Singapore-China Joint Symposium on Al & Sustainability

Day 2 Program: Young Scientists Forum

Lay z Program: 1 ouing Scientists Forum SESSION 1							
Venue: LT5	Venue: LT6	Venue: LT7	SION 1 Venue: LT8	Venue: LT14	Venue: LT15		
Session A: Resource Recovery	Session B: Membrane Technology	Session C: Computing, Data Science & Al	Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair:	Session E: Environmental Al & Modelling Session Chair and Co-Chair	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair.		
Session Chair and Co-Chair: Xunchang FEI	Session Chair and Co-Chair: Tzyy Haur CHONG & Tian LI	Session Chair and Co-Chair:	Session Chair and Co-Chair:	Session Chair and Co-Chair: Xunyuan YIN & Zhe WU	Session Chair and Co-Chair:		
Keynote Lecture A1	Keynote Lecture B1	Keynote Lecture C1	Keynote Lecture D1	Keynote Lecture E1	Keynote Lecture F1		
(09:00 to 09:20)	(09:00 to 09:20)	(09:00 to 09:35)	(09:00 to 09:20)	(09:00 to 09:20)	(09:00 to 09:20)		
Reclaim, Restore, Reimagine: Circular Waste Solutions in Action	Improving Efficiency in Seawater Reverse Osmosis Desalination (SWRO) Process	Optimization and Acceleration of Large Generative Model Development	A Sustainable Bio-platform for High Quality Microbial Protein Production	Spatial-temporal Adaptive Planning of Flood Managed Aquifer Recharge Guided by Deep Reinforcement Learning	Intercalation in 2D TMDs and Membranes Fabrication for Water Purification		
Grzegorz LISAK Nanyang Technological University, SG	Tzyy Haur CHONG Nanyang Technological University, SG	Tianwei ZHANG Nanyang Technological University, SG	Yan ZHOU Nanyang Technological University, SG	Xiaogang HE National University of Singapore, SG	Zhiyuan ZENG City University of Hong Kong, CN		
Keynote Lecture A2 (09:20 to 09:40)	Invited Lecture B2 (09:20 to 09:35)		Oral D2 (09:20 to 09:35)	Oral E2 (09:20 to 09:35)	Invited Lecture F2 (09:20 to 09:35)		
Valorising Waste for Aquaculture Feed in Singapore	Enhanced Ammonium Rejection in Thir-Film Composite Osmotic Membranes: Performance and Mechanisms		Food Waste Valorisation via Fermentation	A mechanism-data co-driven hybrid modeling framework for WWTPs to achieve reliable simulation at system-level	Developing high-pressure pressure-retarded osmosis membranes for renewable osmotic energy harvesting; the critical role of membrane material design and structure optimization		
Yu De CHAO Singapore Food Agency, SG	Xian BAO Harbin Institute of Technology, CN		Huang MAO Temasek Polytechnic, SG	YI PAN Zhejiang University, CN	Qlanhong SHE Nanyang Technological University, SG		
Oral A3 (09:40 to 09:55)	Oral B3 (09:35 to 09:50)	Oral C2 (09:35 to 09:50)	Oral D3 (09:35 to 09:50)	Oral E3 (09:35 to 09:50)	Invited Lecture F3 (09:35 to 09:50)		
Turning Waste into Resource: Blochar Solutions for Sustainable Agriculture	Membrane Structure-dependent Water and Ion Transport in Osmotic Electrodialysis	Generative Al for Health	Medium-chain fatty acid biosynthesis under high ammonia stress: Mechanisms and process optimization	Spatiotemporal Patterns of Urban Flooding in Singapore and Detection via Al-Based Image Analysis	Sustainable Membranes for a Circular Membrane Industry		
Xin YANG Nanyang Technological University, SG	Hong LIU Nanyang Technological University, SG	Hung Manh PHAM Singapore Management University, SG	Liang ZHANG Sun Yat-Sen University, CN	Jingyu WANG National Institute of Education, SG	Bofan LI Agency for Science, Technology, and Research (A*STAR), SG		
Oral A4 (09:55 to 10:10)	Invited Lecture B4 (09:50 to 10:05)	Oral C3 (09:50 to 10:05)	Oral D4 (09:50 to 10:05)	Oral E4 (09:50 to 10:05)	Invited Lecture F4 (09:50 to 10:05)		
Chicken Manure Ash as a Bioresource-based Material for Efficient Carbon Dioxide Capture	Modeling Dynamics of NF/RO Membrane Fouling with Collision Attachment Approach	Decentralized GPU Banks: Web3-Orchestrated Al Systems for Sustainability	Revealing Cryptic Microbial Carbon/Nitrogen Pathways: A Novel Strategy for Sustainable Greenhouse Gas Mitigation and Resource Recovery	Transfer learning in modeling and predictive control of chemical processes	Distributed direct air capture by carbon nanofiber air filters		
