Singapore-China Joint Symposium on AI & Sustainability

Day 2 (30 September 2025): Young Scientists Forum

		SES	SION 1					
Venue: LT5	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:			
Xunchang FEI	Tzyy Haur CHONG & Tian LI	Rui TAN	TBC	Xunyuan YIN & Zhe WU	TBC			
Adiicialigi Ei	12yy fiadi Chong & Hall El	Nul IAN	150	Autiyaati TiiV & Ziie WO				
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	Optimization and Acceleration of Large Generative Model	A Sustainable Bio-platform for High Quality Microbial Protein	Spatial-temporal Adaptive Planning of Flood Managed Aquifer	Intercalation in 2D TMDs and Membranes Fabrication for Water			
	(SWRO) Process	Development	Production	Recharge Guided by Deep Reinforcement Learning	Purification			
Grzegorz LISAK Narryang 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	Zhlyuan ZENG City University of Hong Kong, CN			
Nanyang recribogica criversity, 30	ranyang reciniongcai criversity, ac	Nanyang recinological criversity, 30	Nanyang recinological criversity, acc	readonal directory of singapore, 3G	City University of Hong Kong, CN			
Keynote Lecture A2	Invited Lecture B2		Oral D2	Oral E2	Invited Lecture F2			
	(09:20 to 09:35)		(09:20 to 09:35)	(09:20 to 09:35)	(09:20 to 09:35)			
(09:20 to 09:40)	(09.20 to 09.35)		(09.20 to 09.35)	(09.20 to 09.35)	(09.20 to 09.35)			
	Enhanced Assessment Religation in This Eiler Community Commits			A mechanism-data co-driven hybrid modeling framework for WWTPs	Developing high-pressure pressure-retarded osmosis membranes for renewable osmotic energy harvesting: the critical role of membrane			
Valorising Waste for Aquaculture Feed in Singapore	Enhanced Ammonium Rejection in Thin-Film Composite Osmotic Membranes: Performance and Mechanisms		Food Waste Valorisation via Fermentation	to achieve reliable simulation at system-level	renewable osmotic energy harvesting: the critical role of membrane material design and structure optimization			
Yu De CHAO	Xian BAO		Huang MIAO	YIPAN	Qianhong SHE			
Singapore Food Agency, SG	Harbin Institute of Technology, CN		Temasek Polytechnic, SG	Zhejlang University, CN	Nanyang Technological University, SG			
Oral A3	Oral B3	Oral C2	Oral D3	Oral E3	Invited Lecture F3			
(09:40 to 09:55)	(09:35 to 09:50)	(09:35 to 09:50)	(09:35 to 09:50)	(09:35 to 09:50)	(09:35 to 09:50)			
Turning Waste into Resource: Biochar 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	Hong LIU	Hung Manh PHAM	Liang ZHANG	Jingyu WANG	Bofan Li			
Nanyang Technological University, SG	Nanyang Technological University, SG	Singapore Management University, SG	Sun Yat-Sen University, CN	National Institute of Education, SG	Agency for Science, Technology, and Research (A*STAR), SG			
Oral A4	Invited Lecture B4	Oral C3	Oral D4	Oral E4	Invited Lecture F4			
(09:55 to 10:10)	(09:50 to 10:05)	(09:50 to 10:05)	(09:50 to 10:05)	(09:50 to 10:05)	(09:50 to 10:05)			
			Revealing Cryptic Microbial Carbon/Nitrogen Pathways: A Novel					
Chicken Manure Ash as a Bioresource-based Material for Efficient	Modeling Dynamics of NF/RO Membrane Fouling with Collision Attachment Approach	Decentralized GPU Banks: Web3-Orchestrated AI Systems for	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	Distributed direct air capture by carbon nanofiber air filters			
Carbon Dioxide Capture	ratacoment Approach	Sustainability	Recovery	processes				
Jiahui BU	Tian Li	Linshan JIANG	Chen CAI	Ming XIAO	Ronghui WU			
Nanyang Technological University, SG	Tongji University, CN	National University of Singapore, SG	University of Science and Technology of China, CN	National University of Singapore, SG	Nanyang Technological University, SG			
Oral A5	Oral B5	Oral C4	Oral D5	Oral E5	Invited Lecture F5			
(10:10 to 10:25)	(10:05 to 10:20)	(10:05 to 10:20)	(10:05 to 10:20)	(10:05 to 10:20)	(10:05 to 10:20)			
, , , , , ,					· ·			
Circular manufacturing implementation, planning and control	Double-Macrocycles Based COF Membranes for Seawater Lithium	GreenIntelliCPN: Al-Enabled Spatiatemporal Scheduling for Energy- Efficient Computing Power Networks	Carbon Emission of Straw-combined Heat and Power Generation	A Novel Perspective on Process Monitoring: Nonlinear Causal	Smart imaging for smart separation: electron microscopy and			
circular manufacturing imprementation, planning and control	Extraction	Efficient Computing Power Networks	Carbon Emission of Gram-combined ricks and 1 over Consission	Mapping Aggregation for Key Performance Indicator	machine learning in membrane design			
				Hannian WANG				
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			
runyang recitological critically, 50	ranyang rearrangem correlaty, 00	being directly of 1 old and 1 electrical calculations, or	Change Contact Control of the Contro	buying directary of distinual recirculary, ore	ranyang recitologua circulary, 50			
		MODNING TEA DD	FAV (40:20 to 40:40)					
MORNING TEA BREAK (18:20 to 10:40)								
	SESSION 2							
		ece	RION 2					
			SION 2					
Venue: LTS	Venue: LT6	Venue: LT7	Venue: LT8	Venue: LT14	Venue: LT15			
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 B: Membrane Technology Session Chair and Co-Chair:	Venue: LT7	Venue: LT8					
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: Grzegorz LISAK	Session B: Membrane Technology Session Chair and Co-Chair: Gongping LIU & Miao TIAN	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rui TAN	Venue: LT8 Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair: TBC	Session E: Environmental AI & Modelling Session Chair and Co-Chair: Xunyuan YIN and Zhe WU	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair: TBC			
Session A: Resource Recovery Session Chair and Co-Chair: Grzegorz LISAK Keynote Lecture A6	Session B: Membrane Technology Session Chair and Co-Chair: Gongping LIU & Miao TIAN Keynote Lecture B6	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rui TAN Keynote Lecture C5	Venue: LT8 Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair: TBC Keynote Lecture D6	Session E: Environmental Al & Modelling Session Chair and Co-Chair: Xunyuan YIN and Zhe WU Keynote Lecture E6	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair: TBC Keynote Lecture F6			
Session A: Resource Recovery Session Chair and Co-Chair: Grzegorz LISAK	Session B: Membrane Technology Session Chair and Co-Chair: Gongping LIU & Miao TIAN	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rui TAN	Venue: LT8 Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair: TBC	Session E: Environmental AI & Modelling Session Chair and Co-Chair: Xunyuan YIN and Zhe WU	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair: TBC			
Session A: Resource Recovery Session Chair and Co-Chair: Grzegorz USAK Keynote Lecture A6 (10:40 to 11:00)	Session B: Membrane Technology Session Chair and Co-Chair: Gongping LIU & Miao TIAN Keynote Lecture B6 (10:40 to 11:00)	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rui TAN Keynote Lecture C5 (10:40 to 11:15)	Venue: LT8 Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair: TBC Keynote Lecture D6 (10:40 to 11:00)	Session E: Environmental Al & Modelling Session Chair and Co-Chair: Xunyuan YN and Zhe WU Keynote Lecture E6 (10:40 to 11:00)	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00)			
Session A: Resource Recovery Session Chair and Co-Chair: Grzegorz LISAK Keynote Lecture A6	Session B: Membrane Technology Session Chair and Co-Chair: Gongping LIU & Miao TIAN Keynote Lecture B6	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rui TAN Keynote Lecture C5	Venue: LT8 Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair: TBC Keynote Lecture D6	Session E: Environmental Al & Modelling Session Chair and Co-Chair: Xunyuan YIN and Zhe WU Keynote Lecture E6	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair: TBC Keynote Lecture F6			
Session A: Resource Recovery Session Chair and Co-Chair: Grzegorz USAK Keynote Lecture A6 (10:40 to 11:00)	Session B: Membrane Technology Session Chair and Co-Chair: Gongping LIU & Miao TIAN Keynote Lecture B6 (10-40 to 11:00) Mechine Leamine Accelerate Mon-	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rul TAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecopystem	Venue: LT8 Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair: TBC Keynote Lecture D6 (10:40 to 11:00)	Session E: Environmental AI & Modelling Session Chair and Co-Chair: Xunyuan YNN and Zhe WU Keynote Lecture E6 (10.40 to 11:00) Machine learning enabled Kooman modeling and comes	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10-40 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-Energy System Quasing HUANG	Session B: Membrane Technology Session Chair and Co-Chair: Gongping LIU & Miao TIAN Keynote Lecture B6 (10-40 to 11-00) Machine Learning Accelerates High Throughout Design of MOF-Based Membranes for Molecular Separation	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 Sustainable Marine Ecosystem Mainta WEGHJANI	Venue: LTB Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological suffur dispreportionation enlightness new technology development for exaltinable wasterwater treatment Feng JANNG	Session E: Environmental Al & Modelling Session Chair and Co-Chair: Xunyuan YN and Zhe WU Keynote Lecture E6 (10-40 to 11-00) Machine learning-enabled Koogman modeling and connex optimization-based predictive control of nonlinear systems Xunyuan YN	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 Micropronus Structures Suiz MANNA Suiz MANNA			
Session A: Resource Recovery Session Chair and Co-Chair: Grzagorz LISAK Keynote Lecture A6 (10.40 to 11.00) Al Technology for Smart Waste-to-Einergy System	Session B. Membrane Technology Session Chair and Co-Chair: Gongping LUI 8 Mao TIAN Keynote Lecture B6 (10:40 to 11:00) Mechine Learning Accelerates High Throughput Design of MOF-Based Membranes for Moticular Separation	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 Roccic Systems for Sustainable Marine Ecosystem Montoring	Venue: LTB Session D: Bitatechnology & Bioprocesses Session Chair and Co-Chair: TBC Keynote Lecture D6 (10:40 to 11:00) Biological sulfur dispreportionation enlighthers new technology development for austianside wastewater treatment	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xuryuan YM and Zhe WU Keynote Lecture E6 (10:40 to 11:00) Machine learning-enabled Koopman modeling and convex optimization-based predictive control of nonlinear systems	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 Microprovas Structures			
Session A: Resource Recovery Session Chair and Co-Chair: Grzegorz LISAK Keynole Lecture 46 (10-40 to 11:00) Al Technology for Smart Waste-to-Energy System Quanting MUMMG Zhejang Ulwensiy, CH	Session B: Membrane Technology Session Chair and Co-Chair. Gongping LIU & Miao TIAN Keynote Lecture B6 (10-40 to 11:00) Machine Learning Accelerates High Throughput Design of MOF-Based Membranes for Molecular Separation Gongping LIU Narying Tech University, CN	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 Sustainable Marine Ecosystem Mainta WEGHJANI	Venue: LTS Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological sulfur discriptorionation enlightness new technology development for sustainable wastewater treatment Farg. JANG Sur Yazden Liversity, CN	Session E: Environmental Al & Modelling Session Chair and Co-Chair: Xunyuan YNN and Zhe WU Keynote Lecture E6 (10.40 to 11:00) Machine learning enabled Koppman modeling and connex optimization-based predictive control of nonlinear systems Xunyuan YN Nanyang Technological University, SG	Session F. Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10.40 to 11:00) Membranes for Carbon Capture. From Danse Polymers to Microporous Structures Sul ZHANG National Livewarky of Siregopone, SG			
Session A: Resource Recovery Session Chair and Co-Chair: Graeporx LISAK Keynote Lecture A6 (10:40 to 11:00) Al Technology for Smart Waste-to-Energy System Quantity MUANG Zinjang University, CH Keynote Lecture A7	Session B. Membrane Technology Session Chair and Go-Chair Georging LIU & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Machine Learning Accelerates (197) Throughout Design of MOF-Based Membranes for Molecular Special Design of MOF-Based Membranes for Molecular Special Design of Morena	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 Sustainable Marine Ecosystem Mainta WEGHJANI	Venue: LTB Session D: Bitotchnology & Bitoprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological suffer disrupportionation entightness new technology development for sustainable sessesseter freedment Fine JAMO Sun Yak Sen University, CN Oral D7	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan YIN and Zhe WU Keynote Lecture E6 (10-40 to 11:00) Machine fearing-eabled Koguman modeling and comex optimization-based predictive control of notificer systems Xunyuan YIN Nanyang Textrological University, 55 Oral E7	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Cashon Coptive. From Dance Polymers to Micropronous Structures Suiz JAMO National University of Bingapone, SG			
Session A: Resource Recovery Session Chair and Co-Chair: Grzegorz LISAK Keynole Lecture 46 (10-40 to 11:00) Al Technology for Smart Waste-to-Energy System Quanting MUMMG Zhejang Ulwensiy, CH	Session B: Membrane Technology Session Chair and Co-Chair. Gongping LIU & Miao TIAN Keynote Lecture B6 (10-40 to 11:00) Machine Learning Accelerates High Throughput Design of MOF-Based Membranes for Molecular Separation Gongping LIU Narying Tech University, CN	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 Sustainable Marine Ecosystem Mainta WEGHJANI	Venue: LTS Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological sulfur discriptorionation enlightness new technology development for sustainable wastewater treatment Farg. JANG Sur Yazden Liversity, CN	Session E: Environmental Al & Modelling Session Chair and Co-Chair: Xunyuan YNN and Zhe WU Keynote Lecture E6 (10.40 to 11:00) Machine learning enabled Koppman modeling and connex optimization-based predictive control of nonlinear systems Xunyuan YN Nanyang Technological University, SG	Session F. Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10.40 to 11:00) Membranes for Carbon Capture. From Danse Polymers to Microporous Structures Sul ZHANG National Livewarky of Siregopone, SG			
Session A: Resource Recovery Session Chair and Co-Chair: Grzegorz LISAK Keynole Lecture 46 (10-40 to 11:00) Al Technology for Smart Waste-to-Energy System Quantity HUMNG Zeplang Warnell, CN Keynole Lecture A7 (11:00 to 11:20)	Session 8: Membrane Technology Session Chair and Co-Chair. Gongping LIU & Miao TIAN Keynote Lecture B6 (10-40 to 11:00) Machine Learning Accelerates High Throughput Design of MOF-Based Membranes for Molecular Separation Gongping LII Nating Tech Usershy, CN Invited Lecture B7 (11:00 to 11:15)	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 Sustainable Marine Ecosystem Mainta WEGHJANI	Venue: LTS Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological sulfur dispreportionation enlightness new technology development for sustainable wastewater freatment Farey_JANG San Yat-Sen University, CN Oral D7 (11:00 to 11:15)	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan YNN and Zhe WU Keynote Lecture E6 (10.40 to 11:00) Machine learning-enabled Koopman modeling and connex optimization-based predictive control of nonlinear systems Xunyuan YN Nanyang Technological Interestly, SG Oral E7 (11:00 to 11:15)	Session F. Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10.40 to 11:00) Membranes for Carbon Capture. From Danse Polymers to Microporous Structures Sul ZHANG National University of Singapore, SG Invited Lecture F7 (11:00 to 11:15)			
Session A: Resource Recovery Session Chair and Co-Chair: Graeporx LISAK Keynote Lecture A6 (10:40 to 11:00) Al Technology for Smart Waste-to-Energy System Quantity MUANG Zinjang University, CH Keynote Lecture A7	Session B. Membrane Technology Session Chair and Go-Chair Georging LIU & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Machine Learning Accelerates (197) Throughout Design of MOF-Based Membranes for Molecular Special Design of MOF-Based Membranes for Molecular Special Design of Morena	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 Sustainable Marine Ecosystem Mainta WEGHJANI	Venue: LTB Session D: Bitotchnology & Bitoprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological suffer disrupportionation entightness new technology development for sustainable sessesseter freedment Fine JAMO Sun Yak Sen University, CN Oral D7	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan YIN and Zhe WU Keynote Lecture E6 (10-40 to 11:00) Machine fearing-eabled Koguman modeling and comex optimization-based predictive control of notificer systems Xunyuan YIN Nanyang Textrological University, 55 Oral E7	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Cashon Coptive. From Dance Polymers to Micropronous Structures Suiz JAMO National University of Bingapone, SG			
