



Conference Programme (As on 05/12/2024)

Day 1: 05 Dec 2024 (Venue: Dongguan University of Technology)

08:30-09:00	Registration	
09:00-09:20	Opening Ceremony (Room: Academic Conference Hall) MC: Assoc. Prof. Gan Sin Yee (颜杏倚)	
09:00-09:05	Opening Address: Academician Prof. Jonathan Woon Chung Wong (黄焕忠), Conference Chairman	
09:05-09:15	Welcome Address: Prof. Hongwei Ma (马宏伟), President, Dongguan University of Technology	
09:15-09:20	Welcome Address: Prof. Jishuang Chen (陈集双), Nanjing Tech University	
09:20-09:50	Photo Session and Coffee Break	
09:50-11:50	Keynote Session: Chair: Prof. Hélène Carrere Co-Chair: Prof. Guoyin Kai	
09:50-10:20	Opening Keynote Speech: A3546/ Prof. Qirong Shen (沈其荣)/ China/ An Innovation of Combined Prebiotics and Probiotics to Manipulate Soil Microbiome	
10:20-10:50	Keynote Speech 1: A3539/ Prof. Andrew Stephen Ball/ Australia/ Advances in Linking Microbial Ecology and Performance in Anaerobic Digesters	
10:50-11:20	Keynote Speech 2: A3543/ Prof. Duu-Jong Lee/ Taiwan China/ Machine-learning Technologies for Biochar Applications	
11:20-11:50	Keynote Speech 3: A3574/ Prof. Jonathan Woon Chung Wong/ Hong Kong China/ Innovative Biovalorization Technologies for Waste Biomass	
11:50-14:00	Lunch (Qiankunrun Songhu Hotel, No. 6, Libin Road, Songshan Lake District) & Poster viewing (13:15 to 14:00)	
	Session A–Room: Lecture Hall	Session B–Room: Multi-Function Hall
14:00-16:25	A1: Biorefinery and Bioprocess (English/英语)	B1: 中国生物工程学会专场/ Bioprocesses and Products Development (Chinese/中文)
	Chair: Prof. Su Shiung Lam	Chair: Prof. Binghua Yan (颜丙花)
	Co-Chair: Prof. Weifeng Liu	Co-Chair: Assoc. Prof. Jun Zhao (赵峻)

14:00-14:25	P1	Plenary Lecture: A3552/ Prof. Korneel Rabaey/ Belgium/ Electrochemical in Situ Extraction Enables High Purity Product Recovery from Bioproduction	P3	Plenary Lecture: A3547/ Prof. Lin Ma/ China/ Exploring Sustainable and Low-Carbon Food Systems in China: Challenges and Perspectives
14:25-14:45	I1	Invited Lecture: A3563/ Prof. Guanyi Chen /China /Integration of biomass digestion and pyro-gasification: progress and challenges	I9	Invited Lecture: A3550/ Prof. Guoyin Kai (开国银)/ China/ Molecular Regulation of Active Compound Biosynthesis in Medicinal Plant by Metabolic Engineering
14:45-15:05	I2	Invited Lecture: A3536/ Dr. Khang Wei Tan/ Malaysia/ One-Pot Extraction of Nanocellulose from Raw Durian Husk Fiber Using Carboxylic Acid-Based Deep Eutectic Solvent with In Situ Ultrasound Assistance	I10	Invited Lecture: A3545/ Prof. Jianwei Mao (毛建卫)/ China/ New Space for Functional Utilization of Biomass Resources and Plant Jiaosu Biological Fermentation Technology
15:05-15:25	I3	Invited Lecture: A3569/ Prof. Kumarasamy Murugesan/ India/ Treatment of Coir Pith Waste Water and Recovery of Resource through Biogenic Ferric Flocculant and Environmental Applications of Recovered Product	I11	Invited Lecture: A3561/ Prof. Ding Li (李丁)/ China/ Manganese Biomineralization by <i>Providencia mangoxydans</i> and <i>Pseudomonas aeruginosa</i> Bacteria and Environmental Implications
15:25-15:40	O1	A3529/ Dr. Gustavo Amaro Bittencourt/ Brazil/ Microbial Lipid Production by <i>Rhodospiridium toruloides</i> Using Citric Acid Pretreated Soybean Hull Hydrolysates at Bench Scale	O16	A3524/ Prof. Chong Li (李冲)/ China/ Customization of Functional Biochar for Cd Stabilization of Acid Soil Based on Meta-Analysis
15:40-15:55	O2	A3567/ Dr. Neelu Raina/ India/ Impact of Binary DES and Sequential Pretreatment Techniques on the Structural Integrity and Fermentable Sugar Release from Lignocellulosic Biomass	O17	A3509/ Prof. Qingang Xiong (熊勤钢)/ China/ Mechanism Of Natural Rubber-Lignin Interface Based On Molecular Dynamics Simulation
15:55-16:10	O3	A3556/ Assist. Prof. Muthu Kumar Sampath/ India/ Process Development for the Production of Biobutanol from Agricultural Residues: Towards Sustainable Development	O18	A3503/ Dr. Guangyu Cui (崔广宇)/ China/ Valorization of Soybean Processing Wastewater Sludge <i>via</i> Black Soldier Fly Larvae and Bacterial Driving Mechanism
16:10-16:25	O4	A3564/ Assoc. Prof. Bridgid Chin Lai Fui/ Malaysia/ Investigation of Catalytic Co-Pyrolysis of Water Hyacinth and Tetra Pak Packaging Waste Mixtures using Thermogravimetric Analysis	O19	A3522/ Assoc. Prof. Yucong Geng (耿宇聪)/ China/ Optimization of Manure-Based Substrate Preparation to Reduce Nutrients Losses and Improve Quality for Growth of <i>Agaricus bisporus</i>
16:25-16:40	Coffee Break			
	Session A–Room: Lecture Hall		Session B–Room: Multi-Function Hall	
16:40-18:20	A2: Biorefinery and Bioprocess (English/英语)		B2: Biological Waste Treatment (AD & composting) (Chinese/中文)	