Jiahui BU Nanyang Technological University, SG	Tian LI Tongji University, CN	Linshan JIANG National University of Singapore, SG	Chen CAI University of Science and Technology of China, CN	Ming XIAO National University of Singapore, SG	Ronghul WU Nanyang Technological University, SG		
Oral A5 (10:10 to 10:25)	Oral B5 (10:05 to 10:20)	Oral C4 (10:05 to 10:20)	Oral D5 (10:05 to 10:20)	Oral E5 (10:05 to 10:20)	Invited Lecture F5 (10:05 to 10:20)		
Circular manufacturing implementation, planning and control	Double-Macrocycles Based COF Membranes for Seawater Lithium Extraction	GreenIntellICPN: Al-Enabled Spatiotemporal Scheduling for Energy- Efficient Computing Power Networks	Carbon Emission of Straw-combined Heat and Power Generation	A Novel Perspective on Process Monitoring: Nonlinear Causal Mapping Aggregation for Key Performance Indicator	Smart imaging for smart separation: electron microscopy and machine learning in membrane design		
Marvin Carl MAY Nanyang Technological University, SG	Xinkun MA Nanyang Technological University, SG	Wen WEN Beijing University of Posts and Telecommunications, CN	Tingting QiAN Shandong Normal University, CN	Haoqian WANG Beijing University of Chemical Technology, CN	Prashant KUMAR Nanyang Technological University, SG		
MORNING TEA BREAK (10:20 to 10:40)							
		SES:	SION 2				
Venue: LT5	Venue: LT6	Venue: LT7	Venue: LT8	Venue: LT14	Venue: LT15		
Venue: LT5 Session & Resource Recovery Session Chair and Co-Chair:	Venue: LT6 Session B: Membrane Technology Session Chair and Co-Chair:			Venue: LT14 Session E: Environmental Al & Modelling Session Chair and Co-Chair:	Venue: LT15 Session F: Environmental Chemistry & Materials Session Chair and Co-Chair:		
Session A: Resource Recovery	Session B: Membrane Technology	Venue: LT7 Session C: Computing, Data Science & Al	Venue: LT8 Session D: Biotechnology & Bioprocesses	Session E: Environmental AI & Modelling	Session F: Environmental Chemistry & Materials		
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Session A: Resource Recovery Session Chair and Co-Chair: Grzegorz LISAK Keynote Lecture A6 (10-40 to 11-00) Al Technology for Smart Waster-to-Energy System Ounsing MUANG Zinjang University. CN Keynote Lecture A7 (11-00 to 11-20) Sustainable Engineering of Functional Carbon Manches from Waster Lising an Energy-Efficient Qual-Slage Reactor Waster Lising an Energy-Efficient Qual-Slage Reactor Waster Lising an Energy-Efficient Qual-Slage Reactor Wend to OH Universit Slage Margin, MY Oral A8 (11-20 to 11-35) Catalysis Connection of Municipal Sineage Sludge and Animal Manuar (file Slogenic Mull-Wallafel Carbon Nanothes and Hydrogen via Pylmysler-OTD: Availated Catalysis Ferfermance John Connection of Municipal Sineage Sludge and Animal Manuar (file Slogenic Mull-Wallafel Carbon Nanothes and Hydrogen via Pylmysler-OTD: Availated Catalysis of Carbon Sineage Sludge and Animal Nanyang Tectrological University, SG Oral A9 (11-35 for 11-50) RESOURCE ARRAD Nanyang Tectrological University, SG Oral A10	Session B. Membrane Technology Session Chair and Go-Chair Gengoing LU & Mao TIAN Keynote Lecture B6 (10:A0 to 11:00) Machine Lamming Accesses In 1917 Throughout Design of MOF-Based Membranes for Michecular Separation Gengaling LM Namps great University, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Indiagnal Membranes Composede Forward Commonthy, Xian, CN Oral B8 (11:15 to 11:30) Oral B8 (11:15 to 11:30) Grade Membrane Contactor for Bubble free Biomedia Commonthy, Xian, CN Oral B9 (11:30 to 11:45) Oral B9 (11:30 to 11:45) Machine teaming in CO membrane design: stability mechanisms and settle ballistic francaport Grane LM Arch University of Science and Technology, CN Oral B10	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rui TAN Keynote Lecture C5 (10-40 to 11-15) Al-Powered Robotic Systems for Substanda Marine Ecosystem Mania MIGHANE Singapore University of Technology & Design, SG Oral C6 (11-15 to 11-30) Physics and Knowledge based Cogniline Opital Twin for Advanced Sattery Analytics WW ISHANG Singapore Initiate of Technology, SG Oral C7 (11-30 to 11-45) Advantability Trained Symamic Essantile: A Moving Target Defense Strategy for Robust Semantic Segmentation in Autonomous Vehicles Vangha MO Singapore Institute