Session A: Resource Recovery Session Chair and Co-Chair: Grzagorz LISAK Keynote Lecture A6 (10:40 to 11:00) All Technology for Smart Waste-to-Energy System Quinking HUANG Zhejang University, C11 Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Carton Narvables from	Session B. Membrane Technology Session Chair and Co-Chair: Gongping LIU & Miso TIAN Keynote Lecture B6 (10:40 to 11:00) Mechine Learning Accelerates High Throughput Design of MOF-Based Membrane to Molecular Separation Gongping LIU Natiging Tech University, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Invited el Intelligence for Enhanced Title-Fall	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 Sustainable Marine Ecosystem Mainta WEGHJANI	Venue: LTS Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological sulfur dispreportionation enlightness new technology development for sustainable wastewater freatment Farey_JANG San Yat-Sen University, CN Oral D7 (11:00 to 11:15)	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xuruyuan YN and Zhe WU Keynote Lecture E6 (10:40 to 11:00) Machine learning enabled Koogman modeling and convex optimization-based predictive cost of or inclinear systems Xuruyuan YN Nanyang Technological University, 50 Oral E7 (11:00 to 11:15) Quantitative Analysis of Electrostatic Interactions in Nanofiliration	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 Structures Suid PMMG National University of Ringspore, 50 Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrathin films for accurate molecular			
Session A: Resource Recovery Session Chair and Co-Chair: Grzegorz LISAK Keynote Lecture 46 (10-40 to 11:00) Al Technology for Smart Waste-to-Energy System Quinting HUANG Znejang University; CN Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Cachon Narodudes from Waste Using an Energy-Efficient Dual-Shape Reactor Waste Using an Energy-Efficient Dual-Shape Reactor	Session 8: Membrane Technology Session Chair and Co-Chair. Gongping LIU & Mao TIAN Keynote Lecture B6 (10:40 to 11:00) Machine Leaming Accelerates High Throughput Design of MOF- Based Membranes for Molecular Separation Geography LII Naright Tech Deversity, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Hydrogel Interlayers for Enhanced Thin-Film Composite Formed Obrasoa Membranes Maon TIMN	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 Sustainable Marine Ecosystem Mainta WEGHJANI	Venue: LTS Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:A0 to 11:00) Biological sulfur dispreportionation enlightness new technology development for sustainable wastewater treatment Fareg JANG Sun Yat-Sen University, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-negative applications Weiming TU	Session E: Environmental Al & Modelling Session Chair and Co-Chair: Xunyuan YIN and Zhe WU Keynote Lecture E6 (10:40 to 11:00) Machine learning enabled Koopman modeling and convex optimization-based predictive control of nonlinear systems Xunyuan YIN Nanyary Technological University, SG Oral E7 (11:00 to 11:15) Quantitative Analysis of Electrodatic Interactions in Nanofilization for Trace Organic Contaminate Removal	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 Microporous Structures Sul ZHANG National University of Bringsone, 5G Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pows in ultratin films for accurate molecular seeing			
Session A: Resource Recovery Session Chair and Co-Chair: Graspyrx LISAK Keynote Lecture A6 (10:40 to 11:00) Al Technology for Smart Waste-to-Einergy System Quinking NUAMQ Zhejang Disversity, CH Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Cartion Narrodubes from Water Using an Einergy Efficient Duel Stage Reactor	Session B. Membrane Technology Session Chair and Co-Chair: Gongsing LUI & Mao TIAN Keynote Lecture B6 (10-40 to 11-00) Machine Leaning Accelerates High Throughput Design of MOF- Based Membrane for Follocisch Departion Occuping LU Narjing Tech Uswards, CN Invited Lecture B7 (11-00 to 11-15) Precise Construction of Hydrogel Interlayers for Enhanced Thin-Film Composite Forward Demosis Membranes	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 Sustainable Marine Ecosystem Mainta WEGHJANI	Venue: LTS Session D: Bitotchnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological sulfur dispreportionation enlighthers new technology development for seatiment resultment Features of Feng. JAMO San Yat Sen Usersity, CN Oral D7 (11:00 to 11:15) Sustainable synthesic biology for carbon-negative applications	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10-40 to 11-00) Machine learning enabled Koopman modeling and convex optimization easier predictive control of notificer systems Xunyuan TN Nanyers Technological University, SG Oral E7 (11-00 to 11-15) Quantitative Analysis of Electrostatic Interactions in Narollitation for Trace Organic Custaminatis Removal	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Carton Capture From Dense Polymers to Acceptions Structures Stational Development Structures Institute Lecture F7 (11:00 to 11:15) Adgreed macrocycle pores in ultrathin films for accurate molecular serving			
Session & Resource Recovery Session Chair and Co-Chair: Grzegorz LISAK Keynole Lecture A6 (10.40 to 11.00) Al Technology for Smart Waste-to-Energy System Quanting NUANG Zinglang University, Cts Keynole Lecture A7 (11.00 to 11.20) Sustainiable Engineering of Functional Carton Narroubses from Waste Using an Energy-Efficient Dual-Stage Resolor Waste Using an Energy-Efficient Dual-Stage Resolor Waste Using Same Missipola, MY	Session B. Membrane Technology Session Call and Co-Chair Gongping LIU & Mao TIAN Keynote Lecture B6 (10:40 to 11:00) Mechine Leaming Accelerates High Throughput Design of MOF- Based Membranes for Motecute Separation Gongping LIV Narying Tech University, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Hydrogel Interleges for Enhanced Thin-Film Composite Forward Cosmosis Membranes Mao TIAN Northession Polyscorical University, XI ar, CN	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rul TAN Responde Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Montaining Mails as EGIJANI Singapore University of Technology & Design, SQ	Venue: LTB Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biotogical sulfur dispreportionation enlightness new technology development for sustainable wastewater treatment Fareg JAMNG Sun Vat-dem University. CIV Oral D7 (11:00 to 11:15) Sustainable synthesic biology for caston-negative applications Webmig TU Nanyang Tecnnological University. SQ	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xuryusan YIN and Zhe WU Keynote Lecture E6 (10-40 to 11-00) Machine learning-enabled Koopman modeling and convex optimization-based predictive control of nonlinear systems Xuryusan YIN Nanyang Technological triberating, 90 Oral E7 (11-00 to 11-15) Quantitative Analysis of Electrostatic Intensitions in Nanofitration for Trace Organic Contaminants Removal Zhyk XIA Zhojang Linearshy, CN	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Curbon Capture: From Dense Polymers to Microprosus Structures Sub-ANAG National Uteversity of Singapore, 5G Irritled Lecture F7 (11:00 to 11:15) Aligned macrocycle poses in ultrathin films for accurate molecular serving Ziberd JANAG Nanyang Technological threesity, 5G			
Session A: Resource Recovery Session Chair and Co-Chair: Graeporx LISAK Keynote Lecture A6 (10-40 to 11-00) Al Technology for Smart Waste-to-Energy System Quanting MUANG Zinging University CH Keynote Lecture A7 (11:00 to 11-20) Sustainable Engineering of Functional Carbon Navnobes from Waste Using an Energy-Efficient Dual-Stage Resolor Weste Using an Energy-Efficient Dual-Stage Resolor Weste Du OH Christoth State Malaysia, MY Oral A8	Session B. Membrane Technology Session Chair and Go-Chair Georging LUB & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Mechine Learning Accelerates 1997 Thoughput Design of MOF- Based Membranes for Molecular Separation Gongaing LU Namy Tech Usersett, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of hydrogic blothlypes for Enhanced Thin-Film Composite Forward Ceronals Membranes Mao TIAN Northwestern Polycochrosal University, XIA, CN Oral B8	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Ruit TAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Monitoring Ministration of Technology & Design, SG Oral C6	Venue: LTB Session D: Bitotchnology & Bitoprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological sulfur discreptionistic entightness new technology development for sustainable seast-water freatment Fine 3.0496 Gun Tab Contraction C	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10:40 to 11:00) Mashire Isening enable K cogness modeling and connex optimization-based predictive control of nonlinear systems Xunyuan YN Nanyang Technologiau Environity, 90 Oral E7 (11:00 to 11:15) Quantitative Analysis of Electrostic Intendiction in Nanofitration for Trace Organic Contaminants Removal Zhejway University, CN Oral E8	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Carbon Capture Fron Dance Polymers to Microproness Structures Substitution Substi			
Session & Resource Recovery Session Chair and Co-Chair: Grzegorz LISAK Keynole Lecture A6 (10.40 to 11.00) Al Technology for Smart Waste-to-Energy System Quanting NUANG Zinglang University, Cts Keynole Lecture A7 (11.00 to 11.20) Sustainiable Engineering of Functional Carton Narroubses from Waste Using an Energy-Efficient Dual-Stage Resolor Waste Using an Energy-Efficient Dual-Stage Resolor Waste Using Same Missipola, MY	Session B. Membrane Technology Session Call and Co-Chair Gongping LIU & Mao TIAN Keynote Lecture B6 (10:40 to 11:00) Mechine Leaming Accelerates High Throughput Design of MOF- Based Membranes for Motecute Separation Gongping LIV Narying Tech University, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Hydrogel Interleges for Enhanced Thin-Film Composite Forward Cosmosis Membranes Mao TIAN Northession Polyscorical University, XI ar, CN	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rul TAN Responde Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Montaining Mails as EGIJANI Singapore University of Technology & Design, SQ	Venue: LTB Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biotogical sulfur dispreportionation enlightness new technology development for sustainable wastewater treatment Fareg JAMNG Sun Vat-dem University. CIV Oral D7 (11:00 to 11:15) Sustainable synthesic biology for caston-negative applications Webmig TU Nanyang Tecnnological University. SQ	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xuryusan YIN and Zhe WU Keynote Lecture E6 (10-40 to 11-00) Machine learning-enabled Koopman modeling and convex optimization-based predictive control of nonlinear systems Xuryusan YIN Nanyang Technological triberating, 90 Oral E7 (11-00 to 11-15) Quantitative Analysis of Electrostatic Intensitions in Nanofitration for Trace Organic Contaminants Removal Zhyk XIA Zhojang Linearshy, CN	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Curbon Capture: From Dense Polymers to Microprosus Structures Sub-ANAG National Uteversity of Singapore, 5G Irritled Lecture F7 (11:00 to 11:15) Aligned macrocycle poses in ultrathin films for accurate molecular serving Ziberd JANAG Nanyang Technological threesity, 5G			
Session A: Resource Recovery Session Chair and Co-Chair: Graeporx LISAK Keynote Lecture A6 (10-40 to 11-00) Al Technology for Smart Waster-to-Einergy System Quanting MUANG Zhejang Utwenship, CN Keynote Lecture A7 (11:00 to 11-20) Sustainable Eingineering of Functional Custon Nanocher from Waster Litary an Energy-Efficient Qual-Stage Resotor Waste Litary an Energy-Efficient Qual-Stage Resotor Waste Claim an Energy-Efficient Dual-Stage Resotor Waste Claim an Energy-Efficient Dual-Stage Resotor Waste Claim and Company, Mr. Oral A8 (11:20 to 11:35)	Session B. Membrane Technology Session Chair and Co-Chair: Gongping LIU & Mao TIAN Keynote Lecture B6 (10:40 to 11:00) Mechine Leaming Accelerates High Throughput Design of MOF- Based Membranes for Molecute Separation Gongping LIV Narying Tech University, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Hydrogel Intelligens for Enhanced Thin-Film Composite Forward Cosmosis Membranes Mao TIAN Northesstern Polysicrical University, XI ar, CN Oral B8 (11:15 to 11:30)	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Ox-Chair: Rull TAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Maha MECHANI Singapore University of Technology & Design, SG Onal C6 (11:15 to 11:30)	Venue: LTB Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological sulfur dispreportionation enlightness new technology development for sustainable wastewater treatment Farag_JANNO Sun Vat-dim University. CIV O'rail D7 (11:00 to 11:15) Sustainable synthesic biology for caston-negative applications Weining TU Nanyarg Tecnnological University. SG O'rail D8 (11:15 to 11:30)	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xuryuan YIN and Zhe WU Keynote Lecture E6 (10-40 to 11-30) Machine learning-enabled Koopman modeling and convex optimization-based predictive control of nonlinear systems Xuryuan YIN Naryang Technological tribersary, 90 Oral E7 (11-300 to 11-15) Quantitative Analysis of Electrostatic Intensitions in Nanofilitation for Trace Organic Contaminants Removal Zhyk XIA Zhojang University, CN Oral E8 (11-15 to 11-30)	Session F. Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Curbon Capture: From Dense Polymers to Microprosus Structures But JANAB National Uteversity of Structures Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle power in ultrathin films for accurate molecular serving Zievel JANAB Nanyarg Technological Utereshy, SG Invited Lecture F8 (11:15 to 11:30)			
Session A: Resource Recovery Session Chair and Co-Chair: Grasport LISAK Keynote Lecture A6 (10:40 to 11:00) Al Technology for Smart Waste-to-Energy System Quasing HUANG Znejang Drivensy, CH Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Curton Narodubes from Waste Using an Energy Efficient Dua-Stage Resource Catalytic Conservation of Marketing Georges Studge and Animal Catalytic Conservation of Marketing Georges Studge and Animal	Session B. Membrane Technology Session Chair and Go-Chair Georging LUB & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Mechine Learning Accelerates 1997 Thoughput Design of MOF- Based Membranes for Molecular Separation Gongaing LU Namy Tech Usersett, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of hydrogic blothlypes for Enhanced Thin-Film Composite Forward Ceronals Membranes Mao TIAN Northwestern Polycochrosal University, XIA, CN Oral B8	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Ruit TAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Monitoring Ministration of Technology & Design, SG Oral C6	Venue: LTB Session D: Bitotchnology & Bitoprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological sulfur discreptionistic entightness new technology development for sustainable seast-water freatment Fine 3.0496 Gun Tab Contraction C	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10:40 to 11:00) Mashire Isening enable K cogness modeling and connex optimization-based predictive control of nonlinear systems Xunyuan YN Nanyang Technologiau Environity, 90 Oral E7 (11:00 to 11:15) Quantitative Analysis of Electrostic Intendiction in Nanofitration for Trace Organic Contaminants Removal Zhejway University, CN Oral E8	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Carbon Capture Fron Dance Polymers to Microproness Structures Substitution Substi			
Session A: Resource Recovery Session Chair and Co-Chair: Grzagorz LISAK Keynote Lecture A6 (10:40 to 11:00) All Technology for Smart Waste-to-Einergy System Quinking NUANG Zhejang University, C11 Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Carbon Narvalubes from Waste Using an Energy-Efficient Dual-Stage Resotor Weate Using an Energy-Efficient Dual-Stage Resotor Weate Using an Energy-Efficient Dual-Stage Resotor Weate Using an Energy-Efficient Dual-Stage Resotor We Dual CH Litherath Saint Midapia, MY Oral A8 (11:20 to 11:35) Catalytic Convention of Murripul Resuge Studge and Animal	Session B. Membrane Technology Session Chair and Co-Chair: Gongoing LUI & Mao TIAN Keynote Lecture B6 (10:40 to 11:00) Machine Learning Accelerates High Throughput Design of MOF- Based Membrane for Refereded Separation Oraging LUI Nariging Tech Diswards, CNI Invited Lacture B7 (11:00 to 11:15) Precise Construction of Hydrogel Identifyers for Enhanced Thin-Film Composite Forward Commos Membranes Main TEN Northwestern Polylachrolia University, XVan, CNI Oral B8 (11:15 to 11:30) Ridary actuated Hollow Filore Membrane Contactor for Bubble fee	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: RuiTAN Keynote Lecture C5 (10-40 to 11-15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Monitoring Main. MCGHANI Singapore University of Technology & Design, 80 Oral C6 (11-15 to 11-30) Physics and Knowledge-based Cognitive Data! Tein for Advanced	Venue: LTB Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological sulfur dispreportionation enlightness new technology development for sustainable wastewater treatment Farag_JANNO Sun Vat-dim University. CIV O'rail D7 (11:00 to 11:15) Sustainable synthesic biology for caston-negative applications Weining TU Nanyarg Tecnnological University. SG O'rail D8 (11:15 to 11:30)	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10-40 to 11-00) Machine learning enabled Koopman modeling and convex optimization-based predictive costrul of nucleuse systems Xunyuan YN Nanyang Technological University, 50 Oral E7 (11-00 to 11-15) Quantitative Analysis of Electrostatic Interactions in Nanofilitation for Trace Organic Contemnata Removal Zhiya Xia Zhojaray University, CN Oral E8 (11-15 to 11-30) Machine learning forecasts of plobal daily CO2 emissions in rese-	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 Microproval Structures Sui DAMN National Utwarshy of Singapore, 5G Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrathin films for accurate molecular services. These JAMNO Nanyang Technological University, 5G Invited Lecture F8 (11:15 to 11:30) Membranes Soutions for Love-Evern and Sustainable Resource.			
