Main Conference Programme



International Conference on Solid Waste 2023:

Waste Management in Circular Economy and Climate Resilience (ICSWHK2023)

31 May – 03 June 2023 (Hong Kong Time GMT+8) Hong Kong Convention and Exhibition Centre









Conference Program (As on 30/05/2023)

	30 May 2023 (Venue: The Harbourview Hotel)
	Pre-Conference Workshops
0900-1230	Workshop 1: Enhanced landfill mining: Technologies, products, and costs
1400-1730	Workshop 2: Biochar for sustainable management of urban biomass waste

	Day 1: 31 May 2023 (Venue: The Hong Kong Convention and Exhibition Center (HKCEC))
0800- 0900	Registration
0900-1000	Opening Ceremony (Room: S421) https://hkbu.zoom.us/j/98210716429 Meeting ID 982 1071 6429 Code 751763
0900-0905	Opening Address: Chair - Prof. Jonathan Wong, Hong Kong Baptist University, Hong Kong SAR
0905-0910	Welcome Speech: Prof. Alex Wei, President, Hong Kong Baptist University, Hong Kong SAR
0910-0930	Opening Keynote Speech: Mr. Kenneth Cheng, Assistant Director, Hong Kong Environmental Protection Department, Hong Kong SAR "Waste management status of Hong Kong"
0930-1000	Opening Keynote Speech: A753/ Prof. Shen Qirong, Academician, Nanjing Agricultural University, P.R. China "Manufacture of organic-based fertilizers to ensure development of sustainable agriculture"
1000-1015	Photo session
1015-1045	Coffee Break
1045-1215	Keynote Session: Chair – Prof. Chettiyappan Visvanathan; Room: S421 https://hkbu.zoom.us/j/98210716429 Meeting ID 982 1071 6429

				Code 751	763				
1045-1115	I	Keynote Speech 1: A750/ Prof. Micha	ael Nel	lles/ Germany/ The role of bioger technical, ecological & o			ny &	energy system – Strategic,	
1115-1145		Keynote Speech 2	: A754			ole treatment and utilization of M	ISWI	fly ash	
1145-1215	Keynote Speech 3: A248/ Prof. Ashok Pandey/ India/ Microplastics and nanoplastics pollution and their sustainable management/ Online								
1215-1400		Lunch (1215-1300) and Poster Viewing (1300-1400) (Room: S426)							
1400-1500	Keynote Session: Chair – Prof. Michael Nelles; Room: S421 https://hkbu.zoom.us/j/98106349164 Meeting ID 981 0634 9164 Code 224706 Keynote Speech 4: A749/ Prof. Klaus Fricke/ Germany/ Enhanced landfill mining – Technologies, products, and costs								
1400-1430									
1430-1500			L/ Proi		ion oi	wastes to bioplastics: Challenges	ana		
		Session A – Room: S421		Session B – Room: S423		Session C – Room: S425		Session D: Room: S428	
1505-1600	A1: Anaerobic Digestion https://hkbu.zoom.us/j/98106349164 Meeting ID 981 0634 9164 Code 224706		B1: Composting https://hkbu.zoom.us/j/9907993029 Meeting ID 990 7993 0292 Code 202306		C1: Sustainable Waste Management https://hkbu.zoom.us/j/9590421066 Meeting ID 959 0421 0667 Code 153416		D1: Thermal Treatment (Pyrolysis, Gasification & Incineration) https://hkbu.zoom.us/j/916623955 Meeting ID 916 6239 5509 Code 347888		
		Chair: Prof. Michael Nelles	Chair: Dr. Venkata Mohan		Chair: Prof. Katia Lasaridi			Chair: Prof. Roger Ruan	
		Co-Chair: Dr. Suyun Xu	Co-Chair: Dr. Ravindran Balasubramani		Co-Chair: Dr. Soh Kheang Loh		Co-Chair: Prof. Murugesan Kumarasamy		
1505-1530	P1	Plenary Lecture: A957/ Prof. Hélène Carrere/ France/ Pretreatments of organic substrates and their indigenous bacteria for dark fermentation	P2	Plenary Lecture: A946/ Prof. Ji Li/ China/ Composting microbes: Past, present and future	Р3	Plenary Lecture: A947/ Prof. Chettiyappan Visvanathan/ Thailand/ Moving plastic waste management from liner to circular economy: Role of dumpsite plastic mining	P4	Plenary Lecture: A250/ Prof. Duu-Jong Lee/ Hong Kong/ Gasification of municipal solid waste as a disposal route for circular economy	
1530-1545	O1	A365/ Prof. Pratap Pullammanappallil/ USA/ Factors that limit decomposition of organic fraction of non-recyclable municipal solid waste in a high- solids, leach-bed anaerobic digestion process	O2	A301/ Dr. Wang Xuan/ China/ Synergistic abatement of NH ₃ and N ₂ O emission from composting process	О3	A229/ Dr. Sridhar Pilli/ India/ Energy economics of the municipal solid waste process	O4	A776/ Prof. Hua Li/ China/ Co-pyrolysis of food waste and agricultural waste: Mechanism and process optimization study	
1545-1600	O5	A056/ Prof. Liu Jing/ Sweden/ Biodegradability evaluation of plastics in organic solid waste using a novel volumetric	O6	A369/ Mr. Arsenio Jr Bulfa/ Philippines/ Ecological effects of organic fertilizers produced from agrowastes with different	О7	A175/ Ms. May Soe Oo/ Hong Kong/ Evaluating WEEE generation, disposal decision and consumer preferences in	O8	A571/ Prof. Xuebin Wang/ China/ Study on pyrolysis of ultra-high grade oil shale and characteristics of three-phase	