of Technology, SG Oral C7 (11-30 to 11-45) Singapore Institute of Technology, SG Oral C7 (11-30 to 11-45) Singapore Institute of Technology, SG	Venue: LTS Session D: Bitotechnology & Bioprocesses Session Chair and Go-Chair: TBC Keynote Lecture D6 (10:40 to 11:00) (10:40 to 11:00) Biological sulfur disproportionation enightness new fachadogy divelapment for austrainable weaterwater freatment Fing., JAMO Sun Yas-Sen University, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-negative applications Weater TU Nanyang Technological University, SD Oral D8 (11:15 to 11:30) Affarressing Methanorizon-Indicated University of Chaton-Neutral Biogas Purification and High-Value Biomass Production Vasious SORD University of Science and Technology of Chao, CN Oral D9 (11:30 to 11:45) Mining high-value bioproducts from subdigs. Pubertial for MCFAs production without enogenous electron donors Lat U Nanyang Technological University, SD Oral D10	Session E: Environmental Al & Modelling Session Chair and Go-Chair Xunyuan NN and Zhe WU Keynote Lecture E6 (10:40 to 11:00) Mestive learning-enabler Koopman modeling and corner optimization-based predictive control of nonlinear systems Xunyuan NN Nanyang Technological University, 60 Oral E7 (11:00 to 11:15) Quantitative Analysis of Exercitation learning in Nanofilitation for Trace Organic Contaminants Removal 20(11:00 to 11:15) Quantitative Analysis of Exercitation learning in Nanofilitation for Trace Organic Contaminants Removal 20(11:30 to 11:15) Oral E8 (11:15 to 11:30) Machine learning forecasts of glader daily CO2 emissions in near-real-time 3th USBND The Literary of Nanofilitation Control of Nanofilitation for Crail E9 (11:30 to 11:45) Feet Machine Learning based Model Predictive Control of Nanofilitation Processes: Weekloop WAMG National University of Sirragonous 80 Oral E10	Session F: Environmental Chemistry & Materials Session Chair and Go-Chair TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Carbon Capture From Desize Polymers to Microprocus Structures Sui JAMAN National University of Singapore, SG Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in whathin films for accurate molecular sinving Ziberal JAMAN Nanyang Technological University, 3G Invited Lecture F8 (11:15 to 11:30)		
Session A: Resource Recovery Session Chair and Co-Chair: Grzegorz LISAK Keynote Lecture A6 (10-40 to 11-00) Al Technology for Smart Waste-to-Einergy System Gaming RUNNO Zinging University, CN Keynote Lecture A7 (11-00 to 11-20) Sustainable Engineering of Functional Carbon Nanotubes from Waste Using an Energy Efficient Dus-Slage Reactor Waste Using an Energy Efficient Dus-Slage Reactor Waste Using an Energy Efficient Dus-Slage Reactor Waste Using an Energy Efficient Dus-Slage Association Waste Using State Using State Using State Using State Via Psychystic-CVD: Associate Shapes Sladge and Animal Materia Politicopics All Waster Carbon Intendibles and Hydrogen via Psychystic-CVD: Associate State Using State Naryang Technological University, 50 Orial A9 (11-35 to 11-50) Resource recovery of All and P from gastification semage sludge slag via a multi-stip well-estraction system MASSEA AMRAD Naryang Technological University, 50 (11-50 to 12-05) Reclaimed seawater discharge, An electolytic approach to brine	Session B. Membrane Technology Session Chair and Go-Chair Genging LU & Miso TIAN Keynote Lecture B6 (10:A0 of 11:00) Machine Learning Accelerates lefty Throughput Design of MOF-Based Membranes for Molecular Separation Gengaling LU Italian Technologian Chairman Companies Companies LU Italian Technologian Chairman	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Go-Chair: Rui TAN Keynote Lecture C5 (10-40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Monitoring Mails MEGIJJANE Singapore University of Technology & Design, SG Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Tain for Advanced Battery Analysis Wat DAMNO Singapore Institute of Technology, SG Oral C7 (11:30 to 11:45) Adversarially Trained Dynamic Ensemble: A Moving Target Defense Strategy for Robust Semantic Signegatementation in Autonomous Vehicles Yanghal MO Singapore Institute of Technology, SG Oral C7 (11:45 to 12:00) Date Orien