Session & Resource Recovery Session Chair and Co-Chair: Grzegorz LISAK Keynole Lecture A6 (10.40 to 11.00) Al Technology for Smart Waste-to-Energy System Quanting HUANG Znejang University, Ct1 Keynole Lecture A7 (11.00 to 11.20) Sustainable Engineering of Functional Carton Narostoles from Waste Using an Energy-Efficient Dual-Stage Resolor Waste Using a Energy-Efficient Dual-Stage Resolor	Session B. Membrane Technology Session Chair and Co-Chair: Gongping LIU & Mao TIAN Keynote Lecture B6 (10:40 to 11:00) Mechine Leaming Accelerates High Throughput Design of MOF- Based Membrane to Molecular Separation Gongping LIU Natiging Tech University, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Hydrogel Interlayers for Enhanced Thin-Fam Composite Forward Commiss Membranes Maio TUM Northwestern Polyachrosia University, XI nr. CN Onal B8 (11:15 to 11:130) Riddery-actuated Historia Pierre Membrane Contactor for Bubble-free Biovactor Aerosia Daniel NO Yee Fan	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Ox-Chair: Rul TAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Maha MECHANI Birgapore University of Technology & Design, SG Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Battery Maniples Well 3MANG	Venue: LTB Session D: Bitotchnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lacture D6 (10:40 to 11:00) Biological sulfur discriptionis entightness new technology development for sustainable waterwater treatment Fang. JAMN San Yat-Sen Linvessity, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for cedon-negative applications Weahing TU Nanyang Technological University, SD Oral D8 (11:15 to 11:30) Hamessing Methanological-Microslages Synergy for Carbon-Neural Biogas Purifications and riply-Value Biomass Production Yussion SONO	Session E: Environmental Al & Modeling Session Chair and Co-Chair: Session Chair and Co-Chair: Xurnyuan YIN and Zhe WU Keynote Lecture E6 (10-40 to 11:00) Machine learning-esabled Korgama modeling and comex optimization-based predictive control of notificer systems Xurnyuan YIN Nanyung Technological University, 90 Oral E7 (11:00 to 11:15) Quantitative Analysis of Electrostatic Interactions in Nanofiliration for Trace Organic Conteminants Removal Zhigk XIA Zhagang University, CN Oral E8 (11:15 to 11:30) Machine learning forecasts of global daily CO2 emissions in near-real-fine Zhu DENG	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Canton Capture. From Dance Polymers to Microgenous Structure. Sul ZHAMA National Utiversity of Singapore, SG Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrathin films for accurate molecular seeing Zhiesi JAMA Nanyang Technological University, SG Invited Lecture F8 (11:15 to 11:30) Invited Lecture F8 (11:15 to 11:30) Membrane Solutions for Love-Energy and Sustainable Resource Recovery. Zha YAMAG			
Session A: Resource Recovery Session Chair and Co-Chair: Grasport LISAK Keynote Lecture A6 (10:40 to 11:00) Al Technology for Smart Waste-to-Energy System Quinking NLAMG Zinjang Drivensip, CH Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Curton Narodubes from Waste Using an Energy Efficient Dual-Stage Reactor Waste Using an Energy Efficient Dual-Stage Reactor Waste Using an Energy Efficient Plant Stage Reactor Waste Using an Energy Efficient Plant Stage Reactor Oral A8 (11:20 to 11:35) Catalytic Conversion of Mariotipe George Surjage and Animal Manuer less Biogenic Michair Waste Catalyst Performance via Pyrolysia-CVO. Analysis of Catalyst Performance via Pyrolysia-CVO. Analysis of Catalyst Performance	Session B. Membrane Technology Session Chair and Co-Chair: Gongoing LUL & Mao TIAN Keynote Lecture B6 (10-40 to 11-00) Machine Learning Accelerates High Throughout Design of MOF- desired Membrane for National Congestion Gongoing LU Nating Ten Usavard, CN Invited Lecture B7 (11-00 to 11-15) Precise Construction of Hydrogel Interlayers for Enhanced Thin Film Composite Forward Demons Membranes Maio TIAN Northwestern Polyachrosal University, XY an, CN Ornal B8 (11-15 to 11-30) Ratery-actuated Hollow Filter Membrane Contactor for Bubble-free Biorector Jension	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 Sustainable Marine Ecosystem Monitoring Mails MEGNIANI Bingapore University of Technology A Design, 80 Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Sattey Analytics	Venue: LTS Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10-A0 to 11:00) Biological sulfur dispreportionation enlighthers new technology development for sulfunded entireaster featured? Fang JANNO Survada Internet, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-negative applications Weaking TU Nanyang Technological Internet, SG Oral D8 (11:15 to 11:30) Hamessing Methanologic-Microsigne Synengy for Carbon-Neutral Biogas Purification and right-Value Biomass Production	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10-40 to 11-00) Machine isenning-enabled Koopman modeling and convex optimization asset predicting for the convex optimization and the convex optimization asset predicting for the convex optimization for Trace Organic Continuous International Asset (11:15 to 11:30) Machine Iseaming forecasts of global daily CO2 emissions in near-residence	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 Microperium Shruthers Balanda National University of Engagement Shruthers Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrathin films for accurate molecular serving Zhined JAMMG Nanyang Technological University, 50 Invited Lecture F8 (11:15 to 11:30) Membrane Solutions for Low-Energy and Sustainable Resource Recovery			
Session A: Resource Recovery Session Chair and Co-Chair: Grzagorz LISAK Keynote Lecture A6 (10:40 to 11:00) Al Technology for Smart Waste-to-Energy System Quinking HUANG Zhejang Chivenshy, Ch Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Carbon Narvalubes from Waste Using an Energy-Efficient Dual-Stage Resotor Weath Linkensh Saire Milaysia, MY Oral A8 (Linkensh Saire Milaysia, MY Chair A6 Manure Ind Diogenic Multi-Visional Sessing Subge and Animal Manure Ind Diogenic Multi-Visional Sessing Performance vision Prophysics Conversion of Municipal Sessing Subge Performance Jedao LU Nanyang Tectrological University, SG	Session B. Membrane Technology Session Chair and Co-Chair: Gongoing LUB & Mao TIAN Keynote Lecture B6 (10:40 to 11:00) Mechine Learning Accelerates High Throughput Design of MOF- Based Membrane for Motocute Separation Gongoing LU Nating Tech Uservart, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Hydrogel Interlayers for Enhanced Thin-Film Northwestern Polyecuted University, XI an, CN Oral B8 (11:15 to 11:30) Rotary-actuated Holizon Flam Membranes Contactor for Bubble-free Bioreactor Aeration Daniel NG Yee Fan Nanyary Technological University, SG	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: RuiTAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Monitoring Mails ME GHJANI Singapore University of Technology & Design, SG Oral C6 (11:15 to 11:30) Physics and Knowledge-Based Cognitive Digital Twin for Advanced Statesy Analytics Well ZHANG Singapore Installs of Technology, SG	Venue: LTS Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological sulfur dispreportionation enlightness new technology development for sustainable wastewater treatment Fang JAMO Sun Vat-Sen University, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-negative applications Waining TU Nanyang Technological biowards, SG (11:15 to 11:30) Marmessing Methanostrops-Microsigns Syneagy for Carbon-Neutral Biogas Purification and High-Value Biomass Production Vasanus SOMG University of Science and Technology of China, CN	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xurryuan YN and Zhe WU Keynote Lecture E6 (10:40 to 11:00) Machine learning enabled Koogman modeling and convex optimization-based predictive cost of or inclinear systems Xurryuan YN Nanyang Technological Universally, SG Orall E7 (11:00 to 11:15) Quantitative Analysis of Electrostatic Interactions in Nanofiltration for Trace Organic Conteminanta Removal Zeejang Universally, CN Oral E8 (11:15 to 11:30) Machine learning forecasts of global daily CO2 emissions in rearreal-dime Zee Universally of Hong Kong, CNI	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 Microprosis Structures Suiz PAMN National University of Ringspoor, 503 Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrathin films for accurate molecular services Zhies JAMNO Nanyang Technological University, 50 Invited Lecture F8 (11:15 to 11:30) Membrane Solutions for Low-Carpy and Sustainable Resource Riccorey Zha VANG The University of Queensland, AU			
Session A. Resource Recovery Session Chair and Co-Chair. Graeporx LISAK Keynote Lecture A6 (10-40 to 11-00) All Technology for Smart Waste-to-Energy System Quantity MIANG Zinging University. C11 Keynote Lecture A7 (11-00 to 11-20) Sustainable Engineering of Functional Carbon Navnobles from Waste Using an Energy-Efficient Dual-Stage Resolor Word Do Ch Universit States Malaysia, MY Ciral A8 (11-20 to 11-25) Catalytic Conversion of Municipal Sessage Studge and Animal Manuse into Biogenic Main-Visible Control Navnobae of Calayer Performance via Pyrolysia C1-02 Assigned Calayer Performance Janes U.I. Navyarg Technological University, SG	Session B. Membrane Technology Session Chair and Co-Chair Georging LUB & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Mechine Learning Accelerates 1997. Throughout Design of MOF- Based Membranes for Molecular Separation Georging LU Numpri Sen Userwish, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of hydroget Intelligent for Enhanced Thin-Fair Composale Forward Connects Membranes Mao TIAN Northwestern Polymortreal University, XIan, CN Onal B8 (11:15 to 11:30) Rotary-actuated Folian Flax Membrane Contactor for Bubble-free Boreactor Acertica	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 Sustainable Marine Ecosystem Monitoring Main as MCOLANI Siggapore University of Technology & Design, SQ Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Sattlery Analytics Wall DANIA Singapore Institute of Technology, SQ Wall DANIA Singapore Institute of Technology, SQ Oral C7	Venue: LTB Session D: Bitotchnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:A0 to 11:00) Biological sulfur discreptions engineers are technology-development for sustainable seasonater treatment Fine 2,0046 Given Table (11:00) Oral D7 (11:00 to 11:15) Sustainable synthetic biology for cabon-regative applications Weining TU Nanyany Technological binevisity, SG Oral D8 (11:15 to 11:20) Mamessing Methanologic-Monitorial Production Venans SONG University of Science and Technology for Carbon-Meutral Biogus Purification and High-Value Biomass Production Venans SONG University of Science and Technology of Dirac, CN Oral D9	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10-40 to 11:00) Machine Isening enable K cogness modeling and connex optimization-based predictive control of nonlinear systems Xunyuan YN Nanyang Technologiau University, 90 Oral E7 (11:00 to 11:15) Quantitative Analysis of Bisectostatic Interactions in Nanofitration for Trace Organic Contaminants Removal Zhigway University, CN Oral E8 (11:15 to 11:20) Machine Isening forecasts of plast daily CO2 emissions in near- real Gime Zhu GEM The University of Heing King, CN Oral E9	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Carbon Capture Fron Dance Polymers to Microproness Structures Sub SIMMO National University of Bingoons, 50 Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultimate films for accurate molecular serving Zheat JAWO Nanyang Technological University, 50 Invited Lecture F8 (11:15 to 11:20) Membrane Solutions for Loss-Recovery Recovery The VANG The University of Queentiand, AU Oral F9			
Session A: Resource Recovery Session Chair and Co-Chair: Grzagorz LISAK Keynote Lecture A6 (10:40 to 11:00) Al Technology for Smart Waste-to-Energy System Quinking HUANG Zhejang Chivenshy, Ch Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Carbon Narvalubes from Waste Using an Energy-Efficient Dual-Stage Resotor Weath Linkensh Saire Milaysia, MY Oral A8 (Linkensh Saire Milaysia, MY Chair A6 Manure Ind Diogenic Multi-Visional Sessing Subge and Animal Manure Ind Diogenic Multi-Visional Sessing Performance vision Prophysics Conversion of Municipal Sessing Subge Performance Jedao LU Nanyang Tectrological University, SG	Session B. Membrane Technology Session Chair and Co-Chair: Gongoing LUB & Mao TIAN Keynote Lecture B6 (10:40 to 11:00) Mechine Learning Accelerates High Throughput Design of MOF- Based Membrane for Motocute Separation Gongoing LU Nating Tech Uservart, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Hydrogel Interlayers for Enhanced Thin-Film Northwestern Polyecuted University, XI an, CN Oral B8 (11:15 to 11:30) Rotary-actuated Holizon Flam Membranes Contactor for Bubble-free Bioreactor Aeration Daniel NG Yee Fan Nanyary Technological University, SG	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: RuiTAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Monitoring Mails ME GHJANI Singapore University of Technology & Design, SG Oral C6 (11:15 to 11:30) Physics and Knowledge-Based Cognitive Digital Twin for Advanced Statesy Analytics Well ZHANG Singapore Installs of Technology, SG	Venue: LTS Session D: Biotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological sulfur dispreportionation enlightness new technology development for sustainable wastewater treatment Fang JAMO Sun Vat-Sen University, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-negative applications Waining TU Nanyang Technological biowards, SG (11:15 to 11:30) Marmessing Methanostrops-Microsigns Syneagy for Carbon-Neutral Biogas Purification and High-Value Biomass Production Vasanus SOMG University of Science and Technology of China, CN	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xurryuan YN and Zhe WU Keynote Lecture E6 (10:40 to 11:00) Machine learning enabled Koogman modeling and convex optimization-based predictive cost of or inclinear systems Xurryuan YN Nanyang Technological Universally, SG Orall E7 (11:00 to 11:15) Quantitative Analysis of Electrostatic Interactions in Nanofiltration for Trace Organic Conteminanta Removal Zeejang Universally, CN Oral E8 (11:15 to 11:30) Machine learning forecasts of global daily CO2 emissions in rearreal-dime Zee Universally of Hong Kong, CNI	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 Microprosis Structures Suiz PAMN National University of Ringspoor, 503 Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrathin films for accurate molecular services Zhies JAMNO Nanyang Technological University, 50 Invited Lecture F8 (11:15 to 11:30) Membrane Solutions for Low-Carpy and Sustainable Resource Riccorey Zha VANG The University of Queensland, AU			
