidation Processes
7821	Kian Hao Ng, Nurul Husna Mohd Yusoff, Zheng Yuen Shee, En Yi Lim, Jeevandeep Singh, Chien Hwa Chong and Yoke Kin Wan	P-graph approach to synthesize a wastewater treatment process with nonlinearities based on economic performance and heavy metal removal
7929	Yishen Tew, Lanyu Li and Xiaonan Wang	Optimizing Waste Valorization in the Biochemical Industry: A Graph RAG-Powered Domain-Specific Q&A System
9364	Hong Yee Hung and Zhao Jinsong	Unsupervised Deep Learning Approach for Batch Chemical Process Fault Detection