Control for Three-Phase AC-OC Power Converters	Venue: LTS Session D: Bitchchnology & Bioprocesses Session Chair and Go-Chair: TBC Keynote Lecture D6 (10-40 to 11:00) Biological suffer disproportionation entightness new technology development for austrainable wastenester treatment Fara, JAMP Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-negative applications Weeking TU Namyang Technological University, SG Oral D8 (11:15 to 11:30) Hamsessing Methandrogal-Alforestipae Synergy for Carbon-Neutral Biograp Purification and Rejn-Vauel Biomess Production Vauenus SONO University of Source and Technology of China, CN Oral D9 (11:30 to 11:45) Mining high-value Biognoducts from studge-Potential for MCFAs production without engeneous delation donus Lai Li Lai Li Nanyang Technological University, SG Oral D9 (11:45 to 12:00) Resortion of referably Malifert neutron products by Fe3- during themelly forlight perthermities of enforced shading themelly forlight perthermities of enforced shading themelly device protections from the options products by Fe3- during themelly forlight perthermities of enforced shading themelly device perthermities of enforced shading themelly device perthermities and enforced shading themelly and themelly a	Session E: Environmental A & Modelling Session Chair and Go-Chair Xuryuan YN and Zhe WU Keynote Lecture E6 (10-40 to 11-00) Machine learning enabled Koopman modeling and convex optimization-based predictive central of notineae systems Xuryuan YN Nanyang Technological University, SD Oral E7 (11:00 to 11:15) Quantitative Analysis of Electrostatic Interactions in Nanofilitration for Trace Organic Conteminese Removal Zingian Xia Zingiang University, CN Oral E8 (11:15 to 11:30) Machine learning forecasts of global daily CO2 emissions in near-rise diene The University of Hong King, CN Oral E9 (11:30 to 11:45) Fast Machine Learning based Model Predictive Control of Nonlinear Processes Westinog WANG National University of Singapore, SG Oral C9 (11:45 to 12:00) Date Diven Moving Horizon Estimation Using Machine Learning	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10-40 to 11-00) Membranes for Carbon Capture. From Dense Polymers to Microprova Shructure But DAIMG National University of Singapore, 50 Invited Lecture F7 (11:00 to 11-15) Aligned macrocycle pores in ultrathin films for accurate molecular serving The University of Singapore, 50 Invited Lecture F7 (11:00 to 11-15) Aligned macrocycle pores in ultrathin films for accurate molecular serving The University of Chemistry, 50 Invited Lecture F8 (11:15 to 11:30) Membrane Solutions for Low-Energy and Sustainable Resource Recovery The University of Chemister, 30-40 films for accurate molecular serving for Chemister, 50 The University of Chemister, 30-40 films for accurate Microcorpic Conditions Ziene YLMA Nanyang Technological University, 30 Ornal F9 (11:30 to 11:45) Lactio-Acid-based Deep Extensive Severe for Sustainable Recovery of Otical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for Sustainable Recovery of Chical Media from Specific Severe for S		

SESSION 3								
Warran LTP	Venue: LTS Venue: LT6 Venue: LT7 Venue: LT8 Venue: LT14 Venue: LT15							
Session A: Resource Recovery	Session B: Membrane Technology	Session C: Computing, Data Science & Al	Session D: Biotechnology & Bioprocesses	Session E: Environmental Al & Modelling	Session F: Environmental Chemistry & Materials			
Session Chair and Co-Chair:	Session Chair and Co-Chair:	Session Chair and Co-Chair:	Session Chair and Co-Chair:	Session Chair and Co-Chair:	Session Chair and Co-Chair:			
Qunxing HUANG	Haiqing LIN & Yumeng ZHAO	Rui TAN	TBC	Xunyuan YIN and Zhe WU	TBC			
Keynote Lecture A11	Keynote Lecture B11	Keynote Lecture C9	Keynote Lecture D11	Keynote Lecture E11	Keynote Lecture F11			
(14:00 to 14:20)	(14:00 to 14:20)	(14:00 to 14:35)	(14:00 to 14:20)	(14:00 to 14:20)	(14:00 to 14:20)			
Status, Global Trends and Perspectives for Chemical Recycling	Sabatier principle on highly CO 2-phillic yet rejective membranes for hydrogen purification	Efficient Multi-agent Path Planning via Graph Potential Field	Al for Toxicology - An Case Study on Deep Learning-enabled Morphometric Analysis (DLMA) for High Throughput Toxicity Screening	Robust BFMHE and Robust Data-driven MHE for Lithium-ion Battery	Food as a source of disinfection byproducts: Detection, formation, and control in processing and coaking			