Session A: Resource Recovery Session Chair and Co-Chair: Grzagorz LISAK Keynote Lecture A6 (10:40 to 11:00) Al Technology for Smart Waste-to-Energy System Quinning HUANG Znejang University, C11 Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Carbon Narvalubes from Waste Using an Energy-Efficient Dual-Stage Resotor Weate Using an Energy-Efficient Dual-Stage Resotor Weate Using an Energy-Efficient Carbon Narvalubes from Waste Using an Energy-Efficient Dual-Stage Resotor We Dual OH Linkewald Sales Midaysia, MY Oral A8 (11:20 to 11:25) Catalytic Conversion of Municipal Sessage Skulpe and Animal Manure Into Biogenic Authority Stages Stage and Animal Manure Into Biogenic Authority Stages Stages Stages and Animal Manure Into Biogenic Authority Stages Stages Stages and Animal Manure Into Biogenic Authority Stages Stages Stages and Animal Manure Into Biogenic Authority Stages Stages Stages and Animal Manure Into Biogenic Authority Stages Stages Stages and Animal Manure Into Biogenic Authority Stages St	Session B. Membrane Technology Session Chair and Co-Chair: Genging LIU & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Machine Learning Accesses in 1997. Throughout Design of MOF- Based Membranes for Molecular Spearation Geoglegic LI Naright Tool University, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Hydrogel Interluyers for Enhanced Trin Film Northwestein Pulylachrisad University, XY an, CN Oral B8 (11:15 to 11:20) Riddary-activated Hollow Films Himbarae Contactor for Bubble-free Biovaccio-Arestion Daniel NG Yee Fan Nanyang Technological University, SS Oral B9 (11:30 to 11:45)	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Ox-Chair: Rul TAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Maha McCHANI Singapore University of Technology & Design, SG Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Battery Analytics Wel 3HANG Singapore Institute of Technology, SG Oral C7 (11:30 to 11:45)	Venue: LTB Session D: Bitotchnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10-40 to 11:00) Biological suffer discriptionistic entightness new technology development for austiantable wastewater freedment Frequ (AMM) Gan Yat den University, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-regative applications Waining TU Nanyang Technological University, SG Oral D8 (11:15 to 11:30) Hamessing Methanotopu-Microslages Synergy for Carbon-Neutral Biogus Purification and High Value Biomass Production Yuannus SONG University of Sizence and Technology of Clea. CN Oral D9 (11:20 to 11:45)	Session E: Environmental Al & Modelling Session Chair and Co-Chair: Session Chair and Co-Chair: Xurnyuan YIN and Zhe WU Keynote Lecture E6 (10-40 to 11:00) Machine learning-esabled Korgman modeling and comex optimization-based predictive control of notificer systems Xurnyuan YIN Nanyung Technological University, 90 Oral E7 (11:00 to 11:15) Quantitative Analysis of Discontain in Nanofiliration for Trace Organic Contaminants Removal Zhigk XIA Zhagang University, CN Oral E8 (11:15 to 11:30) Machine learning forecasts of global daily CO2 emissions in near-real-fine Zhia DENG The University of Horsp Eng. CNI Oral E9 (11:30 to 11:45)	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Carbon Capture From Dance Polymers to Microproreas Structures Sub SIAMO National University of Siregore, SG Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle poses in ultrathin films for accurate molecular serving Zienes JAMO Nanyang Technological University, SG Invited Lecture F8 (11:15 to 11:30) Membrane Solutions for Line-Energy and Sustainable Resource Recovery Da YAMG The University of Queensland, AU Oral F9 (11:30 to 11:45)			
Session A: Resource Recovery Session Chair and Co-Chair: Graggorz LISAK Keynote Lecture A6 (10:40 to 11:00) Al Technology for Smart Waste-to-Energy System Quinking HUANG Znajang Diversity, CH Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Curtion Nanodubes from Waste Using an Energy Efficient Dus-Stage Reactor Waste Using an Energy Efficient Dus-Stage A fainted Linear Linear Efficient Dus-Stage A fainted Assert Port Port Port Port Port Port Port Po	Session B. Membrane Technology Session Chair and Co-Chair: Genging LIU & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Machine Learning Accesses in 1997. Throughout Design of MOF- Based Membranes for Molecular Spearation Geoglegic LI Naright Tool University, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Hydrogel Interluyers for Enhanced Trin Film Northwestein Pulylachrisad University, XY an, CN Oral B8 (11:15 to 11:20) Riddary-activated Hollow Films Himbarae Contactor for Bubble-free Biovaccio-Arestion Daniel NG Yee Fan Nanyang Technological University, SS Oral B9 (11:30 to 11:45)	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Ox-Chair: Rul TAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Maha McCHANI Singapore University of Technology & Design, SG Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Battery Analytics Wel 3HANG Singapore Institute of Technology, SG Oral C7 (11:30 to 11:45)	Venue: LTB Session D: Bitotchnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10-40 to 11:00) Biological suffer discriptionistic entightness new technology development for austiantable wastewater freedment Frequ (AMM) Gan Yat den University, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-regative applications Waining TU Nanyang Technological University, SG Oral D8 (11:15 to 11:30) Hamessing Methanotopu-Microslages Synergy for Carbon-Neutral Biogus Purification and High Value Biomass Production Yuannus SONG University of Sizence and Technology of Clea. CN Oral D9 (11:20 to 11:45)	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10-40 to 11:00) Machine Isening enable K cogness modeling and connex optimization-based predictive control of nonlinear systems Xunyuan YN Nanyang Technologiau University, 90 Oral E7 (11:00 to 11:15) Quantitative Analysis of Bisectostatic Interactions in Nanofitration for Trace Organic Contaminants Removal Zhigway University, CN Oral E8 (11:15 to 11:20) Machine Isening forecasts of plast daily CO2 emissions in near- real Gime Zhu GEM The University of Heing King, CN Oral E9	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10-40 to 11:00) Membranes for Cestor: From Dense Polymers to Meroperous Structures Suit DIANG National Utwenty of Simpapore, SG Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrative films for accurate molecular serving Zheel JANG Nanyery Technological University, SG Invited Lecture F8 (11:15 to 11:30) Membrane Solutions for Lore Energy and Sustainable Resource Riccorery Zha VANG The Utwenty of Cameraida All Oral F9 (11:30 to 11:45) Lactir-Acid based Dept Elefactic Solvent for Sustainable Recovery Citical Method Energe Lithards Individual Solvent for Sustainable Recovery Colicial Method Energe Lithards Individual Solvent for Sustainable Recovery Colicial Solvent for Spect Lithards Solvent for Sustainable Recovery Colicial Method Solvent for Sustainable Recovery			
Session A: Resource Recovery Session Chair and Co-Chair: Grzagorz LISAK Keynote Lecture A6 (10:40 to 11:00) Al Technology for Smart Waste-to-Energy System Quinning HUANG Znejang University, C11 Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Carbon Narvalubes from Waste Using an Energy-Efficient Dual-Stage Resotor Weate Using an Energy-Efficient Dual-Stage Resotor Weate Using an Energy-Efficient Carbon Narvalubes from Waste Using an Energy-Efficient Dual-Stage Resotor We Dual OH Linkewald Sales Midaysia, MY Oral A8 (11:20 to 11:25) Catalytic Conversion of Municipal Sessage Skulpe and Animal Manure Into Biogenic Authority Stages Stage and Animal Manure Into Biogenic Authority Stages Stages Stages and Animal Manure Into Biogenic Authority Stages Stages Stages and Animal Manure Into Biogenic Authority Stages Stages Stages and Animal Manure Into Biogenic Authority Stages Stages Stages and Animal Manure Into Biogenic Authority Stages Stages Stages and Animal Manure Into Biogenic Authority Stages St	Session B. Membrane Technology Session Chair and Co-Chair Georging LUB & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Mechine Learning Accelerates 1997. Throughout Design of MOF- Based Membranes for Molecular Separation Georging LU Numpri Sen Userwish, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of hydroget Intelligent for Enhanced Thin-Fair Composale Forward Connects Membranes Mao TIAN Northwestern Polymortreal University, XIan, CN Onal B8 (11:15 to 11:30) Rotary-actuated Folian Flax Membrane Contactor for Bubble-free Boreactor Acertica	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 Sustainable Marine Ecosystem Monitoring Main as MCOLANI Siggapore University of Technology & Design, SQ Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Sattlery Analytics Wall DANIA Singapore Institute of Technology, SQ Wall DANIA Singapore Institute of Technology, SQ Oral C7	Venue: LTB Session D: Bitotchnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:A0 to 11:00) Biological sulfur discreptions engineers are technology-development for sustainable seasonater treatment Fine 2,0046 Given Table (11:00) Oral D7 (11:00 to 11:15) Sustainable synthetic biology for cabon-regative applications Weining TU Nanyany Technological binevisity, SG Oral D8 (11:15 to 11:20) Mamessing Methanologic-Monitorial Production Venans SONG University of Science and Technology for Carbon-Meutral Biogus Purification and High-Value Biomass Production Venans SONG University of Science and Technology of Dirac, CN Oral D9	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10-A0 to 11-00) Machine learning enabled Koopman modeling and convex optimization easies predictive control of notificial spatials. Xunyuan YN Nanyerg Technological University, SG Oral E7 (11:00 to 11:15) Quantitative Analysis of Electrostatic Interactions in Nanofilitation for Trace Organic Cutterianness Removal Zhaje XIA Zhojavag University, CN Oral E8 (11:15 to 11:30) Machine learning forecasts of global daily CO2 emissions in near-readine Zhu DEMO The University of Hong King, CN Oral E9 (11:20 to 11:45) Fast Machine Learning-based Model Predictive Control of Nonlinear	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Carbon Capture Form Danse Polymers to Microportous Shoretices National University of Singapore. SG Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle poers in ultimath films for accurate molecular serving Zeneu JAMO Nanyang Technological University, SG Invited Lecture F8 (11:15 to 11:20) Membrane Solutions for Lose Recovery Recovery Da YAMG The University of Queenstand, AU Oral F9 (11:30 to 11:45)			
Session A: Resource Recovery Session Chair and Co-Chair: Graggorz LISAK Keynote Lecture A6 (10:40 to 11:00) Al Technology for Smart Waste-to-Energy System Quinking HUANG Znajang Diversity, CH Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Curtion Nanodubes from Waste Using an Energy Efficient Dus-Stage Reactor Waste Using an Energy Efficient Dus-Stage A fainted Linear Linear Efficient Dus-Stage A fainted Assert Port Port Port Port Port Port Port Po	Session B. Membrane Technology Session Chair and Co-Chair: Genging LIU & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Machine Learning Accesses in 1997. Throughout Design of MOF- Based Membranes for Molecular Spearation Geoglegic LI Naright Tool University, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Hydrogel Interluyers for Enhanced Trin Film Northwestein Pulylachrisad University, XY an, CN Oral B8 (11:15 to 11:20) Riddary-activated Hollow Films Himbarae Contactor for Bubble-free Biovaccio-Arestion Daniel NG Yee Fan Nanyang Technological University, SS Oral B9 (11:30 to 11:45)	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Ox-Chair: Rul TAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Maha McCHANI Singapore University of Technology & Design, SG Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Battery Analytics Wel 3HANG Singapore Institute of Technology, SG Oral C7 (11:30 to 11:45)	Venue: LTB Session D: Bitotchnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10-40 to 11:00) Biological suffer discriptionistic entightness new technology development for austiantable wastewater freedment Frequ (AMM) Gar 107 (11:00 to 11:15) Sustainable synthetic biology for carbon-regative applications Waining TU Nanyang Technological binerasity, SG Oral D8 (11:15 to 11:30) Hameasing Methanotopu-Microslage Synergy for Carbon-Neutral Biopse Purification and High Value Biomase Production Values SMI University of Sizence and Technology of Clea. CN Oral D9 (11:20 to 11:45)	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10-A0 to 11-00) Machine learning enabled Koopman modeling and convex optimization easies predictive control of notificial spatials. Xunyuan YN Nanyerg Technological University, SG Oral E7 (11:00 to 11:15) Quantitative Analysis of Electrostatic Interactions in Nanofilitation for Trace Organic Cutterianness Removal Zhaje XIA Zhojavag University, CN Oral E8 (11:15 to 11:30) Machine learning forecasts of global daily CO2 emissions in near-readine Zhu DEMO The University of Hong King, CN Oral E9 (11:20 to 11:45) Fast Machine Learning-based Model Predictive Control of Nonlinear	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10-40 to 11:00) Membranes for Cestor: From Dense Polymers to Meroperous Structures Suit DIANG National Utwenty of Simpapore, SG Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrative films for accurate molecular serving Zheel JANG Nanyery Technological University, SG Invited Lecture F8 (11:15 to 11:30) Membrane Solutions for Lore Energy and Sustainable Resource Riccorery Zha VANG The Utwenty of Cameraida All Oral F9 (11:30 to 11:45) Lactir-Acid based Dept Elefactic Solvent for Sustainable Recovery Citical Method Energe Lithards Individual Solvent for Sustainable Recovery Colicial Method Energe Lithards Individual Solvent for Sustainable Recovery Colicial Solvent for Spect Lithards Solvent for Sustainable Recovery Colicial Method Solvent for Sustainable Recovery			