		respirometer		carbon-nitrogen (C/N) ratios on corn growth, soil chemical properties and earthworm behavior		support of reverse logistics for a circular economy in Hong Kong		products
A2: Anaerobic Digestion https://hkbu.zoom.us/j/98106349164 Meeting ID 981 0634 9164 Code 224706		B2: Composting https://hkbu.zoom.us/j/9907993029 Meeting ID 990 7993 0292 Code 202306		C2: Sustainable Waste Management https://hkbu.zoom.us/j/9590421066 Meeting ID 959 0421 0667 Code 153416		D2: Thermal Treatment (Pyrolysis, Gasification & Incineration) https://hkbu.zoom.us/j/916623955 09 Meeting ID 916 6239 5509 Code 347888		
		Chair: Prof. Hélène Carrere		Chair: Prof. Ji Li		Chair: Prof. R. D. Tyagi	Chair: Prof. Jianhua Yan	
1620-1645	P5	Co-Chair: Prof. Liu Jing Plenary Lecture: A948/ Dr. Venkata Mohan/ India/ Metabolic insights of carboxydotrophics in syngas fermentation for low-carbon chemicals/fuels Invited Lecture:	P6	Plenary Lecture: A74/ Prof. Zengqiang Zhang/ China/ Nitrogen transformation during pig manure composting with diatomite addition Invited Lecture:	P7	Plenary Lecture: A356/ Prof. Katia Lasaridi/ Greece/ Assessing the baseline of food waste generation in Greek households Invited Lecture:	P8	Co-Chair: Prof. Hua Li Plenary Lecture: A11/ Prof. Roger Ruan/ USA/ Catalytic microwave- assisted pyrolysis of organic solid waste for fuels, chemicals, and materials production Invited Lecture:
1645-1705	I1	A61/ Dr. Suyun Xu/ China/ CO ₂ enrichment regulates acid production and methane yield from anaerobic digestion of food waste	I2	A62/ Dr. Ravindran Balasubramani/ South Korea/ Dynamics of nutrients and gaseous emissions during co- composting of food waste and poultry manure with different amendments	13	A938/ Dr. Soh Kheang Loh/ Oil palm biomass - Waste to wealth circular approach	I4	A92/ Prof. Murugesan Kumarasamy/ India/ Conversion of waste face mask into carbonized functional materials for environmental applications
1705-1720	O9	A051/ Dr. Jibao Liu/ China/ Deciphering molecular transformation behavior and potential molecular markers in advanced anaerobic digestion of sludge by FT-ICR MS nontarget metabolomic analysis	O10	A207/ Prof. Vinod Kumar Garg/ India/ Nutrient recovery and treatment of organic waste by vermitechnology	O11	A256/ Prof. Lan Xiang/ China/ Separation of low- grade phosphate ores by novel semi-through hydraulic barrier hydrocyclone	O12	A198/ Dr. Lei Wang/ China/ Synthesis gas production from co-pyrolysis of straw biomass and polyethylene agricultural film
1720-1735	O13	A077/ Dr. Nirakar Pradhan/ Hong Kong/ Effect of micro-nano zero- valent iron on the metabolic profiles of fermentative bacteria	O14	A060/ Dr. Guoying Wang/ China/ Responds of physiological inheritance mechanism on seed germination under phytotoxicity during chicken	O15	A144/ Prof. Lei Wang/ China/ Designing low-carbon cements for stabilization/solidification of MSWI fly ash	O16	A212/ Dr. Jian Zhang/ China/ Ash fusion characteristics of sewage sludge and its inhibitors to avoid slagging during incineration