M. GRAEBNER	Halqing LIN	Ivor W. TSANG	Sijie LIN	Xiaodong XU	Yang PAN			
TU Bergakademie Freiberg, Fraunhofer Institute for Ceramic Technologies and System IKTS, DE	University at Buffalo, USA	A*STAR Centre for Frontier Al Research, SG	Tongji University, CN	Central South University, CN	Nanjing University, CN			
Oral A12 (14:20 to 14:35)	Invited Lecture B12 (14:20 to 14:35)		Oral D12 (14:20 to 14:35)	Keynote Lecture E12 (14:20 to 14:40)	Invited Lecture F12 (14:20 to 14:35)			
Development and Application of High-Performance Biochar Catalysts for Waste Pyrolysis—Steam Reforming	Biomimetic Catalytic Membrane Enables Sustainable Water Punfication through Direct-Electron-Transfer Pathway		(14.20 to 14.33)	Machine Learning in Model Predictive Control of Chemical Processes	Powering chemicals production with renewable electricity			
Jiali GUO	Yumeng ZHAO		Le Boucher RICHARD	Zhe WU	Wan Ru LEOW			
Nanyang Technological University, SG	Harbin Institute of Technology, CN		Temasek Life Sciences Laboratory, SG	National University of Singapore, SG	Nanyang Technological University, SG			
Oral A13	Oral B13	Oral C10	Oral D13	Oral E13	Invited Lecture F13			
(14:35 to 14:50)	(14:35 to 14:50)	(14:35 to 14:50)	(14:35 to 14:50)	(14:40 to 14:55) Large Language ModelAssisted Machine Learning for the Design	(14:35 to 14:50)			
Incorporating CO2 capture-utilization with municipal solid waste upcycling through isothermal sorbent looping-reforming	Lithium recovery from seawater desalination brines using ion-sieve electrospun nanofibrus membranes: the role of nanofiber design	Towards Fair Concurrent Training of Privacy Preserving AI	Elucidating the EPS-Biofouling Nexus in Electrochemical Anaerobic Membrane Bioreactor via Explainable AI Approaches	and Validation of Deep Eutectic Solvent-Porous Organic Cage Membranes in CO ₂ N ₂ Separation	Hydrogen embrittlement in steels – a roadblock against sustainable hydrogen economy			
Gulcai LilU Nanyang Technological University, SG	Nacem NADZRI Nanyang Technological University, SG	Marie SIEW Singapore University of Technology & Design, SG	Chengxin NIU Nanyang Technological University, SG	Jie ZHAO Kunming University of Science and Technology, CN	Eason CHEN Nanyang Technological University, SG			
Oral A14	Oral B14	Oral C11	Oral D14	Oral E14	Oral F14			
(14:50 to 15:05)	(14:50 to 15:05)	(14:50 to 15:05)	(14:50 to 15:05)	(14:55 to 15:10)	(14:50 to 15:05)			
Carbon black dispersions in conductive cementitious composites: Mechanistic insights into the interrelationship between dispersion behaviour, electrical properties and microstructures	Polyphenylsulfone-Based Membranes for Gas Separation	Certified Robustness against Sensor Heterogeneity in Acoustic Sensing	Machine Learning Optimization of Waste Salt Pyrolysis: Predicting Organic Pollutant Removal and Mass Loss	Distributed Fault-Tolerant Garne-Theoretic Control for Sustainable Multi-Agent Systems with Actuator Faults	Artificial Intelligence-Assisted Online Sensor for Environmental Monitoring			
Kevin Matthew MANURUNG Nanyang Technological University, SG	Fan FENG National University of Singapore, SG	Phuc Duc NGUYEN Nanyang Technological University, SG	Run ZHOU Narryang Technological University, SG	Wenjing HOU Beijing University of Chemical Technology, CN	Xuanhao LIN National University of Singapore, SG			
Oral A15	Oral B15	Oral C12	Oral D15	Oral E15	Oral F15			
(15:05 to 15:20)	(15:05 to 15:20)	(15:05 to 15:20)	(15:05 to 15:20)	(15:10 to 15:25)	(15:05 to 15:20)			
Utilizing Polyethylene Terephthalate (PET) as a Sustainable Additive in Cementitious Mortar Composites: Plastic Modification and binary additive-cement system	Chemically Robust Hollow Fiber Thin-film Composite Membranes Based on Polyurea Selective Layers for Nanofiltration under Extreme pH Conditions	Slim-SC: Thought Pruning for Efficient Scaling with Self-Consistency	Towards Explainable Hybrid Model for Multi-Hour Ahead Wastewater Effluent Prediction	Evaluating and Advancing Large Language Models for Nanofiltration Membrane Knowledge Tasks	Temperature effects on ozonation: Impacts on kinetics of organic amines abatement, bromate formation and disinfection			