Session A: Resource Recovery Session Chair and Co-Chair: Grasport LISAK Keynote Lecture A6 (10:40 to 11:00) Al Technology for Smart Waste-to-Energy System Quinking NLAMG Zhajang University, CH Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Purictional Carbon Narodubes from Waste Using an Energy Efficient Dual Stage Reactor Waste Using an Energy Stage of Assimul All Control Stage National Stage Reactor Waste Conversion of Municipal Stage Stage and Animal Admire into Biogenia Waste Violence (Stage Performance viole Pyrolysis CVD. Analysis of Catalyst Performance viole Pyrolysis CVD. Analysis of Catalyst Performance Jinto LU Nanyang Technological University, SC Oral A9 (11:35 to 11:50) Resource recovery of Al and P From gasification sewage sludge stage via a multi-step and extraction system.	Session B. Membrane Technology Session Chair and Co-Chair: Gongping LUI & Mao TIAN Keynote Lecture B6 (10-40 to 11-00) Machine Learning Accelerates High Throughout Design of MOF- desired Membrane for Motoccal Cognition Gongping LUI Nating Ten Userway, CN Invited Lecture B7 (11-00 to 11-15) Precise Construction of Hydrogel Interlayers for Enhanced Thin-Film Composite Forward Dismoss Membranes Maio TIAN Northwestern Polyachrical University, Yu n, CN Oral B8 (11-15 to 11-30) Ridary-actuated Holloon Filiper Membrane Contactor for Bubble-free Biorestic Avention Daniel NG Yee Fan Nanyang Technological University, SG Oral B9 (11-30 to 11-15) Machine Teaming in GO membrane design: stability mechanisms and water ballistic transport	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 Sustainable Marine Ecosystem Alcohomy Matha MCGHANI Bingapore University of Technology & Design, 8G Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Battery Analytics Wei ZHANI Singapore bentillar of Technology, 8G Oral C7 (11:30 to 11:45) Adversarially Trained Dynamic Ensemble: A Moving Target Defense Sisteingy for Roboti Sementic Segmentation in Autonomous Vehicles	Venue: LTS Session D: Bitotchnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological suffur dispreparitionation entigathers new technology development for auditionally entire the section of part of the section of	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10-40 to 11:00) Machine learning-enabled Koopman modeling and corners optimization-based prediction of control of nonlinear systems Xunyuan NN Nanyang Technological University, SG Oral E7 (11:00 to 11:15) Quantitative Analysis of Electrostatic Interactions in Nanofilitation for Trace Organic Conteminate Removal Zhujian (11:15 to 11:30) Machine learning forecasts of global daily CO2 emissions in near- real me Zhu DEMS This University of Machine Learning based Model Predictive Control of Nonlinear Processes Fast Machine Learning based Model Predictive Control of Nonlinear Processes	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 Meroperous Structures Sub-MAN National University of Engagene, SG Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrathin films for accurate molecular series 2			
Session & Resource Recovery Session Chair and Co-Chair. Graggor. USAK Keynote Lecture A6 (10.40 to 11.00) All Technology for Smart Waste-to-Energy System Questing MIANG Zhejang Usiversity, CN Keynote Lecture A7 (11.00 to 11.20) Sustainable Engineering of Functional Cartion Narnables from Waste Using an Energy-Efficient Dual-Stage Resour Waste Using an Energy-Efficient Dual-Stage Resour Waste Using an Energy-Efficient Dual-Stage Resour Ween B.O.H Universit Sains Misiyas, MY Oral A8 (11.20 to 11.35) Catalytic Conversion of Municipal Seeage Studge and Animal Manus of Catalytic Conversion of Municipal Seeage Studge and Animal Manus of Catalytic Conversion of Municipal Catalytics Catal	Session B. Membrane Technology Session Chair and Co-Chair: Gongoing LUI & Mao TIAN Keynote Lecture B6 (10:40 to 11:00) Mechine Learning Accelerates High Throughput Design of MOF- Based Membrane for Kelecutal Separation Gongoing LUI Nerging Tech Userways, CN Invited Lacture B7 (11:00 to 11:15) Precise Construction of Hydrogel Interlayers for Enhanced Thin-Film Composite Forward Comosis Membranes Mac TIAN Northwestern Polytochrisal University, XVan, CN Oral B8 (11:15 to 11:20) Ratary-actuated Hollow Films Membrane Contactor for Bubble firee Bioreactor Aeration Dasiel MC Ver Pan Nanyang Technological University, SG Oral B9 (11:30 to 11:45) Machine learning in GO membrane design: stability mechanisms and safet battlets: transport Quant LUI Arthu University of Source and Technology, CN	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Ox-Chair: Rul TAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Mails MEGHANI Birgapore University of Technology & Design, SG Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Battery Analytics Wel JAMNG Singapore Institute of Technology, SG Oral C7 (11:30 to 11:45) Adversarially Trained Dynamic Ensemble: A Moving Target Defense Solidely for Robots Semantic Segmentation in Autonomous Vehicles Yanghul MO Singapore Institute of Technology, SG	Venue: LTB Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lacture D6 (10:40 to 11:00) Biological sulfur discrepantions or eligibless reve technology divelopment for sustainable waterwater treatment Farag JAMO Sun Yas den University, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-regative applications Weating TU Nanyang Technological University, SD Oral D8 (11:15 to 11:130) Hamessing Methanological Springly for Carbon-Neutral Biogas Purification and right Value Biomass Production Yuannu SONO University of Science and Technology of China, CN Oral D9 (11:30 to 11:45) Minning high-value bioproducts from subage: Potential for MCPAs production without erogenous election discuss	Session E: Environmental Als Modelling Session E: Environmental Als Modelling Session Chair and Co-Chair: Xurnyuan YIN and Zhe WU Keynote Lecture E6 (10-40 to 11-00) Machine learning-esablet Korpman modeling and connex optimization-based predictive control of notificer systems Xurnyuan YIN Nanyung Technological University, 90 Oral E7 (11-00 to 11-15) Quantitative Aralysis of Electrostatic Interactions in Nanofiliration No Trace Organic Contaminants Removal Zhugung University, CN Oral E8 (11-15 to 11-30) Machine learning forecasts of plobal daily CO2 emissions in near- real fine Zhu DENG The University of Horap Grop, CNI Oral E9 (11-30 to 11-45) Fast Machine Learning based Model Predictive Control of Nonlinear Processes Westing WANG National University of Simpoons, 50	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Carton Capture. From Dense Polymers to Microprocus Structures Management of Broggeone, SG Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrathin films for accurate molecular seeing Zhiera JAWA Natived Lecture F8 (11:15 to 11:30) Invited Lecture F8 (11:15 to 11:30) Invited Lecture F8 (11:15 to 11:30) Membrane Solutions for Leve-Bregy and Sustainable Resource Recovery Zha VANG The University of Commission, AU Oral F9 (11:30 to 11:45) Lactin-Acid based Deep Edication Schement on Stateries under Miss of Conditions Zhe VANG Nanyarg Technological University, SG			
Session & Resource Recovery Session Chair and Co-Chair. Gragoyz LISAK Keynote Lecture A6 (10.40 to 11.00) All Technology for Smart Waste-to-Energy System Quanting HIAMO Znejang Litivensity, CN Keynote Lecture A7 (11.00 to 11.20) Sustainable Engineering of Functional Canton Namodoes from Wester Using an Energy Efficient Dual-Stage Resotor Wester Living an Energy Efficient Dual-Stage Resotor Wen to CM Universiti Sains Misiryala, MY Cral A8 (11.20 to 11.25) Catalytic Conversion of Municipal Sessings Studge and Animal Manuser or Princips CVO. Analysis of Catalytic Conversion of Municipal Sessings Studge and Animal Manuser or Princips CVO. Analysis of Catalytic Conversion of Municipal Canada (11.25 to 11.25) Cral A9 (11.35 to 11.50) Resource recovery of A1 and P From gastification sewage sludge slag via a multi-step self-antimoton system	Session B. Membrane Technology Session Chair and Co-Chair Genging LIU & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Machine Learning Accelerates (19) Throughout Design of MOF- Based Membranes for Molecular Separation Geography LIU Nating to Litherate, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Hydrogel Intelligence for Einhanced Thir-Fall Compassed Forward Compassion Membranes Mach TIAN Northwestein Pulylachristal University, X1 nr. CN Crall B8 (11:15 to 11:20) Riddery-activated Hollow Fiber Membrane Contactor for Bubble-free Blowards Areation Dame ING Yea Fan Nanyang Technological University, 32 on Crall B9 (11:30 to 11:45) Machine Interning in GO membrane design stability mechanisms and water ballist bresport General U	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Ox-Chair: Rul TAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Maha MECHANI Singapore University of Technology & Design, SG Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Battery Analytics Wel 3HANG Singapore Institute of Technology, SG Oral C7 (11:30 to 11:45) Adversarially Trained Dynamic Ensemble: A Moving Target Defense Stategy for Robust Sementic Segmentation in Autonomous Vehicles Yanghal MG Yanghal MG Yanghal MG Yanghal MG Yanghal MG Yanghal MG Y	Venue: LTB Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lacture D6 (10:40 to 11:00) Biological suffer discriptions on eligibilities are les inhadogs development for sustainable waterwater treatment Fing JAMS San Yat-Sen University, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-negative applications Weahing TU Nanyang Technological University, SD Oral D8 (11:15 to 11:30) Interesting Methanological-Microslage Synergy for Carbon-Neutral Biograp Purification and riply-Value Biomass Production Vasious SONO University of Science and Technology of China, CN Oral D9 (11:30 to 11:45) Minning high-value bioproducts from sludge. Potential for MCPAs production without exopension denotes doors Lacit L	Session E: Environmental Als Modeling Session E: Environmental Als Modeling Session Chair and Co-Chair: Xurnyuan YIN and Zhe WU Keynote Lecture E6 (10-40 to 11-00) Machine learning-esabled Korgman modeling and comex optimization-based predictive control of notificer systems Xurnyuan YIN Nanyung Technological University, 90 Oral E7 (11-00 to 11-15) Quantitative Analysis of Discontain Intendification for Trace Organic Contaminants Removal Zhigk XIA Zhagang University, CN Oral E8 (11-15 to 11-30) Machine learning forecasts of global daily CO2 emissions in near- real-fine Zhu DENG The University of Horp Eng. CNI Oral E9 (11-30 to 11-145) Fast Machine Learning-based Model Predictive Control of Norlinear Phoceases Westong WANG	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10-40 to 11-00) Membranes for Carton Capture From Dense Polymers to Microparacus Structures Management of Biospoons, 5G Invited Lecture F7 (11-00 to 11-15) Aligned macrocycle pores in ultrathin films for accurate molecular seving Zheet JAWA National University of Biospoons, 5G Invited Lecture F7 (11-10 to 11-15) Invited Lecture F7 (11-10 to 11-15) Invited Lecture F8 (11-15 to 11-30) Invited Lecture F8 (11-15 to 11-3			
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-Energy System Quanting NUANG Zelping University, C11 Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Cartion Narvolubes from Waste Using an Energy Efficient Dual Stage Resource Ween Da OH Universitä Sains Malaysia, MY Cral A8 (11:20 to 11:25) Cral A8 (11:20 to 11:25) Cral A9 (11:35 to 11:50) Resource recovery of Al and P from pasification senage sludge slag via a multi-disp self-extraction system MEDIA ARRAD Nanyang Technological University, SG Resource recovery of Al and P from pasification senage sludge slag via a multi-disp self-extraction system	Session B. Membrane Technology Session Chair and Co-Chair: Gongoing LUI & Mao TIAN Keynote Lecture B6 (10:40 to 11:00) Mechine Learning Accelerates High Throughput Design of MOF- Based Membrane for Kelecutal Separation Gongoing LUI Nerging Tech Userways, CN Invited Lacture B7 (11:00 to 11:15) Precise Construction of Hydrogel Interlayers for Enhanced Thin-Film Composite Forward Comosis Membranes Mac TIAN Northwestern Polytochrisal University, XVan, CN Oral B8 (11:15 to 11:20) Ratary-actuated Hollow Films Membrane Contactor for Bubble firee Bioreactor Aeration Dasiel MC Ver Pan Nanyang Technological University, SG Oral B9 (11:30 to 11:45) Machine learning in GO membrane design: stability mechanisms and safet battlets: transport Quant LUI Arthu University of Source and Technology, CN	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Ox-Chair: Rul TAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Mails MEGHANI Birgapore University of Technology & Design, SG Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Battery Analytics Wel JAMNG Singapore Institute of Technology, SG Oral C7 (11:30 to 11:45) Adversarially Trained Dynamic Ensemble: A Moving Target Defense Solidely for Robots Semantic Segmentation in Autonomous Vehicles Yanghul MO Singapore Institute of Technology, SG	Venue: LTB Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lacture D6 (10:40 to 11:00) Biological sulfur discrepantions or eligibless reve technology divelopment for sustainable waterwater treatment Farag JAMO Sun Yas den University, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-regative applications Weating TU Nanyang Technological University, SD Oral D8 (11:15 to 11:130) Hamessing Methanological Springly for Carbon-Neutral Biogas Purification and right Value Biomass Production Yuannu SONO University of Science and Technology of China, CN Oral D9 (11:30 to 11:45) Minning high-value bioproducts from subage: Potential for MCPAs production without erogenous election discuss	Session E: Environmental Als Modelling Session E: Environmental Als Modelling Session Chair and Co-Chair: Xurnyuan YIN and Zhe WU Keynote Lecture E6 (10-40 to 11-00) Machine learning-esablet Korpman modeling and connex optimization-based predictive control of notificer systems Xurnyuan YIN Nanyung Technological University, 90 Oral E7 (11-00 to 11-15) Quantitative Aralysis of Electrostatic Interactions in Nanofiliration No Trace Organic Contaminants Removal Zhugung University, CN Oral E8 (11-15 to 11-30) Machine learning forecasts of plobal daily CO2 emissions in near- real fine Zhu DENG The University of Horap Grop, CNI Oral E9 (11-30 to 11-45) Fast Machine Learning based Model Predictive Control of Nonlinear Processes Westing WANG National University of Simpoons, 50	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Carton Capture. From Dense Polymers to Microprocus Structures Material Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrathin films for accurate molecular seeing Zhiera JAWA Natived Lecture F8 (11:15 to 11:30) Invited Lecture F8 (11:15 to 11:30) Invited Lecture F8 (11:15 to 11:30) Invited Lecture F8 (11:15 to 11:30) Membrane Solutions for Leve-Bregy and Sustainable Resource Recovery Zha VANG The University of Committed, AU Oral F9 (11:30 to 11:45) Lactin-Acid based Deep Edication Schement on Stateries under Miss of Conditions Zhe VANG Nanyarg Technological University, SG			