				manure composting				
1735-1750	O17	A007/ Dr. Liwen Luo/ Hong Kong/ Regulation of acidogenic fermentation through exogenous additives for promoting carbon conversion of food waste in two- phase anaerobic system	O18	A163/ Ms. Ruonan Ma/ China/ Deciphering the dynamics of antibiotic resistance genes and the driving mechanisms during pig manure, kitchen waste, sewage sludge composting	O19	A009/ Dr. Muthu Kumar Sampath/ India/ Process optimization for the pretreatment of <i>Lantana</i> <i>Camara</i> using combined acid and deep eutectic solvent for sugar production	O20	A567/ Dr. Yili Zhang/ China/ Emission and distribution of dioxin in a coal-fired power plant coupled with garbage and biomass
1750-1800	SO1	A072/ Mr. Chuenchart Wachiranon/ USA/ Effect of microaeration on anaerobic co- digestion of food waste and sewage sludge	SO2	A043/ Ms. Xu Zhao/ China/ Effects of reflux of mature compost during perishable waste composting	SO3	A156/ Ms. Komal Saini/ India/ Effective utilisations of discarded reverse osmosis post- carbon for dye adsorption	SO4	A041/ Mr. Jianzun Lu/ China/ Fabrication of hydrophobic composite material using residues derived from incineration of textile waste
1800-1810	SO5	A242/ Ms. Hemapriya S/ India/ Precise pH control of food waste biomethanation using granulated activated carbon	SO6	A098/ Ms. Haorong Zhang/ China/ Control of nitrogen and odor emission during chicken manure composting with a carbon-based microbial agent inoculation and biotrickling filter	SO7	A374/ Mr. Salvo Salvacion/ Philippines/ Utilization of corn wastes as biochar in amending acidic soil grown with corn	SO8	A568/ Ms. Shin Ying Foong/ Malaysia/ Production of a novel catalyst from oil palm waste and chitosan for application in catalytic microwave pyrolysis of algae

	Day 2: 01 June 2023 (Venue: The Hong Kong Convention and Exhibition Center (HKCEC))								
0800-0900		Poster Viewing (Room: S426)						
0900-1000		Keynote Session: Chair – Prof. Qunxing Huang https://hkbu.zoom.us/j/94005807031 Meeting ID 940 0580 7031							
0900-0930	Keynote Speech 5: A747/ Prof Hailong	Code 489533 Keynote Speech 5: A747/ Prof Hailong Wang/ China/ Pristine and modified biochar derived from urban green waste for remediation of contaminated environments							
0930-1000	Keynote Speech 7: A39/ Prof. Pinjing He/ China/ Influences of waste segregation policy on the climate change impact of waste management systems/ Online								
1000-1020		Coffee B	Break						
1020-1205	A3: Anaerobic Fermentation https://hkbu.zoom.us/j/96288343145 Meeting ID 962 8834 3145 Code 889268	B3: Composting https://hkbu.zoom.us/j/9942102719 Meeting ID 994 2102 7194 Code 202306	C3: Waste Management Practices: Countries Perspective https://hkbu.zoom.us/j/9423407453 Meeting ID 942 3407 4534 Code 153416	D3: Thermal Treatment (Pyrolysis, Gasification & Incineration) https://hkbu.zoom.us/j/950973671 Meeting ID 950 9736 7195 Code 347888					

	Chair: Prof. Agamuthu Pariathamby Co-Chair: Prof. Jun Zhou		Chair: Prof. Guanyu Zheng Co-Chair: Prof. Qiyong Xu		Chair: Prof. Su Shiung Lam Co-Chair: Prof. Anthony Lau		Chair: Prof. Dong-Jin Kim Co-Chair: Prof. Gina Villegas- Pangga	
1020-1045	P9	Plenary Lecture: A939/ Prof. Lixiang Zhou/ China/ A novel approach for purifying anaerobic food waste digestate through bio- conditioning and dewatering followed by activated sludge process: A case study	P10	Plenary Lecture: A940/ Prof. Lin Ma/ China/ Challenges and strategies for improving manure management system in China	P11	Plenary Lecture: A756/ Prof. Weixiang Wu/ China/ Technological barriers of MSW classification, reduction and resource utilization in China	P12	Plenary Lecture: A313/ Prof. Qunxing Huang/ China/ Novel step pyrolysis technology for recovery valuable products from waste tires
1045-1105	15	Invited Lecture: A950/ Dr. Parthiba Karthikeyan Obulisamy/ USA/ Pretreatment of food waste for high-rate hydrogen production/ Online	I6	Invited Lecture: A941/ Dr. Ammaiyappan Selvam/ India/ Decentralized municipal solid waste composting in Tamil Nadu, India – A case study	17	Invited Lecture: A758/ Prof. Konstadinos Abeliotis/ Greece/ Food waste generation in the grocery retail sector	18	Invited Lecture: A33/ Dr. Suchithra T. Gopakumar/ Malaysia/ Catalytic co-pyrolysis of sweet sorghum stalk and polypropylene: Simultaneous waste reduction and biofuel production
1105-1120	O21	A107/ Mr. Subbarao Shamsundar/ India/ Design and implementation of a pilot carbon capture technology to obtain compressed biogas (green fuel) & compressed CO ₂ from biogas plant at NIE-CREST, Mysuru, India	O22	A117/ Ms. Dongyi Li/ Hong Kong/ The role of different types of biochar in food waste digestate composting	O23	A202/ Dr. Steuer Benjamin/ Hong Kong/ Evaluating circular economy applications for plastic waste management in Hong Kong	O24	A176/ Dr. Yaqi Peng/ China/ Utilization of mechanochemically pretreated municipal solid waste incineration fly ash for supplementary cementitious material
1120-1135	O25	A151/ Mr. Xunan Li/ China/ Effect of biogas residue biochar on anaerobic digestion of food waste with different organic loading	O26	A341/ Ms. Yue Wang/ China/ Different composting technologies and raw materials induced microbial dynamics and core microbiomes	O27	A012/ Dr. Dhundhi Raj Pathak/ Nepal/ The Impact of COVID-19 on quantification and characterization of solid waste in the Bagmati river corridor of Kathmandu Valley, Nepal/ Online	O28	A338/ Dr. Anurita Selvarajoo/ Malaysia/ Improving biochar properties by pyrolysis of palm biomass for use as cement based materials