Zijian WANG Nanyang Technological University, SG	Qlang XUE Nanyang Technological University, SG	Colin HONG Nanyang Technological University, SG	Yijie WANG Narryang Technological University, SG	Xinchen XIANG Zhojiang University, CN	Zhuangsong HUANG Harbin Institute of Technology, CN			
		A EXTERNACION TELLO						
AFTERNOON TEA BREAK (15:20 to 15:40)								
			REAK (15:20 to 15:40)					
Venue: LT5	Venue: LT6	SES:	SION 4 Venue: LT8	Venue: LT14	Venue: LT15			
Venue: LT5 Session A: Resource Recovery Session Chair and Co-Chair:	Venue: LT6 Session B: Membrane Technology Session Chair and Co-Chair:	SES:	SION 4	Venue: LT14 Session E: Environmental Al & Modelling Session Chair and Co-Chair:	Venue: LT15 Session F: Environmental Chemistry & Materials Session Chair and Co-Chair:			
Session A: Resource Recovery	Session B: Membrane Technology	Venue: LT7 Session C: Computing, Data Science & Al	Venue: LT8 Session D: Biotechnology & Bioprocesses	Session E: Environmental Al & Modelling	Session F: Environmental Chemistry & Materials			
Session A: Resource Recovery Session Chair and Co-Chair:	Session B: Membrane Technology Session Chair and Co-Chair:	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair:	Venue: LT8 Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair:	Session E: Environmental Al & Modelling Session Chair and Co-Chair:	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair:			
Session A: Resource Recovery Session Chair and Co-Chair: Wen Da OH Invited Lecture A16 (15:40 to 16:00) Wastein-Products* for the Substandiality Transformation of	Session B: Membrane Technology Session Chair and Co-Chair: Xiaoying ZHU 8. Lei YAO Keynote Lecture B16 (15:40 to 16:00)	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rui TAN	SION 4 Venue: LT8 Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair: TBC Keynote Lecture D16 (15:40 to 16:00)	Session E: Environmental AI & Modelling Session Chair and Co-Chair: Xumyuan YN and Zhe WU Keynote Lecture E16 (15:40 to 16:00)	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F16 (15:40 to 16:00)			
Session A: Recursor Recursor Session Chair and Co-Chair: Wen Da OH Invited Lecture A16 (15:A0 to 16:00) Weste-to-Product' for the Sessionality Transformation of Magacilles: Impact of Policie Knowledge & Reception on Chemical Recycling Deployments in Singapore	Session B: Membrane Technology Session Chair and Co-Chair: Xiaoying ZHU 8. Let YAO Keynole Lecture B16 (15:40 to 16:00) Interface-Engineered Functional Membranes for Emerging Pollutert Removal	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rui TAN Keynote Lecture C13 (15:40 to 16:15) Being Small in the Eta of Large Models	SION 4 Venue: LT8 Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair: TBC Keynote Lecture D16 (15:40 to 16:00) Emerging Pollutants: Antibiotic Resistance Genes — Transmission in the Environment	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xuryuan YN and Zhe WU Keynole Lecture E16 (15:40 to 16:00) A445 for Sustainable Innovation: Building High-Quality Datasets for Cool-Based New Millen	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F16 (15:40 to 16:00) Antificially Confined Sub-Nanoscale Channels for Molecular Separation			
Session A: Resource Recovery Session Chair and Co-Chair: Wen Da OH Invited Lecture A16 (15:40 to 16:00) Wastein-Products* for the Substandiality Transformation of	Session B: Membrane Technology Session Chair and Co-Chair: Xiaoying ZHU 8. Lei YAO Keynote Lecture B16 (15:40 to 16:00)	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rui TAN Keynote Lecture C13 (15:40 to 16:15)	SION 4 Venue: LTB Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair: TBC Keynote Lecture D16 (15:40 to 16:00) Emeging Politants: Artibiotic Resistance Genes – Transmission in	Session E: Environmental Al & Modelling Session Chair and Co-Chair: Xunyuan YNN and Zhe WU Keynote Lacture E16 (15.40 to 16:00) A45 for Sustainable Innovation: Building Hart-Quality Datasets for	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F16 (15:40 to 16:00) Antificially Confined Sub-Nanoscale Charmets for Milecular			