Session A: Resource Recovery Session Chair and Co-Chair: Gragoyz LISAK Keynote Lecture A6 (10-40 to 11-00) Al Technology for Smart Waster-to-Energy System Quanting HUMA Zhejang Ulwarell, CN Keynote Lecture A7 (11:00 to 11-20) Sustainable Engineering of Functional Curton Nanobber from Waster Living an Energy-Efficient Dual-Stage Reactor Waster Living Company of Municipal Stage Stage and Animal Manure into Biogenic Multi-Vallación Livino- Livino LIVI Nanyang Technological Ulwareshy, SG Presource recovery of A1 and P Form pasification senage sludge sing via a multi-Stage sele-straction systems MERIA MARIAO. Nanyang Technological Ulwareshy, SG Oral A10	Session B. Membrane Technology Session Chair and Co-Chair Georging LUB & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Mechine Learning Accelerates 1997. Throughout Design of MOF- Based Membranes for Molecular Separation Georging LUB Namps from Usersaly, CN Invited Lecture B7 (11:00 to 11:15) Precise Constitution of hydroget intelligent for Enhanced Thin-Fair Composate Forward Connects Membranes Mao TIAN Northwestern Polyschroset University, Xian, CN Onal B8 (11:15 to 11:30) Rotary-actuated Polition Flast Membrane Contactor for Builde free Bornactor Forward Connects Membrane Onal NO Yea Fair Nanyang Technological University, Xian, CN Onal B9 (11:30 to 11:45) Machine tearning in CO membrane design, stability mechanisms and water ballistic transport Onal UL Archit University of Source and Technology, CN Oral B10	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rul TAN Keynote Lecture C5 (10-40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Monitoring Main as ECHANNI Singapore University of Technology & Design, SG Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Battery Analytics Weil ZHANG Singapore Institute of Technology, SG Oral C7 (11:30 to 11:45) Advertainably Trained Dynamic Exemplies A Moning Target Orleanes Strategy for Robust Semantic Segmentation in Autonomous Vehicle Vapulus MD Singapore Institute of Technology, SG Oral C7 (11:30 to 11:45) Advertainably Trained Cynamic Exemples A Moning Target Orleanes Strategy for Robust Semantic Segmentation in Autonomous Vehicles Vapulus MD Singapore Institute of Technology, SG Oral C8	Venue: LTB Session D: Bitotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological suffer discriptionistics entightees new technology-development for susstainable seast-enter freatment Frequ JAMO Sun Yas Sen University, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-regative applications Weshing TU Nanyang Technological University, SD Oral D8 (11:15 to 11:20) Mamessing Methanoroput-Microslapie Synergy for Carbon-Neutral Biogas Purification and High-Value Biomass Production Vasions SNM University of Sidence and Technology of China, CN Oral D9 (11:30 to 11:45) Mining high-value bioproduct for mulsubge Patiential for MCFAs production without exogenous electron droops Littl Nanyang Technological University, SG Oral D10 (11:45 to 12:00)	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10-40 to 11:00) Machine Isening enable K foogman modeling and connex optimization-based predictive control of nonlinear systems Xunyuan YN Nanyang Technologiau University, 90 Oral E7 (11:00 to 11:15) Quantitative Analysis of Bisetonostic Interactions in Nanofitration for Trace Organic Contaminants Removal Zheyaya University, CN Oral E8 (11:15 to 11:20) Machine Isening forecasts of plast daily CO2 emissions in near- real-films The University of Heing King, CN Oral E9 (11:30 to 11:45) Fast Machine Learning based Model Predictive Control of Nonlinear Processess Weekeng WAMG National University of Siragonos, 90 Oral E10	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Chair and Co-Chair. Membranes for Chair Capture Fern Dense Polymers to Micropolitical Structures Substitution of Struppone, SG Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultimoth films for accurate molecular serving. Zheari JANNO Nanyang Technologiau University, SG Invited Lecture F8 (11:15 to 11:20) Membrane Solutions for Lose-Recovery Recovery The University of Queentand, AU Oral F9 (11:30 to 11:45) Lactic Acid based Despired Lithurents on Batteries under Mids Conditions Conditions Care TYLIN Nanyang Technologiau University, SG Oral F10			
Session A: Resource Recovery Session A: Resource Recovery Session Chair and Co-Chair: Gragorz LISAK Keynote Lecture A6 (10:40 to 11:00) Al Technology for Smart Waste-to-Energy System Qunsing HUANG Znejang Diversity, CH Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Curton Narodubes from Waste Using an Energy Efficient Dua-Stage Resource All Control Company Stage of Association Servings (11:15) Catalytic Conversion of Mariotics Groups Stage Stage Waste Dua-Stage Resource Recovery of All and P From gasification servings studge stage via a multi-step intervently, 50 Creal A9 (11:35 to 11:50) Resource recovery of All and P From gasification servings studge stage via a multi-step intervently, 50 Creal A9 (11:35 to 11:50) Resource recovery of All and P From gasification servings studge stage via a multi-step intervently, 50 Creal A9 (11:35 to 11:50) Resource recovery of All and P From gasification servings studge stage via a function of the Company Stage St	Session B. Membrane Technology Session Chair and Co-Chair: Gongoing LUI & Mao TIAN Keynote Lecture B6 (10-40 to 11-00) Machine Learning Accelerates High Throughout Design of MOF- desired Membrane for Molecular Organization Gongoing LUI Nairing Ten Usavaria, CN Invited Lecture B7 (11-00 to 11-15) Precise Construction of Hydrogel Interlayers for Enhanced Thin-Film Composite Forward Dismoss Membranes Maior TIAN Northwestern Polyachrosal University, XY an, CN Ornal B8 (11-15 to 11-30) Roberty-actuated Holloon Filter Membrane Contactor for Bubble-free Biorestory Arention Daniel NG Yee Fan Nairyang Technological University, 30 Ornal B9 (11-30 to 11-45) Machine Iteraming in CO membrane design: stability mechanisms and water ballistic transport Grant LUI Arthal University of Source and Technology, CN Ornal B10 Ornal B10 Arthal University of Source and Technology, CN Ornal B10 Arthal University of Source and Technology, CN Ornal B10 Ornal B10 Arthal University of Source and Technology, CN Ornal B10 Arthal University of Source and Technology, CN Ornal B10 Arthal University of Source and Technology, CN Ornal B10 Arthal University of Source and Technology, CN Ornal B10 Arthal Charles of Source and Technology, CN Auch All Althal Annological Membrane Scaffold Module for	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 Sustainable Marine Ecosystem Monitoring Mails ME GALANI Bingapore University of Technology A Design, 80 Oral C6 (11:15 to 11:30) Physics and Knowledge based Cognitive Digital Twin for Advanced Battery Analytics Wei JANA Singapore Institute of Technology, 90 Oral C7 (11:30 to 11:45) Adversarially Trained Dynamic Einsemble: A Moving Target Defense Strategy for Robust Semantic Signapore Institute of Technology, 90 Singapore Institute of Technology, 90 Oral C7 (11:30 to 11:45) Adversarially Trained Dynamic Einsemble: A Moving Target Defense Strategy for Robust Semantic Segmentation in Autonomous Vehicles Yanghul MO Singapore Institute of Technology, 90 Oral C8 (11:45 to 12:20) Data-Driven Control for Three-Plaze AC DC Power Converters	Venue: LTS Session D: Bitotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10-40 to 11:00) Biological sulfur dispreportionation enlighthers new technology development for earthmach environment for earthmach environment for earthmach environment for earthmach environment for earthmach to such the such expension of the sulfure of Fang, JAMO Sun vat den Utwensity, CN Oral D7 (11:00 to 11:15) Sustainable synthesic biology for carbon-negative applications Walning TU Nanyang Technological Utwensity, SG Oral D8 (11:15 to 11:30) Hamsessing Methanologis-Microslages Synergy for Carbon-Neutral Biogas Purification and rispla-Value Biomass Production Valence SONG University of Solence and Technology of China, CN Oral D8 (11:30 to 11:45) Mining high-value bioproducts from sludge: Potential for MCFAs production without exogenous electron durons Oral D10 (11:45 to 12:00) Read-critic of refractory I faillaird reaction products by Fe3+ during	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10-A0 to 11-00) Machine learning enabled Koopman modeling and convex optimization easier predictive Control of notificer systems. Xunyuan NN Nanyers Technological University, SG Oral E7 (11:00 to 11:15) Quantitative Analysis of Electrostatic Interactions in Nanofilitation for Trace Organic Contaminata Removal Zhay Xia Zhigiang University, CN Oral E8 (11:15 to 11:30) Machine learning forecasts of global daily CO2 emissions in near-real elime Zha DEMS Tib Demsely of Hong Kng, CN Oral E9 (11:30 to 11:45) Fast Machine Learning-based Model Predictive Control of Nonlinear Processes Western Washing Learning-based Model Predictive Control of Nonlinear Processes Western Washing Learning-based Model Predictive Control of Nonlinear Processes Western Washing Learning-based Model Predictive Control of Nonlinear Processes Western Washing Learning-based Model Predictive Control of Nonlinear Processes Western Washing Learning-based Model Predictive Control of Nonlinear Processes Western Washing Learning-based Model Predictive Control of Nonlinear Processes Western Washing Learning-based Model Predictive Control of Nonlinear Processes Western Washing Learning-based Model Predictive Control of Nonlinear Processes Western Washing Learning-based Model Predictive Control of Nonlinear Processes Western Washing Learning-based Model Predictive Control of Nonlinear Processes	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 Monoporous Structures Sulvey Charles Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrathin films for accurate molecular senses Direct JAMAG Nanyarg Technological University, 50 Invited Lecture F8 (11:15 to 11:30) Membrane Solutions for Low-Energy and Sustainable Resource Recovery The University of Coverended. AU Oral F9 (11:30 to 11:45) Lactin-Acid-based Deep Extencis Solvent for Sustainable Recovery of Critical Medias from Specialists The University of Coverended. AU Oral F9 (11:30 to 11:45) Lactin-Acid-based Deep Extencis Solvent for Sustainable Recovery of Critical Medias from Specialists The University of Coverended. AU Oral F9 (11:30 to 11:45) Lactin-Acid-based Deep Extencis Solvent for Sustainable Recovery of Critical Medias from Specialists The University of Coverended. AU Oral F9 (11:30 to 11:45) Lactin-Acid-based Deep Extencis Solvent for Sustainable Recovery of Critical Medias from Specialists The Charles Special			
Session A. Resource Recovery Session Chair and Co-Chair. Graeporx LISAK Keynote Lecture A6 (10-40 to 11-00) All Technology for Smart Waste-to-Energy System Counting WAMAD Zeigang University, CNI Keynote Lecture A7 (11:00 to 11-20) Sustainable Engineering of Functional Carbon Narrabbes from Waste Lising an Energy-Efficient Dual-Stage Resolv Waste Lising and Precipient Stage of Animal Manue into Biogenic Mall-Walland Carbon Fernimence Waste Lising and Chair Promised Carbon Fernimence Visit Propasa Child Animal Dual Stage and Animal Manue into Biogenic Mall-Walland Carbon Fernimence Visit Propasa Child Animal Dual Carbon Fernimence Visit Propasa Child Animal Carbon Fernimence Visit Propasa Child Anim	Session B. Membrane Technology Session Chair and Co-Chair Genging LUB & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Machine Learning Accessess (19) Throughout Disign of MOF- Based Membranes for Molecular Separation Consigne LUB Natings Tech Uswesty, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Hydrogol telestryless for Enhanced Thin-Fall Composale Forward Caronics Membranes Maon TIAN Northwestern Pulyacinscal University, X1 an, CN Oral B8 (11:15 to 11:20) Riddery exturated Polition Filter Membrane Contactor for Bubble fine Biomactic Aerolics Oral B9 (11:30 to 11:45) Machine Inserving in GO membrane design stability mechanisms and water ballist foresport Owen LU Area University of Source and Technology, CN Oral B10 (11:45 to 12:00)	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rul TAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Maha WEGHAMI Singapose University of Technology & Design, 50 Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Battery Analytics Wei JAMAO Singapose Institute of Technology, 90 Oral C7 (11:30 to 11:45) Adversarially Trained Dynamic Ensemble: A Moving Target Defense Strategy for Robust Semantic Segmentation in Autonomous Vehicle Vanghul MO Singapose Institute of Technology, 90 Oral C7 (11:30 to 11:45) Vanghul MO Singapose Institute of Technology, 90 Oral C8 (11:45 to 12:00)	Venue: LTB Session D: Bitotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological suffer discriptionistics entightees new technology-development for susstainable seast-enter freatment Frequ JAMO Sun Yas Sen University, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-regative applications Weshing TU Nanyang Technological University, SD Oral D8 (11:15 to 11:20) Mamessing Methanoroput-Microslapie Synergy for Carbon-Neutral Biogas Purification and High-Value Biomass Production Vasions SNM University of Sidence and Technology of China, CN Oral D9 (11:30 to 11:45) Mining high-value bioproduct for mulsubge Patiential for MCFAs production without exogenous electron droops Littl Nanyang Technological University, SG Oral D10 (11:45 to 12:00)	Session E: Environmental Als Modeling Session Chair and Co-Chair Xunyuan YiN and Zhe WU Keynote Lecture E6 (10-40 to 11-00) Machine learning-eabled Koguman moleting and comex- optimization-based predictive control of nonlinear systems Xunyuan YiN Nanyang Technological University, 55 Oral E7 (11-00 to 11-15) Quantitative Analysis of Directostatic interactions in Nanodifiration for Trace Organic Contaminants Removal Zhejang University, CN Oral E8 (11-15 to 11-30) Machine learning forecasts of splad daily CO2 emissions in near- real-fine Zhu DENO The University of Hong Kong, CN Oral E9 (11-30 to 11-45) Fast Machine Learning-based Model Predictive Control of Novilinear Processes Westong WANG National University of Simpoons, 50 Oral E10 (11-45 to 12-00)	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 Microproposal Structures Material Lecture F7 (11:00 to 11:15) Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrathin films for accurate molecular serving Zheed JAMAG Nainyang Technological University, SG Invited Lecture F8 (11:15 to 11:30) Invited Lecture F8 (11:15 to 11:30) Invited Lecture F8 (11:15 to 11:30) Lectic-Acid-based Deep Earlies Solvent for Sustainable Recovery Zhe YANG The University of Committed, AU Oral F9 (11:30 to 50-44) Nainyang Technological University, SG Lectic-Acid-based Deep Earlies Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of Childral Mediat from Special Solvent for Sustainable Recovery of			