		A068/ Dr. Rajnikant		A055/ Ms. Lingxiao Wang/		A015/ Prof. Bashir J K		A368/ Mr. Wei-Jhu Wang/	
1135-1145	SO9	Rajagopal/ Canada/ Co- digestion of swine-manure and carcass at low temperature: A long term operation and stability monitoring/ Online	SO10	China/ Mature compost promotes biodegradable plastic degradation and reduces greenhouse gas emissions during kitchen waste composting	SO11	Mohammad/ Malaysia/ Sustainable bioenergy, economic, and environmental impacts of resource recovery from organic fraction municipal solid waste in Penang, Malaysia/ Online	SO12	Taiwan/ A study on the effects of waste glass sand on the properties of bricks contained with incinerator bottom ash	
1145-1155	SO13	A255/ Mr. Haixiao Guo/ China/ Enhanced anaerobic digestion of waste activated sludge with periodate-based pretreatment/ Online	SO14	A096/ Mr. Arun Kumar M/ India/ Effect of mature compost as additive during municipal solid waste composting	SO15	A352/ Dr. Yatim Puan/ Malaysia/ Transition towards circular economy: Policy insights from a developing country/ Online	SO16	A014/ Dr. Xin Guo/ China/ Migration and transformation characteristics of molten heavy metals from MSWI fly ash under different additives/ Online	
1155-1205	SO17	A266/ Ms. Yufen Wang/ China/ Enhancement strategies and mechanisms of high-value medium-chain fatty acids production from waste activated sludge through anaerobic fermentation/ Online	SO18	A738/ Mr. Jufei Wang/ China/ Controllability improvement of food waste composting quality: A comparative study of control strategies	SO19	A241/ Ms. Trinh Lina/ Vietnam/ Understanding, consensus, and willingness to implement solid waste management policy of citizens in municipalities of Vietnam/ Online	SO20	A158/ Mr. Yifan Xiang/ China/ The application of laser ionization-time-of- flight mass spectrometry online detecting system for dioxins in a municipal solid waste incineration plant/ Online	
1205-1400				Lunch (1205-1300) & Poster V	iewing	g (1300-1400) (Room: S426)		<u> </u>	
1400-1600	<u>https</u>	naerobic Digestion: Bioenergy & Bioproducts s://hkbu.zoom.us/j/96022047738 Meeting ID 960 2204 7738 Code 389382		B4: Composting https://hkbu.zoom.us/j/96246804067 Meeting ID 962 4680 4067 Code 202306		C4: Waste Utilization & Recycling https://hkbu.zoom.us/j/95441474346 Meeting ID 954 4147 4346 Code 153416		D4: Biochar & its Applications https://hkbu.zoom.us/j/91493109292 Meeting ID 914 9310 9292 Code 347888	
	(Chair: Dr. Venkata Mohan		Chair: Dr. Sunita Varjani		Chair: Prof. Jun Zhou		air: Prof. Qunxing Huang	
		Co-Chair: Dr. Liwen Luo		Co-Chair: Dr. Manu M.K.		Co-Chair: Prof. Murugesan Kumarasamy		Co-Chair: Dr. Jun Zhao	
1400-1425	P13	Plenary Lecture: A249/ Prof. Agamuthu Pariathamby/ Malaysia/ Biomass to green energy: an Asian perspective	P14	Plenary Lecture: A363/ Prof. Guanyu Zheng/ China/ Spatial distribution of fecal pollution indicators in sewage sludge flocs and their removal and inactivation during sludge conditioning processes	P15	A761/ Prof. Su Shiung Lam/ Malaysia/ Microwave processing of waste for circular waste management	P16	Plenary Lecture: A289/ Prof. Dong-Jin Kim/ South Korea/ Phosphate adsorption of Mg and Ca-biochar and its P bioavailability	
1425-1445	I9	Invited Lecture:	I10	Invited Lecture:	I11	Invited Lecture:	I12	Invited Lecture:	