		Chair: Prof. Rajeshwar Dayal Tyagi	Chair: Prof. Yufeng Sun (孙宇峰)	
		Co-Chair: Assoc. Prof. Sunita Varjani	Co-Chair: Prof. Ding Li (李丁)	
16:40-17:00	I4	Invited Lecture: A3554/ Prof. Weifeng Liu (刘伟峰)/ China/ Applications of Industrial Lignin in Polymer Materials	I12	Invited Lecture: A3575/ Prof. Yeqing Li (李叶青)/ China/ Anaerobic Digestion of Biomass And The High-value Utilization of Biogas
17:00-17:20	I5	Invited Lecture: A3555/ Prof. Wei-Hsin Chen/ Taiwan China/ Province of China/ Spent Coffee Ground Valorization from Torrefaction for Circular Bioeconomy and Sustainability	I13	Invited Lecture: A3542/ Prof. Binghua Yan (颜丙花)/ China/ Microbial Communities and Metabolic Pathways in Anaerobic Fermentation of Vegetable Waste for Enhanced Propionic Acid Production
17:20-17:35	O5	A3560/ Dr. Mohammed Abiola Akanbi/ Nigeria/ Effect of Earthworms on Physicochemical Parameters and Microbial Community Succession during Vermicomposting of Fresh Kitchen Waste and Sewage Sludge	O20	A3568/ Dr. Bo Zhou (周博)/ China/ A Novel Approach for Purifying Food Waste Anaerobic Digestate through Bio-Conditioning Dewatering Followed by Activated Sludge Process
17:35-17:50	O6	A3541/ Miss. Clara Matte Borges Machado/ Brazil/ Second-Generation Polyhydroxybutyrate (PHB) Production from Pre-treated Corn Lignocellulosic Fraction in a Biorefinery Concept	O21	A3573/ Dr. Chao Yang (杨超)/ China/ Response of Exogenous and Indigenous Microorganisms in Alleviating Acetate-ammonium Co-Inhibition during Thermophilic Anaerobic Digestion
17:50-18:05	O7	A3572/ Dr. Jie Bu / China/ Upcycling Bone Meal for Bioenergy and Nutrient Recovery towards Sustainable Vegetable Production	O22	A3577/ Prof. Wangwang Yan (严汪汪)/ China/ Trichoderma's Dual Impact on Anaerobic Digestion of Waste Activated Sludge: Enhancer or Inhibitor
18:05-18:20	O8	A3557/ Miss. Shristy Sonal/ India/ Valorization of Lanatan Camara for Efficient Sugar Production	O23	A3558/ Dr. Qianzhu Zhao (赵倩竹)/ China/ Enhancing Anaerobic Digestion of Food Waste with CVD Biochar: Effective Enrichment of Methanosarcina and Hydrogenotrophic Methanogens
18:20-19:00	Poster Viewing			
19:00-21:30	Banquet Dinner: Qiankunrun Songhu Hotel, No. 6, Libin Road, Songshan Lake District			
Day 2: 06 Dec 2024 (Venue: Dongguan University of Technology)				
8:00-9:00	Poster Viewing			
	Session A–Room: Lecture Hall		Session B–Room: Multi-Function Hall	