Session & Resource Recovery Session Chair and Co-Chair: Wen Da OH Invited Lecture A16 (15:40 to 16:00) Waste-to-Podocts' for the Sustainability Transformation of Megaciles: inpacts of Palic Knowledge & Peccaption or Chemical Recycling Deployments in Singapore Rob Paul ER	Session B: Membrane Technology Session Chair Xisoving ZHU 8. Let YAO Keynote Lecture B16 (15:40 to 16:00) Interface-Engineered Functional Membranes for Emerging Pollutent Personal Xisoying 2HU	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rui TAN Keynote Lecture C13 (15:40 to 16:15) Being Small in the Era of Large Models Anthony K: H: TUNG	Venue: LTE Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair: TBC Keynote Lecture D16 (15:40 to 16:00) Emerging Pollutants: Antibiotic Resistance Genes – Transmission in the Environment	Session E: Environmental Al & Modelling Session Chair and Co-Chair: Xunyuan YN and Zhe WU Keynote Lecture E16 (15:40 to 16:00) A445 for Sustainable Invasions Building High-Quality Datasets for Coal-State Pleas Meetings Yang DONG	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair: TBC Keynote Lecture F16 (15:40 to 16:00) Artificially Confined Sub-Nanoscale Chamels for Molecular Separation Je SHEN			
Session A. Resource Recovery Session Chair and Go-Chair: Wen Da OH Invited Lecture A16 (15-40 to 16:00) Waste-G-Poducts' for the Sustainability Transformation of Magacities: Impacts of Public Recovering & Recognition on Chemical Recognition Displayments in Singapore Resolved to the Confederal of Transformation of Magacities: Resolved Displayments in Singapore Rob Pie LEE Bioinferburg University of Technology, DE Oral A17	Session B: Membrane Technology Session Chair and Co-Chair: Xisoying ZHU 8. Lei YAO Keynote Lecture B16 (15:40 to 16:00) Identice Engineered Functional Membranes for Emerging Polluter Removal Zeolong University, CN Invited Lecture B17	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rui TAN Keynote Lecture C13 (15:40 to 16:15) Being Small in the Era of Large Models Anthony K: H: TUNG	Sign 4 Venue: LT8 Session D: Bistechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D16 (15:40 to 16:00) Emerging Pollutants. Addition's Resistance Genes — Transmission in the Environment Xxade YN Nanyang Tednological University, SG Oral D17	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xurryuan YN and Zhe WU Keynote Lecture E16 (15:40 to 16:00) A445 for Sustainable invention. Building High-Quality Datasets for Code Sessed New Materials Yang DONG National Institute of Clear-and-Line Custon Energy, CN Oral E17	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F16 (15:40 to 16:00) Addicially Confined Sub-Neroscale Channels for Molecular Separation Ja 98/88 Nanyang Technological University, SG Oral F17			
Session A: Resource Recovery Session Chair and Ca-Chair: Wen Da OH Invited Lecture A16 (15:40 to 16:00) Waste 10-Products' for the Sustainability Transformation of Magazines: Inspection on Chemical Part of Part	Session B: Membrane Technology Session Chair and Co-Chair Xisoying ZHU 8 Lei YAO Keynote Lecture B16 (15:40 to 16:00) Interface-Engineered Functional Membranes for Emerging Pollution Removal Xisoying ZBU Zisigang University, CN Invited Lecture B17 (16:00 to 16:15) Machine-learning guided design and performance prediction of membrane processes for PFAS removal Lat YAO	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rui TAN Keynote Lecture C13 (15:40 to 16:15) Being Small in the Era of Large Models Anthony K: H: TUNG	Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair: TBC Keynote Lecture D16 (15:40 to 16:00) Emerging Pollutants: Arcibotic Resistance Genes – Transmission in the Emiriconnent Xabe YN Nanyang Technologiau University, SG Oral D17 (16:00 to 16:15) Simultaneous Vanedum/17 Removal and Toxicity Response Mechanisms in Settledock Ages Systems	Session E: Environmental Al & Modelling Session Chair and Co-Chair: Xuryuan YN and Zhe WU Keynote Lacture E16 (15:A0 to 16:00) AMS for Sustainable Innovation: Building High-Quality Datasets for Coal-Based New Meetinds Yang DONG National Institute of Clean-act-Law-Custon Energy, CN Oral E17 (16:00 to 16:15) Manniba-result ordinary equation Koopman approach for modeling and optimal control of membrane water restriend a pittern Zhaopang LI	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F16 (15:40 to 16:00) Artificially Confined Sub-Namoscale Channels for Molecular Separation Jas BRBN Namyang Technological University, 80 Oral F7 (16:00 to 16:15) Namocovalent Complex Modulated Fabrication of COF Membrane for Organic Solvent Namodification Bacon WAND			