		A952/ Prof. Jun Zhou/ China/ Biogas Production from Agro- waste in Nanjing Tech University: Research and Practice		A770/ Prof. Qiyong Xu/ China/ Evaluation of digestate-derived biochar on humification and in-situ odor reduction during food waste digestate composting		A942/ Prof. Anthony Lau/ Canada/ Combined steam explosion and water leaching pretreatments to upgrade the fuel properties of wheat straw		A958/ Mr. Tom Miles/ USA/ Biochar products, systems and processes in North America
1445-1500	O29	A395/ Dr. Xiaodong Xin/ China/ Sludge source-redox mediators obtainment and availability for enhancing bioelectrogenesis and acidogenesis: Deciphering characteristics and mechanisms	O30	A349/ Dr. Yung-song Chen/ Taiwan/ Study of the three common vermicomposting species on cyclical utilization of swine manure in organic farmland	O31	A280/ Dr. Chun Ho Lam/ Hong Kong/ Electrocatalytic upgrading of furfural, a platform chemical from hemicellulose-rich feedstocks	O32	A700/ Prof. Gina Villegas- Pangga/ Philippines/ Enrichment of biochar for improved soil conditions and crop productivity
1500-1515	O33	A122/ Dr. Xiaolei Zhang/ China/ Direct carbon recovery from raw wastewater for bioenergy production by anaerobic digestion	O34	A084/ Ms. Yuwen Zhou/ China/ Patterns of heavy metal resistant bacterial community succession influenced by biochar amendment during poultry manure composting	O35	A701/ Dr. R. Ramesh/ India/ Three-dimensional activated carbon derived from Luffa fiber biomass for capacitive energy storage application	O36	A713/ Dr. Chunxue Yu/ China/ Nitrogen-doped biochar induced efficient activation of ferrate (VI) for degradation of organic pollutants: Effect of nitrogen species and surface promoted mechanism
1515-1530	O37	A168/ Dr. Jialin Liang/ China/ Iron-rich digestate biochar toward sustainable peroxymonosulfate activation for efficient anaerobic digestate dewaterability	O38	A019/ Ms. Jiaqi Liu/ China/ Effects of fungal pathogen and assistant materials on composting process of infected vegetable wastes	O39	A030/ Dr. Ankur Rajpal/ India/ Potential utilization of sewage sludge for cost effective natural farming in India: Characterization and treatment	O40	A278/ Dr. Remya Neelancherry/ India/ Applicability of commingled food waste biochar as a potential fertilizer
1530-1540	SO21	A054/ Ms. Lijun Luo/ Hong Kong/ Impact of salinity on hydrogen production and acidogenic bacteria for food waste fermentation	SO22	backflow to reduce environmental burden during food waste composting	SO23	A415/ Mr. Zhenwei Yi/ China/ Evaluation of carbon emission and economy of carbon dioxide mineralization for building materials technology	SO24	A120/ Ms. Peixin Wang/ Hong Kong/ Investigation on the synthesis strategy of MgO-biochar catalysts for glucose isomerization to fructose
1540-1550	SO25	A088/ Mr. Neeraj Raja Ram/ India/ Investigation of microbial-substrate interaction using mixed microbial consortia for enhancement of biogas production from food	SO26	A329/ Mr. Barun Kanoo/ India/ Preliminary risk assessment of decentralized composting systems for source separated biodegradable wet waste	SO27	A951/ Ms. Geng Yiqi/ Hong Kong/ Efficient catalytic hydrogen production from FA over Pd nanoparticles loaded on chitosan biochar at room temperature	SO28	A082/ Ms. Qiaozhi Zhang/ Hong Kong/ Synthesizing yard waste-derived biochar for microwave- assisted degradation of PPCPs: performance of