9:00-10:50	A3: Sustainable Resource Management and Environmental Remediation (English/英语)		B3: Biological Waste Treatment (Chinese/中文)	
	Chair: Prof. Guanyi Chen		Chair: Prof. Jishuang Chen (陈集双)	
	Co-Chair: Dr. Khang Wei Tan		Co-Chair: Prof. Wangwang Yan (严汪汪)	
9:00-9:25	P2	Plenary Lecture: A3553/ Prof. Su Shiung Lam/ Malaysia/ Transforming Waste to Wealth: Microalgae for High-Value Products and Eco-Friendly Wastewater Management	P4	Plenary Lecture: A3535/ Prof. Yufeng Sun (孙宇峰)/ China/ Comprehensive Application and Development Prospects of Industrial Hemp Biomass Resources
9:25-9:45	I6	Invited Lecture: A3562/ Prof. Hongbo Liu /China / Low carbon management and resource utilization of solid waste from multi perspectives	I14	Invited Lecture: A503/ Prof. Xuan Wang (王选)/ China/ Diminishing Heavy Metal Co-Resistance Aids in Antibiotic Resistome Elimination from Manure
9:45-10:05	I7	Invited Lecture: A3548/ Assoc. Prof. Sunita Varjani/ India/ Waste-to-Wealth Nexus: Approaches for Sustainable Resource Recovery from Agricultural and Municipal Solid Waste	I15	Invited Lecture: A3540/ Prof. Shan He (何山)/ China/ Upsized Vortex Fluidic Device Enhancement of Mechanical Properties and Microstructure of Biomass Based Biodegradable Films
10:05-10:20	O9	A3571/ Assist. Prof. Jitendra Kumar Saini/ India/ Efficient Degradation of Emerging Phenolic Pollutant Bisphenol A by Laccase of <i>Trametes Cubensis</i>	O24	Invited Lecture: A3515/ Assoc. Prof. Mingjie Chen (陈铭杰)/ China/ Modified Lignin for Antimicrobial Applications
10:20-10:35	O10	A3570/ Dr. Dharani Krishnamurthi/ India/ Integrated Approaches for Tannery Sludge Management: Enhancing Dewaterability and Pollutant Removal with Biochar and <i>Acidithiobacillus Ferrooxidans</i>	O25	A3517/ Assoc. Prof. Yuanwang Liu (刘元望)/ China/ Temperature Dominates The Dissemination of ARGs Mediated by MGEs during Composting with Gentamicin Fermentation Residue and Swine Manure
10:35-10:50	O11	A3526/ Miss. Blessy Silvester/ India/ Adsorption Characteristics of Vancomycin from Aqueous Solution Using Cassava Industrial Waste Residue Biochar	O26	A3511/ Dr. Yuchen Zhang (张雨辰)/ China/ Degradation of Biodegradable Plastics in Biological Waste Treatment: Potential Mechanisms and Pathways
10:50-11:05	Coffee Break			
11:05-11:35	Chair: Prof. Andrew Stephen Ball Co-Chair: Prof. Yen Wah Tong			
11:05-11:35	Keynote Speech 4: A3527/ Prof. Hélène Carrere/ France/ Overview of Pretreatments for Anaerobic Digestion : Link between Full Scale and Lab-scale			
11:35-12:00	Poster Award Presentation and Closing English Session			