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Session A. Resource Recovery Session Chair and Co-Chair: Wen Da OH Invited Lecture A16 (15-40 to 16:00) Waste-Co-Products' for the Sustainability Transformation of Magazettes: Impacts of Public Recovering of Perception on Chemical Recycling Delayments in Singapare Recycling Delayments in Singapare Rob Tex LEE Bisanderburg Utel wently of Technology, DE Oral A17 (16:00 to 16:15) Inequality in Air Politician-distributation Mortality by Income Level between and within Countries Honoglang ZHANG Utel wently of Shangland for Science and Technology, CN Oral A18 (16:15 to 16:30) Green Synthesis of Binder-Free Weste Clerified advanced for HZS Removal at Ambient Temperature Wenning LI Shangland University CN, Nanyang Technological University SG Oral A19 (16:30 to 16:45)	Session B: Membrane Technology Session Chair and Co-Chair Xisoying ZHU & Lei YAO Keynote Lecture B16 (15:40 to 16:00) Interface Engineered Functional Membranes for Emerging Pollutent Removal Xisoying ZBU Zinging University, CN Invited Lecture B17 (16:00 to 16:15) Machine-learning quided edition and performance prediction of membrane processes for PFAS removal Lei YAO Whan Institute of Technology, CN Oral B18 (16:15 to 16:30) Quantifying the potential of high-genformance RO membranes for securety and professional	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rui TAN Keynote Lecture C13 (15:40 to 16:15) Being Small in the Eira of Large Models Anthony K: H. TUNG National University of Birappore, SG Oral C14 (16:15 to 16:30) D/TMoS: Delving into Diverse Timp-Model Selection on Microcontrollers Xiao MA Shappore Management University, SG Oral C15 (16:30 to 16:45)	Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair: TBC Keynote Lecture D16 (15:40 to 16:00) Emerging Pollutants: Antibiotic Resistance Genes — Transmission in the Eminioment Xuole YN Nanyang Technological University, SG Oral D17 (16:00 to 16:15) Simultaneous Variadum(I/) Removal and Toxicity Response Mechanisms in Settlesche Algae Systems Simp REN Nanyang Technological University, SG Oral D18 (16:15 to 16:30) The plastisphere: A hazard or solution? Salcham BARROUTA Nanyang Technological University, SG Oral D18 (16:15 to 16:30) The plastisphere: A hazard or solution? Salcham BARROUTA Interpret Technological University, SG Oral D19 (16:30 to 16:45) A Semenistic Statebor of MS Statebors and HMAD Patteres for	Session E: Environmental Al & Modelling Session Chair and Go-Chir: Xunyuan YN and Zhe WU Keynote Lecture E16 (15:40 to 16:00) A445 for Sustainable invariation Multidon (Apri-Quality Datasets for Coal Beard New Materials Yeap D040 National Institute of Clean-and-Lore-Carloon Energy, CN Oral E17 (16:00 to 16:15) Mambé-neural ordinary equation Koopman approach for modeling and optimal control of membrane water freatment system Zhapayang L. Nanyang Technological University, SG Oral E18 (16:15 to 16:30) Date-Efficient Modelling of Integrated Chemical Plants with Recycles using a Graph Convolutional LSTM Approach Warnia WU National University of Sirrapores, SG Oral E19 (16:30 to 16:45)	Session F. Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F16 (15:40 to 16:00) Antificially Confined Sub-Necocate Channels for Molecular Separation Assisted Nanyary Technological University, SG Oral F17 (16:00 to 16:15) Noncovalent Complex Modulated Fasticiation of COF Membrane for Organs Science Naceditation Basys WANO Joint Stock of NUB and TAU, ON Oral F18 (16:15 to 16:30) When polymers meet 20 materials: Innovations in nanochannel membrane design The University of Cuematinal, AU Oral F19 (16:30 to 16:45) Califate toxicities of disinfection of conventional disinfection.			
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