		waste		from households/ Online				various oxidants	
1550-1600	SO29	A257/ Dr. Zhang Le/ China/ Cascading fermentation of oleaginous yeast using organic waste for lipid production/ Online	SO30	emissions during chicken manure composting/ Online	SO31	A215/ Ms. Masse Bamba/ Ivory Coast/ Preparation and characterization of cellulose triacetate from cocoa pod husk (CPH)/ Online	SO32	A057/ Dr. Chaoren Sun/ China/ Straw and straw biochar differently affect microorganisms and soil organic carbon pools in farmland soil under different water regimes/ Online	
1600-1620				Coffee B	reak		D.F.	Dischan Cita Amplications	
		5: Bioenergy & Bioproducts		B5: Biowaste Volarisation :://hkbu.zoom.us/j/96246804067		Waste Utilization & Recycling ://hkbu.zoom.us/j/95441474346		Biochar & its Applications //hkbu.zoom.us/j/914931092	
1620-1750	Meeting ID 960 2204 7738 Code 389382					Meeting ID 954 4147 4346	M	92 Leeting ID 914 9310 9292 Code 347888	
	Chair: Prof. Binghua Yan			Chair: Prof. Lin Ma		Chair: Prof. Konstadinos Abeliotis		Chair: Dr. Suchithra T. Gopakumar	
	C	Co-Chair: Dr. Xiaolei Zhang	Co-Chair: Dr. Ammaiyappan Selvam		Co-Chair: Prof. Weixiang Wu		Co-Chair: Mr. Tom Miles		
1620-1645	P17	Plenary Lecture: A959/ Prof. Solange I Mussatto/ Denmark/ Sustainable strategies to overcome inhibition of biomass hydrolysates and get more value from lignocellulosic biomass/ Online	P18	Plenary Lecture: A169/ Dr. Sunita Varjani/ Hong Kong/ Green processing of cottonseed oil soap-stock for sustainable waste management	P19	Plenary Lecture: A943/ Prof. Lin Luo/ China/ Soil remediation and resource utilization of red mud/ Online	P20	Plenary Lecture: A960/ Prof. Dan Tsang/ Hong Kong/ Green technology with biochar for waste recycling and carbon reduction	
1645-1700	O41	A311/ Dr. Mathava Kumar/ India/ Bio-hydrogen generation from food waste: Effects of microwave pre- treatment and inoculum source	O42	A071/ Dr. Surendra KC/ USA/ Insect-based biorefinery for organic wastes valorization	O43	A723/ Dr. Fanghua Li/ /China/ Sustainable production of jet-fuel range hydrocarbons and carbonaceous materials from biowaste catalytic co- pyrolysis	O44	A962/ Dr. P. Maadeswaran/ India/ Synthesis of ternary CeO ₂ /Fe ₂ O ₃ /R-GO nanocomposite loaded biochar for photocatalytic degradation of organic pollutants	
1700-1715	O45	A336/ Mr. Harishankar Kopperi/ India/ Solid waste biorefinery: Integrated process development via hydrothermal liquefaction and dark fermentation	O46	A037/ Ms. Yujing Wang/ China/ Odor characterization and health risk assessment of food waste bioconversion by housefly (<i>Musca domestica</i> L.) larvae	O47	A350/ Dr. Nallapaneni Manoj Kumar/ Hong Kong/ Blockchain-based artificial intelligence of things nutrient-rich food waste selection framework for food	O48	A650/Dr. Manman Xu/ China/ Melaleuca bark- based biochar for triclosan adsorption and energy storage applications	

						waste-derived medical textiles		
1715-1730	O49	A172/ Mr. To Ming Ho/ Hong Kong/ Elucidate biorefinery inhibition effect on commercially collected food waste and greener pre- treatment for sophorolipids production	O50	A290/ Mr. Krishna Chaitanya Maturi/ India/ Investigation of morphological characteristics of Abelmschus esculentus during terrestrial weed compost amendment in soil/ Online	O51	A265/ Mrs. Meilan Zhang/ China/ Optimization of wet waste pre-treatment process and the removal of inert fine particles/ Online	O52	A173/ Dr. Min Pan/ Hong Kong/ Co-application of sewage sludge-Chinese medicinal herbal residues- biochar to antibiotics and antibiotic resistance genes in soil-plant system
1730-1740	SO33	A206/ Ms. Youli Yang/ China/ High solid anaerobic fermentation of vegetable wastes for propionic acid recovery	SO34	A330/ Dr. Kaari Manigundan/ India/ Integrated genomic and field level evaluation of agricultural waste enriched potential <i>Streptomyces</i> UP1A-1 for plant growth promotion and disease control/ Online	SO35	A186/ Mr. Kartik Popat/ India/ Employing aspen plus for process modeling of syngas production from municipal solid waste/ Online	SO36	A231/ Mr. Hongxian Li/ China/ Molecular simulation combined with DFT calculation to guide the directional design of heteroatom-doped biochar for efficient CO ₂ capture
1740-1750	SO37	A179/ Dr. Bharthiraja B./ India/ Biodiesel production from rice straw using ascomycetous yeast <i>Yarrowia</i> lipolytica/ Online	SO38	A322/ Prof. Sihem Arris/ Algeria/ Bio-waste valorisation as sorbent for removal of methylene blue from aqueous solutions/ Online	SO39	A267/ Mr. Adedeji Jacob Adedayo/ South Africa/ Performance evaluation of interlocking paving bricks incorporating waste plastic as alternative aggregates/ Online	SO40	A064/ Ms. Si Tian/ China/ Study on water retention of biochar prepared from coffee by-products/ Online
1750-1830				Poster Viewing (Room:	S426)		
1900-2200	Banquet Dinner: Choi Fook Royal Banquet (iSquare), Tsim Sha Tsui							

	Day 3: 02 June 2023 (Venue: The Hong Kong Convention and Exhibition Center (HKCEC))
0800-0900	Poster Viewing (Room: S426)
	Keynote Session: Chair – Prof. Tian Zhang
0900-1000	https://hkbu.zoom.us/j/96893433276
0900-1000	Meeting ID 968 9343 3276
	Code 633620
0900-0930	Keynote Speech 8: A752/ Prof. Jonathan Wong/ Hong Kong/ Sustainable biowaste management: Opportunities and challenges in circular economy
0930-1000	Keynote Speech 9: A748/ Prof. Chi Sun Poon/ Hong Kong/ Total recycling of concrete waste using accelerated carbonation
1000-1020	Coffee Break