Session A: Resource Recovery 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-Energy System Gundey NUAMG Zeplang University, CH Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Carbon Narodubes from Weste Using an Energy Rifferent Dua-Stage Resolar West to CH Universit Sase Malaya, MY Crail A8 (11:20 to 11:35) Crail A8 (11:20 to 11:35) Catalytic Conversion of Municipal Sessings Sudge and Animal Manuar into Disport Midel Walleric Carbon Narodubes and Hydrogen via Pyrolysia CVD. Analysis of Catalyt Performance Jestica LU Nanyang Tectrological University, SG Oral A9 (11:35 to 11:50) Resource recovery of All and P Rom gasification sewage sludge stag via a multi-stip we distraction system MZEM AMBRAD Nanyang Tectrological University, SG Oral A1 (11:50 to 12:05) Reclaimed seasater discharge. An electrolytic approach to brine utilization and ineatment	Session B. Membrane Technology Session Chair and Co-Chair Georging LUB & Mao TIAN Keynote Lecture B6 (10-40 to 11-00) Mechine Learning Accelerates High Throughout Design of MOF- Based Membrane for Medical Separation Georging LU Nating Tech Usersay, CN Invited Lecture B7 (11-00 to 11-15) Precise Construction of Hydrogel Interlayers for Enhanced Thin-Film Composer Formed Changes Membranes Mao TIAN Northwestern Polyachraci University, Yan, CN Oral B8 (11-15 to 11-30) Roday-actuated Politice Films Membrane Contactor for Bubble-free Biomedic Avertion Oral B9 (11-30 to 11-45) Machine learning in GO membrane design: stability mechanisms and water ballistic branger! Quan LU Arital University of Source and LU Coral B10 (11-45 to 12-00) 2-arch PANNAMO Nanotiscous Membranes Scaffold Module for Lethum Recovery from Simulaes GWRO Joine	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 Sustainable Marine Ecosystem Montane MCOHAN Singapore Linvestly of Technology & Design, SG Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Solitory, Audysca Was JAMAS Singapore Institute of Technology, SG Oral C7 (11:30 to 11:45) Adversarially Trained Dynamic Enternology, SG Oral C7 (11:30 to 11:45) Assensarially Trained Dynamic Enternology, SG Oral C7 (11:30 to 11:45) Singapore Institute of Technology, SG Oral C7 (11:30 to 11:45) Adversarially Trained Dynamic Enternology, SG Oral C7 (11:45 to 12:00) Date-Driven Control for Times-Phase AC-DC Power Conventors Modeled by Switched Affine Systems	Venue: LTS Session D: Bitrotchnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological suffer disproprisonation entightness new technology development for australiation entightness new technology development for australiation entightness new technology development for australiation entightness new technology and technology and the suffered of the s	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10-A0 to 11-00) Machine learning-enabled Kogenes modeling and connex optimization based predictive control of nonlinear epidens Xunyuan YN Nanyang Technological University, SG Oral E7 (11:00 to 11-15) Quantitative Analysis of Electrodatic Interactions in Nanofilitation for Trace Organic Conteminate Removal Zhaja Xia, Zhajang University, CN Oral E8 (11:15 to 11:30) Machine learning forecasts of global daily CO2 emissions in near- real case of the Conteminate Removal The University of Electrodatic Production Oral E9 (11:30 to 11:45) Fast Machine Learning-based Model Predictive Control of Nonlinear Processes Weekong WANG National University of Singapore, SG Oral E10 (11:45 to 12:00) Data-Oniven Moving Horizon Estimation Using Machine Learning- Application to Membrane Bioreactic Processes	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 Monoporous Structures Sub-MAND National University of Singaporo, SG Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle gores in ultratine films for accurate molecular Serving Zhared JANG Nanyang Technological University, SG Invited Lecture F8 (11:15 to 11:30) Membrane Solutions for Lore Energy and Sustainable Resource Recovery Zhared JANG The University of Camerain, AU Oral F9 (11:30 to 11:45) Lectir-Acid based Dept Extentic Solvent for Sustainable Recovery of Critical Metals from Septent Estimation Esteries under Mids Conditions Zhen YUAN Nanyang Technological University, SG Oral F10 (11:45 to 12:00) Migh-Performance Lithium Extraction from Sait Lakes with designing nano materials and device			
Session A. Resource Recovery Session Chair and Co-Chair. Graeporx LISAK Keynote Lecture A6 (10-40 to 11-00) All Technology for Smart Waste-to-Energy System Quantity MIAMO Zeajang Libraria, Chi Reynote Lecture A7 (11:00 to 11-20) Sustainable Engineering of Functional Carton Narnables from Waste Lizing an Energy Efficient Disa-Stage Resolv Wee ba OH Libraria State Malaysia, MY Oral A8 (11:20 to 11-25) Catalysic Conversion of Municipal Sessage Stage and Animal Manue into Engineering of India of India Professional Stage of Professional Sta	Session B. Membrane Technology Session Chair and Co-Chair Gongping LUB & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Machine Learning Accessess (19) Throughput Disign of MOF- Based Membranes for Molecular Separation Gongeling LUB Nating 1 to Utwesty, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Injury Involvement for Enhanced Thin-Fall Compacted Forward Caronics Membranes Mao TIAN Northwestern Pulyacinscal University, X1 an, CN Oral B8 (11:15 to 11:20) And The Membrane Contactor for Bubble fines Biomactic Aeration Daniel MG Yee Fan Nanyang Technological University, S0 Oral B9 (11:30 to 11:45) Machine Insensing in GO membrane design stability mechanisms and water ballist foreign General University of Source and Technology, CN Oral B10 (11:45 to 12:00) 2-inch PANNHMO Nanotificous Membrane Scaffold Module for Lithium Recovery from Simulate SWFO Brine Yeighe LIMMO	Venue: LT7 Session C: Computing, Data Science & Al Session Chair and Co-Chair: Rul TAN Keynote Lecture C5 (10:40 to 11:15) Al-Powered Robotic Systems for Sustainable Marine Ecosystem Maha a EGUALANI Singapose University of Technology & Design, 50 Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Battery Analysics Wei JAHAN Singapose Institute of Technology, 50 Oral C7 (11:30 to 11:45) Adversarially Trained Dynamic Ensemble: A Moving Target Defense Strategy for Pobusid Semantic Signmentation in Autonomous Vehicle Vanghul MO Singapose Institute of Technology, 50 Oral C3 (11:45 to 12:00) Datis-Driven Control for Tree-Phase AC-OC Power Conventers Modeled by Switched Affins Systems Xisosceng XU	Venue: LTB Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lacture D6 (10:40 to 11:00) Biological suffer disruprofrosorion enlightness new technology development for sustainable waterwater treatment Fine JAMM San Yat den University, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-negative applications Weahing TU Nanyang Technological University, SD Oral D8 (11:15 to 11:30) Interesting Methanological University, SD Area D8 (11:15 to 11:30) University of Science and Technology of Class CN Oral D9 (11:30 to 11:45) Minning high-value bioproducts from sludge. Potential for MCPAs production without exceptions electron devices Lai LI Nanyang Technological University, SD Oral D10 (11:45 to 12:00) Reduction of reflectivy Maintaird residios products by Fig3- during thermal hydrolysis previousment and enhanced sludge. What DEMD **Production of reflectivy Maintaird residios products by Fig3- during thermal hydrolysis previousment and enhanced sludge. **Value DEMD	Session E: Environmental Al & Modeling Session Chair and Co-Chair Xurnyuan YIN and Zhe WU Keynote Lecture E6 (10-A0 to 11-00) Machine learning-enabled Korpman moleting and comex- optimization-based predictive control of notificer systems Xurnyuan YIN Nanyang Technological University, 95 Oral E7 (11-00 to 11-15) Quantitative Analysis of Electrodatic interactions in Nanoffittation for Trace Organic Contaminants Removal Zhigk XIA Zhejang University, CN Oral E8 (11-15 to 11-30) Machine learning forecasts of global daily CO2 emissions in near- read-fine Zhia DENG The Liversity of Horp Kong, CN Oral E9 (11-30 to 11-45) Fast Machine Learning-based Model Predictive Control of Nonlinear Processes Westong WANG National University of Simpoon, 93 Oral E10 (11-15 to 12-00) Data Oriven Moving Februar Estimation Using Machine Learning- Application to Membrane Simensor Processes Xioojia U	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Carbon Capture Fore Dense Polymers to Microgeneous Sincheres Sui ZHANG National University of Bingoons, 5G Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle power in ultrathin films for accurate motecular serving Zenery January Technological University, 5G Invited Lecture F8 (11:15 to 11:30) Lectic-Acid-Sead Deep Editects Sovient for Sustainable Resource Recovery Zenery JANG The University of Queentand, AU Oral F9 (11:20 to 11:45) Lectic-Acid-Sead Deep Editects Sovient for Sustainable Resource Recovery Zenery JANG The University of Queentand, AU Oral F9 (11:20 to 11:45) Lectic-Acid-Sead Deep Editects Sovient for Sustainable Resource Recovery Zenery JANG The University of Constitutes Conditions Zenery JANG Nanyarg Technological University, SG Oral F10 (11:15 to 12:00) Righ-Performance Libitium Estraction from Salf Lakes with designing nano materialists and device Quangalang MA			
Session A: Resource Recovery 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-Energy System Gundey NUAMG Zeplang University, CH Keynote Lecture A7 (11:00 to 11:20) Sustainable Engineering of Functional Carbon Narodubes from Weste Using an Energy Rifferent Dua-Stage Resolar West to CH Universit Sase Malaya, MY Crail A8 (11:20 to 11:35) Crail A8 (11:20 to 11:35) Catalytic Conversion of Municipal Sessings Sudge and Animal Manuar into Disport Midel Walleric Carbon Narodubes and Hydrogen via Pyrolysia CVD. Analysis of Catalyt Performance Jestica LU Nanyang Tectrological University, SG Oral A9 (11:35 to 11:50) Resource recovery of All and P Rom gasification sewage sludge stag via a multi-stip we distraction system MZEM AMBRAD Nanyang Tectrological University, SG Oral A1 (11:50 to 12:05) Reclaimed seasater discharge. An electrolytic approach to brine utilization and ineatment	Session B. Membrane Technology Session Chair and Co-Chair Georging LUB & Mao TIAN Keynote Lecture B6 (10-40 to 11-00) Mechine Learning Accelerates High Throughout Design of MOF- Based Membrane for Medical Separation Georging LU Nating Tech Usersay, CN Invited Lecture B7 (11-00 to 11-15) Precise Construction of Hydrogel Interlayers for Enhanced Thin-Film Composer Formed Changes Membranes Mao TIAN Northwestern Polyachraci University, Yan, CN Oral B8 (11-15 to 11-30) Roday-actuated Politice Films Membrane Contactor for Bubble-free Biomedic Avertion Oral B9 (11-30 to 11-45) Machine learning in GO membrane design: stability mechanisms and water ballistic branger! Quan LU Arital University of Source and LU Coral B10 (11-45 to 12-00) 2-arch PANNAMO Nanotiscous Membranes Scaffold Module for Lethum Recovery from Simulaes GWRO Joine	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 Sustainable Marine Ecosystem Montane MCOHAN Singapore Linvestly of Technology & Design, SG Oral C6 (11:15 to 11:30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Solitory, Audysca Was JAMAS Singapore Institute of Technology, SG Oral C7 (11:30 to 11:45) Adversarially Trained Dynamic Enternology, SG Oral C7 (11:30 to 11:45) Assensarially Trained Dynamic Enternology, SG Oral C7 (11:30 to 11:45) Singapore Institute of Technology, SG Oral C7 (11:30 to 11:45) Adversarially Trained Dynamic Enternology, SG Oral C7 (11:45 to 12:00) Date-Driven Control for Times-Phase AC-DC Power Conventors Modeled by Switched Affine Systems	Venue: LTS Session D: Bitrotchnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lecture D6 (10:40 to 11:00) Biological suffer disproprisonation entightness new technology development for australiation entightness new technology development for australiation entightness new technology development for australiation entightness new technology and technology and the suffered of the s	Session E: Environmental Al & Modelling Session Chair and Go-Chair: Xunyuan NN and Zhe WU Keynote Lecture E6 (10-A0 to 11-00) Machine learning-enabled Kogenes modeling and connex optimization based predictive control of nonlinear epidens Xunyuan YN Nanyang Technological University, SG Oral E7 (11:00 to 11-15) Quantitative Analysis of Electrodatic Interactions in Nanofilitation for Trace Organic Conteminate Removal Zhaja Xia, Zhajang University, CN Oral E8 (11:15 to 11:30) Machine learning forecasts of global daily CO2 emissions in near- real case of the Conteminate Removal The University of Electrodatic Production Oral E9 (11:30 to 11:45) Fast Machine Learning-based Model Predictive Control of Nonlinear Processes Weekong WANG National University of Singapore, SG Oral E10 (11:45 to 12:00) Data-Oniven Moving Horizon Estimation Using Machine Learning- Application to Membrane Bioreactic Processes	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 Morepowers Structures Sui ZHAND National University of Engagene, SG Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle pores in ultrathin films for accurate molecular serving. Zheel JIANG Nanyang Technologial University. SG Invited Lecture F8 (11:15 to 11:30) Membrane Solutions for Low Energy and Sustainable Resource Recovery Zheel JIANG The University of Cameriand. AU Oral F9 (11:20 to 11:45) Lectir-Acid based Dept Extentic Solvent for Sustainable Resource According September 10:10-10:			