12:00-14:30	Lunch (Qiankunrun Songhu Hotel, No. 6, Libin Road, Songshan Lake District)			
	Session A–Room: Lecture Hall		Session B–Room: Multi-Function Hall	
14:30-15:50	A4: Biorefinery and Bioprocess (Chinese/中文)		B4: Composting (Chinese/中文)	
	Chair: Prof. Shan He (何山)		Chair: Prof. Guanyu Zheng (郑冠宇)	
	Co-Chair: Assoc. Prof. Yeqing Li (李叶青)		Co-Chair: Prof. Dengmiao Cheng (成登苗)	
14:30-14:50	I8	Invited Lecture: A3528/ Prof. Jun Zhou (周俊)/ China/ Novel Process for Production of Calcium Carbonate Nanoparticles by Immobilizing CO ₂ from Coal-to-Hydrogen Exhaust Gas with Calcium-Based Solid Wastes	I16	Invited Lecture: A3576/ Assoc. Prof. Xiaolei Zhang (张小磊)/ China/ Direct Carbon Recovery from Raw Wastewater for Bioenergy Production by Anaerobic Digestion
14:50-15:05	O12	A3538/ Assoc. Prof. Jialin Liang (梁嘉林)/ China/ Triclocarban Transformation in Sludge Conditioning Process	O27	A3501/ Dr. Ning Wang (王宁)/ China/ Using Activated Carbon to Promote Humification during Digestate Composting and Predicting The Maturity of Compost with Machine Learning Models
15:05-15:20	O13	A3518/ Assoc. Prof. Nianjie Feng (冯年捷)/ China/ The Effect of Packing Density and Hydrophobic Interaction of Lignin Particles on Enzymatic Hydrolysis	O28	A3504/ Dr. Lu Zhang (张陆)/ China/ Microbial Electrochemical Composting: A Sustainable Strategy to Enhance Lignocellulose Conversion into Humus
15:20-15:35	O14	A3516/ Dr. Qinghao Zhao (赵擎豪)/ China/ Machine Learning-Supported Deep Eutectic Solvents Multiscale Screening to Maximize Bagasse Pretreatment toward Controllable Producing Cellulose Microfiber, Lignin Nanoparticles, and Furfural	O29	A3507/ Prof. Jiachao Zhang (张嘉超)/ China/ Greenhouse Gas Emission and Pollutant Reduction during Manure Composting with Different Conditioning Strategies
15:35-15:50	O15	A3514/ Dr. Jing Mai (麦景)/ China/ Metabolic Division of Labor Between Acetivibrio Thermocellus DSM 1313 and Thermosaccharolyticum MJ1 Enhanced Hydrogen Production from Lignocellulose	O30	A3508/ Dr. Yubo Cao (曹玉博)/ China/ Ammonium Enrichment in Livestock Manure Driven by Ammonia-abatement Practices Can Reduce Nitrous Oxide Emissions
15:50-16:10	Coffee Break			
	Session A–Room: Lecture Hall		Session B–Room: Multi-Function Hall	
16:10-17:10	A5: Postgraduates Forum/ Biological Waste Treatment (Chinese/中文)		B5: Postgraduates Forum/ Composting (Chinese/中文)	
	Chair: Prof. Jun Zhou (周俊)		Chair: Prof. Xuan Wang (王选)	

	Co-Chair: Prof. Jiachao Zhang (张嘉超)		Co-Chair: Prof. Chong Li (李冲)	
16:10-16:20	SO1	A3531/ Miss. Jiani Wang (王佳妮)/ China/ The Enrichment of Antibiotic Resistance Genes in Swine Manure Compost Was Related to the Bulking Agent Types	SO7	A3566/ Miss. Ruolan Tang (唐若兰)/ China/ Iron-modified Biochar to Mitigate Nitrogen Loss during Pig Manure Composting: Performance and Mechanisms
16:20-16:30	SO2	A3532/ Miss. Lanxia Zhang (张兰霞)/ China/ Unravelling Biotic and Abiotic Mechanisms of Mature Compost to Alleviate Gaseous Emissions in Kitchen Waste Composting by Metagenomic Analysis	SO8	A3513/ Miss. Yan Yang (杨燕)/ China/ Risk Level and Removal Performance of Antibiotic Resistance Genes and Bacterial Pathogens in Static Composting with Different Temperature
16:30-16:40	SO3	A3551/ Miss. Xinyuan Zhang (张新媛)/ China/ Stratified Aeration Supplied an Effective Way for Ammonia and Greenhouse Gas Mitigation in Composting	SO9	A3533/ Miss. An Geer (安格尔)/ China/ Polymeric Membranes to Retain Gas Emission during Organic Waste Composting: Performance and Moisture Impacts
16:40-16:50	SO4	A3537/ Mr. Chengjian Li (李城坚)/ China/ In-Situ Generation of Iron Activated Percarbonate for Sustainable Sludge Dewatering	SO10	A3534/ Miss. Ruohan Xia (夏若涵)/ China/ Deciphering the Horizontal Transfer Mechanisms of Antibiotic Resistance Genes During Kitchen Waste Composting Inoculated with Mature Compost using Metagenomics
16:50-17:00	SO5	A3510/ Miss. Wanning Li (李万宁)/ China/ Cornstalks Regulate Bacterial Succession and Functions for Organic Matter Degradation in the Composting of Food Waste Digestate	SO11	A3512/ Miss. Yilin Kong (孔艺霖)/ China/ Deciphering The Phytotoxicity of Different Organic Waste in Composting by Linking Microbial Community Structure with Molecular Composition of Dissolved Organic Matter
17:00-17:10	SO6	Mr. Ruipeng Li (李瑞鹏)/ China/ Iron Spin-State Regulation For Selective Persulfate Activation into Singlet Oxygen	SO12	Miss. Linjuan Li (李林娟)/ China/ Hydrolase preparation for producing volatile fatty acids via anaerobic co-fermentation of food waste and waste sludge: Performance and mechanisms
17:10-17:30	Closing Session and Departure			