1020-1220	A6: Bioenergy & Bioproducts https://hkbu.zoom.us/j/99946194811 Meeting ID 999 4619 4811 Code 964565 Chair: Prof. Yanling Cheng Co-Chair: Dr. Jialin Liang		B6: Biowaste Valorisation https://hkbu.zoom.us/j/9749473301 9 Meeting ID 974 9473 3019 Code 202306 Chair: Prof. Sandhya Babel		C6: Waste Utilization & Recycling https://hkbu.zoom.us/j/93481121809 Meeting ID 934 8112 1809 Code 153416 Chair: Prof. Samir Khanal		D6: Catalytic Conversion Technologies https://hkbu.zoom.us/j/997670075 Meeting ID 997 6700 7551 Code 347888 Chair: Prof. Duu-Jong Lee	
			Co-Chair: Prof. Shiyong Sun		Co-Chair: Prof. Kaimin Shih		Co-Chair: Prof. Haowen Guo	
1020-1045	P21	Plenary Lecture: A760/ Prof. Anurag Garg/ India/ Approaches for valorisation of biodegradable organic fraction of domestic solid waste	P22	Plenary Lecture: A307/ Prof. Tian Zhang/ USA/ Green recovery from and sustainable management of solid waste generated in electrolytic manganese production	P23	Plenary Lecture: A038/ Prof. Fan Lu/ China/ Odours and other airborne contaminants of emerging concerns relating to MSW storage and transportation	P24	Plenary Lecture: A963/ Dr. Zhao Jun/ Hong Kong/ Conversion of biomass to 5- hydroxymethylfurfural- derived chemicals using carbon-based catalysts
1045-1105	I13	Invited Lecture: A964/ Prof. Binghua Yan/ China/ Highly selective butyric acid production by coupled acidogenesis and ion substitution electrodialysis	I14	Invited Lecture: A762/ Dr. Carol S.K. Lin/ Hong Kong/ Technological advancement and development of circular waste-based biorefinery for sustainable production of chemicals, materials and fuels	115	Invited Lecture: A767/ Prof. Kouassi Benjamin Yao/ Ivory Coast/ Valorisation of cocoa pod husks in cellulose triacetate and lactic acid	I16	Invited Lecture: A763/Prof. Yaoyu Zhou/ China/ Magnetic ball- milled red mud@peanut seedling straw biochar as hydrogen peroxide activator for degradation of tetracycline/ Online
1105-1125	I17	Invited Lecture: A766/ Prof. Hojae Shim/ Macau/ Biodiesel production from optimal food waste hydrolysis by yeast Rhodosporidium toruloides	I18	Invited Lecture: A083/ Dr. Mukesh Kumar Awasthi/ China/ Microbial biotechnology approaches for conversion of fruit processing waste in to emerging source of healthy food for sustainable environment	I19	Invited Lecture: A298/ Dr. Ka Yu Cheng/ Australia/ Biotechnical processes for extraction and recovery of metals value from electronic wastes	I20	Invited Lecture: A764/ Prof. Patrick Drogui/ Canada/ Degradation of emerging recalcitrant contaminants in wastes and wastewater using electro-technology
1125-1140	O53	A008/ Ms. Anuradha/ India/ Deep eutectic solvents for the pretreatment of lignocellulosic biomass to enhance the sugar recovery	O54	A663/ Prof. Wenjing Lu/ China/ Potential of bio-risks in MSW management system	O55	A296/ Dr. Jian-lin Chen/ Hong Kong/ Monitoring of beach litter in waters of Hong Kong using aerial drone	O56	A116/ Dr. Reeti Kumar/ Hong Kong/ Nitrogen- doped carbon as efficient catalysts for metal-free conversion of 5- hydroxymethylfurfural to 2,5-furandicarboxylic acid