Session A. Resource Recovery Session Chair and Co-Chair. Graeporx LISAK Keynote Lecture A6 (10-40 to 11-00) All Technology for Smart Waste-to-Energy System Quantity MIAMO Zeajang Libraria, Chi Reynote Lecture A7 (11:00 to 11-20) Sustainable Engineering of Functional Carton Narnables from Waste Lizing an Energy Efficient Disa-Stage Resolv Wee ba OH Libraria State Malaysia, MY Oral A8 (11:20 to 11-25) Catalysic Conversion of Municipal Sessage Stage and Animal Manue into Engineering of India of India Professional Stage of Professional Sta	Session B. Membrane Technology Session Chair and Co-Chair Gongping LUB & Mao TIAN Keynote Lecture B6 (10-40 to 11:00) Machine Learning Accessess (19) Throughput Disign of MOF- Based Membranes for Molecular Separation Gongeling LUB Nating 1 to Utwesty, CN Invited Lecture B7 (11:00 to 11:15) Precise Construction of Injury Involvement for Enhanced Thin-Fall Compacted Forward Caronics Membranes Mao TIAN Northwestern Pulyacinscal University, X1 an, CN Oral B8 (11:15 to 11:20) And The Membrane Contactor for Bubble fines Biomactic Aeration Daniel MG Yee Fan Nanyang Technological University, S0 Oral B9 (11:30 to 11:45) Machine Insensing in GO membrane design stability mechanisms and water ballist foreign General University of Source and Technology, CN Oral B10 (11:45 to 12:00) 2-inch PANNHMO Nanotificous Membrane Scaffold Module for Lithium Recovery from Simulate SWFO Brine Yeighe LIMMO	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 Sustainable Marine Ecosystem Montaining Mains MEGNAMI Bingapore University of Technology & Design, SO Oral C6 (11-15 to 11-30) Physics and Knowledge-based Cognitive Digital Twin for Advanced Battery Analytics Wei JAMAG Singapore Institute of Technology, SO Oral C7 (11-30 to 11-45) Adversarially Trained Dynamic Ensemble: A Moving Target Defenses Strategy for Robust Sementic Sementics in Autonomous Veholes Yanghul MO Singapore Institute of Technology, SO Oral C8 (11-45 to 12-00) Datio-Driven Control for Three-Phase AC DC Power Converters Modeled by Switched Affine Systems Xisonang XII Shandong University of Science and Technology, CNI Shandong University of Science and Technology, CNI	Venue: LTB Session D: Blotechnology & Bioprocesses Session Chair and Co-Chair. TBC Keynote Lacture D6 (10:40 to 11:00) Biological suffer disruprofrosorion enlightness new technology development for sustainable waterwater treatment Fine JAMM San Yat den University, CN Oral D7 (11:00 to 11:15) Sustainable synthetic biology for carbon-negative applications Weahing TU Nanyang Technological University, SD Oral D8 (11:15 to 11:30) Interesting Methanological University, SD Area D8 (11:15 to 11:30) University of Science and Technology of Class CN Oral D9 (11:30 to 11:45) Minning high-value bioproducts from sludge. Potential for MCPAs production without exceptions electron devices Lai LI Nanyang Technological University, SD Oral D10 (11:45 to 12:00) Reduction of reflectivy Maintaird residios products by Fig3- during thermal hydrolysis previousment and enhanced sludge. What DEMD **Production of reflectivy Maintaird residios products by Fig3- during thermal hydrolysis previousment and enhanced sludge. **Value DEMD	Session E: Environmental Al & Modeling Session Chair and Co-Chair Xurnyuan YIN and Zhe WU Keynote Lecture E6 (10-A0 to 11-00) Machine learning-enabled Korpman moleting and comex- optimization-based predictive control of notificer systems Xurnyuan YIN Nanyang Technological University, 95 Oral E7 (11-00 to 11-15) Quantitative Analysis of Electrodatic interactions in Nanoffittation for Trace Organic Contaminants Removal Zhigk XIA Zhejang University, CN Oral E8 (11-15 to 11-30) Machine learning forecasts of global daily CO2 emissions in near- read-fine Zhia DENG The Liversity of Horp Kong, CN Oral E9 (11-30 to 11-45) Fast Machine Learning-based Model Predictive Control of Nonlinear Processes Westong WANG National University of Simpoon, 93 Oral E10 (11-15 to 12-00) Data Oriven Moving Februar Estimation Using Machine Learning- Application to Membrane Simensor Processes Xioojia U	Session F: Environmental Chemistry & Materials Session Chair and Co-Chair. TBC Keynote Lecture F6 (10:40 to 11:00) Membranes for Carbon Capture Fore Dense Polymers to Microgeneous Sincheres Sui ZHANG National University of Bingoons, 5G Invited Lecture F7 (11:00 to 11:15) Aligned macrocycle power in ultrathin films for accurate motecular serving Zenery January Technological University, 5G Invited Lecture F8 (11:15 to 11:30) Lectic-Acid-Sead Deep Editects Sovient for Sustainable Resource Recovery Zenery JANG The University of Queentand, AU Oral F9 (11:20 to 11:45) Lectic-Acid-Sead Deep Editects Sovient for Sustainable Resource Recovery Zenery JANG The University of Queentand, AU Oral F9 (11:20 to 11:45) Lectic-Acid-Sead Deep Editects Sovient for Sustainable Resource Recovery Zenery JANG The University of Constitutes Conditions Zenery JANG Nanyarg Technological University, SG Oral F10 (11:15 to 12:00) Righ-Performance Libitium Estraction from Salf Lakes with designing nano materialists and device Quangalang MA			

SESSION 3					
Venue: LT5	Venue: LT6	Venue: LT7	Venue: LT8	Venue: LT14	Venue: LT15
Session A: Resource Recovery Session Chair and Co-Chair:	Session B: Membrane Technology Session Chair and Co-Chair:	Session C: Computing, Data Science & Al Session Chair and Co-Chair:	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:
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	Sabatler principle on highly CO 2-philic 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 BFMIHE and Robust Data-driven MHE for Lithium-ion Battery	Food as a source of disinfection byproducts: Detection, formation, and control in processing and cooking
M. GRAEBNER	Haiging LIN	Ivor W. TSANG	Sile 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	Invited Lecture B12		Oral D12	Keynote Lecture E12	Invited Lecture F12
(14:20 to 14:35)	(14:20 to 14:35)		(14:20 to 14:35)	(14:20 to 14:40)	(14:20 to 14:35)
Development and Application of High-Performance Blochar Catalysts for Waste Pyrolysis-Steam Reforming	Biomimetic Catalytic Membrane Enables Sustainable Water Purification through Direct-Electron-Transfer Pathway		твс	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)	(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 Al	Elucidating the EPS-Biofouling Nexus in Electrochemical Anaerobic Membrane Bioreactor via Explainable Al Approaches	Large Language Model-Assisted Machine Learning for the Design 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
Guical LIU Nanyang Technological University, SG	Naeem NADZRI Nanyang Technological University, SG	Marie SIEW Singapore University of Technology & Design, SG	Changxin 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 Game-Theoretic Control for Sustainable Multi-Agent Systems with Actuator Faults	Artificial Intelligence-Assisted Online Sensor for Environmental Monitoring
Kevin Matthew MANURUNG	Fan FENG	Phuc Duc NGUYEN	Run ZHOU	Wenjing HOU	Xuanhao LIN
Nanyang Technological University, SG	National University of Singapore, SG	Nanyang Technological University, SG	Nanyang Technological University, SG	Beijing University of Chemical Technology, CN	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	Silm-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 Nanyang Technological University, SG	Xinchen XIANG Zhejlang University, CN	Zhuangsong HUANG Harbin Institute of Technology, CN

AFTERNOON TEA BREAK (15:20 to 15:40)

SESSION 4

		323	31014 4		
Venue: LT5	Venue: LT6	Venue: LT7	Venue: LT8	Venue: LT14	Venue: LT15
Session A: Resource Recovery Session Chair and Co-Chair:	Session B: Membrane Technology Session Chair and Co-Chair:	Session C: Computing, Data Science & Al Session Chair and Co-Chair:	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:
Wen Da OH	Xiaoying ZHU & Lei YAO	Rui TAN	TBC	Xunyuan YIN and Zhe WU	TBC
Keynote Lecture A16	Keynote Lecture B16	Keynote Lecture C13	Keynote Lecture D16	Keynote Lecture E16	Keynote Lecture F16
(15:40 to 16:00)	(15:40 to 16:00)	(15:40 to 16:15)	(15:40 to 16:00)	(15:40 to 16:00)	(15:40 to 16:00)
"Waste-to-Products" for the Sustainability Transformation of Megacities: Impacts of Public Knowledge & Perception on Chemica Recycling Deployments in Singapore	Interface-Engineered Functional Membranes for Emerging Pollutant Removal	Being Small in the Era of Large Models	Emerging Pollutants: Antibiotic Resistance Genes Transmission in the Environment	Al4S for Sustainable Innovation: Building High-Quality Datasets for Coal-Based New Materials	Artificially Confined Sub-Nanoscale Channels for Molecular Separation
Roh Pin LEE	Xiaoying ZHU	Anthony K. H. TUNG	Xiaole YIN	Yang DONG	Jie SHEN
Brandenburg University of Technology, DE	Zhejiang University, CN	National University of Singapore, SG	Nanyang Technological University, SG	National Institute of Clean-and-Low-Carbon Energy, CN	Nanyang Technological University, SG
Oral A17	Invited Lecture B17		Oral D17	Oral E17	Oral F17
(16:00 to 16:15)	(16:00 to 16:15)		(16:00 to 16:15)	(16:00 to 16:15)	(16:00 to 16:15)
Inequality in Air Pollution-Attributable Mortality by Income Level between and within Countries	Machine-learning-guided design and performance prediction of membrane processes for PFAS removal		Simultaneous Vanadium(V) Removal and Toxicity Response Mechanisms in Settleable Algae Systems	Mamba-neural ordinary equation Koopman approach for modeling and optimal control of membrane water treatment system	Noncovalent Complex Modulated Fabrication of COF Membrane for Organic Solvent Nanofiltration
Hongliang ZHANG University of Shanghal for Science and Technology, CN	Lei YAO Wuhan Institute of Technology,CN		Siling REN Nanyang Technological University, SG	Zhaoyang LI Nanyang Technological University, SG	Baoyu WANG Joint School of NUS and TJU, CN
Oral A18	Oral B18	Oral C14	Oral D18	Oral E18	Oral F18
(16:15 to 16:30)	(16:15 to 16:30)	(16:15 to 16:30)	(16:15 to 16:30)	(16:15 to 16:30)	(16:15 to 16:30)
Green Synthesis of Binder-Free Waste-Derived adsorbent for H2S Removal at Ambient Temperature	Quantifying the potential of high-performance RO membranes for seawater and hypersaline brine desalination: from module-scale modelling to experimental evaluation	DiTMoS: Delving into Diverse Tirry-Model Selection on Microcontrollers	The plastisphere: A hazard or solution?	Data-Efficient Modelling of Integrated Chemical Plants with Recycles using a Graph Convolutional LSTM Approach	When polymers meet 2D materials: Innovations in nanochannel membrane design
Wenying LI	Yu Jie LIM	Xiao MA	Sakcham BAIROLIYA	Wanlu WU	Hao ZHANG
Shanghai University CN, Nanyang Technological University SG	Nanyang Technological University, SG	Singapore Management University, SG	Nanyang Technological University, SG	National University of Singapore, SG	The University of Queensland, AU
Oral A19	Oral B19	Oral C15	Oral D19	Oral E19	Oral F19
(16:30 to 16:45)	(16:30 to 16:45)	(16:30 to 16:45)	(16:30 to 16:45)	(16:30 to 16:45)	(16:30 to 16:45)
Innovative MOF-Based Membrane Technologies for Metal Recovery from E-Waste	Effects of 3D Printed Support Pore Size, Porosity and Geometry on Performance Efficiency of Vacuum Membrane Distillation	Efficient Continuous-Time Neural Networks Sustainable Edge Al	A Synergistic Strategy of NH3 Stripping and HNAD Pathway for Enhanced Nitrogen Removal and Resource Recovery from Anaerobically Treated Leachate	Mechanism-Informed Machine Learning for Predicting Water Treatment Performance: Application to Membrane Fouling	Cellular toxicities of disinfection byproducts of 6PPD – a comparison between UV-NH12Cl disinfection and conventional disinfection methods
Bo HAN	Bao Lam NGUYEN	Yimin DAI	Facal AN	Matteo TAGLIAVINI	Cabia Li
Nanyang Technological University, SG	Nanyang Technological University, SG	Nanyang Technological University, SG	Beijing Forest University, CN	Nanyang Technological University, SG	Nanyang Technological University, SG
Oral A20	Oral B20	Oral C16	Oral D20	Oral E20	Oral F20
(16:45 to 17:00)	(16:45 to 17:00)	(16:45 to 17:00)	(16:45 to 17:00)	(16:45 to 17:00)	(16:45 to 17:00)
Al-Enhanced Sorting and Tailored Processing for High-Yield Recovery of Critical Metals from Complex E-Waste	Centrifugal Reverse Osmosis (CRO) for energy-efficient desalination: Modelling and Validation	LR-Auth: Towards Practical Implementation of Implicit User Authentication on Earbuds	Artificial electron snorkels for reducing methane emission decrease microbial community complexity but increase its stability in lake sediment	Event-Triggered Data-Driven Control of Multi-Agent Systems under Sequential Scaling Attacks	Robust and Ordered Ultra-Thin MXene Composite Film for Electromagnetic Shielding and Thermal Camouflage
Dong XIA	Vinh Hien TRUONG	Changshuo HU	Nan SHEN	Habrin MA	Changan LU
Nanyang Technological University, SG	Nanyang Technological University, SG	Singapore Management University, SG	Nanjing Normal University, CN	Beijing University of Chemical Technology, CN	South China University of Technology, CN

TRANSFER TO CONFERENCE DINNER (17:00 to 18:00)