1140-1155	O57	A309/ Mr. Jianyu Guan/ Hong Kong/ Construction of a multi- parameter-based model to simulate lignin fractionation kinetics in biorefinery processes for urban waste valorization	O58	A682/ Prof. Yun Cao/ China/ Lignite effects active nitrogen gas emission during poultry wastes composting: Insights into the microbial mechanism	O59	A259/ Dr. Qi Zhao/ Hong Kong/ Choline chloride- dicarboxylic acid based deep eutectic solvents for the valuable metal recovery of waste printed circuit boards	O60	A110/ Dr. Johnravindar Davidraj/ Hong Kong/ Synthesis of Pd-CNT based hybrid and its application in hydrogen production from formic acid at ambient temperature
1155-1210	O61	A286/ Mr. Leygnima Yaya Ouattara/ Ivory Coast/ Cocoa pod husk valorization: Acid- Alkaline pretreatment for microbial lactic acid production/ Online	O62	A714/ Dr. Wencong Yue/ China/ Carbon emissions in treating food loss and waste in China based on life cycle assessment	O63	A177/ Dr. Dharmar Manimaran/ India/ Effect of 7, 8 dihydroxycoumarin protects environment toxicity of cadmium induced in Zebrafish (Danio rerio) embryos	O64	A194/ Dr. Wang Qiulin/ China/ Insight into PCDD/Fs catalytic decomposition mechanism using two model objects: Experiment and DFT calculation
1210-1220	SO41	A320/ Dr. Venugopal Gopikrishnan/ India/ Exploration of organic waste for its bioactive pigments/ Online	SO42	A310/ Ms. Yahui Miao/ Hong Kong/ Environmental evaluation of emerging bakery waste oil-derived sophorolipids production by applying dynamic life cycle assessment (dLCA)	SO43	A013/ Dr. Yue Zhu/ China/ Generation and utilization of garden waste in Shanghai: Status quo, challenges and countermeasures analysis/ Online	SO44	A184/ Ms. Chenxi Zhu/ China/ Solar-driven reforming of waste polyester plastics for hydrogen evolution over CdS/NiS
1220-1400				Lunch (1220-1300) & Poster V	/iewing	g (1300-1400) (Room: S426)		
1220-1400 1400-1600	https	7: Bioenergy & Bioproducts ://hkbu.zoom.us/j/95059525618 Meeting ID 950 5952 5618 Code 909855	https:	Lunch (1220-1300) & Poster V : Bioplastics & Microplastics ://hkbu.zoom.us/j/93589215534 Meeting ID 935 8921 5534 Code 202306	C7:	Innovative Waste Management Practices //hkbu.zoom.us/j/94192665943 Meeting ID 941 9266 5943 Code 153416	Dem https://	: Landfill, Construction & colition Waste Management /hkbu.zoom.us/j/99383969469 Leeting ID 993 8396 9469 Code 347888
	https	://hkbu.zoom.us/j/95059525618 Meeting ID 950 5952 5618 Code 909855 Chair: Prof. Pratap	https:	: Bioplastics & Microplastics ://hkbu.zoom.us/j/93589215534 Meeting ID 935 8921 5534	C7:	Innovative Waste Management Practices ://hkbu.zoom.us/j/94192665943 Meeting ID 941 9266 5943	Dem https:// M	olition Waste Management /hkbu.zoom.us/j/99383969469 Leeting ID 993 8396 9469
	https	://hkbu.zoom.us/j/95059525618 Meeting ID 950 5952 5618 Code 909855	https:	: Bioplastics & Microplastics ://hkbu.zoom.us/j/93589215534 Meeting ID 935 8921 5534 Code 202306	C7: 1	Innovative Waste Management Practices ://hkbu.zoom.us/j/94192665943 Meeting ID 941 9266 5943 Code 153416	Dem https:// M	olition Waste Management /hkbu.zoom.us/j/99383969469 Iceting ID 993 8396 9469 Code 347888
	https	://hkbu.zoom.us/j/95059525618 Meeting ID 950 5952 5618 Code 909855 Chair: Prof. Pratap Pullammanappallil	https:	: Bioplastics & Microplastics ://hkbu.zoom.us/j/93589215534 Meeting ID 935 8921 5534 Code 202306 Chair: Dr. Carol S.K. Lin -Chair: Dr. Mukesh Kumar	C7: 1	Innovative Waste Management Practices ://hkbu.zoom.us/j/94192665943 Meeting ID 941 9266 5943 Code 153416 Chair: Prof. Fan Lu	Dem https:// M	tolition Waste Management /hkbu.zoom.us/j/99383969469 Leeting ID 993 8396 9469 Code 347888 mair: Prof. Patrick Drogui

		A968/ Prof. Yanling Cheng/ China/ Fermentation of food waste for the production of clean energy and biofertilizer		A359/ Prof. Shiyong Sun/ China/ Enzyme immobilization onto clay surface for waste conversion		A101/ Dr. Deepak Pant/ Belgium/ Technological advances in bio/electrochemical carbon dioxide capture & utilization (CCU)/ Online		A768/ Dr. Hubert Baier/ Germany/ Pre- and co- processing of tailor-made alternative fuel
1445-1500	O65	Dr. Qiuxiang Xu/ China/ Hydrochar prepared from digestate improves anaerobic co-digestion of sewage sludge and food waste	O66	A111/ Dr. Manu M.K./ Hong Kong/ Microplastics pollution in food waste biological treatment	O67	A308/ Prof. Bing Xie/ China/ Toxic metal transformation characteristics of fly ash from different cooling zones after municipal solid waste incinerator	O68	A628/ Dr. Sook Fun Wong/ Singapore/ Binder testing of mixed plastics- polymer modified bitumen for asphaltic wearing course
1500-1515	O69	A157/ Mr. Johnny Lo/ Hong Kong/ Fabrication of food waste-derived biodegradable medical textiles via electrospinning and electrospraying for healthcare apparel and personal protective equipment	O70	A412/ Dr. Yuquan Wei/ China/ Deciphering the mechanism shaping bacterial community in plastisphere and kitchen waste composting with PLA/PBAT blends	O71	A297/ Ms. Adjoavi Colette Djassou/ Ivory Coast/ Enhancing compressive strength of rubberised concrete with sodium hydroxide coupled with microwave devulcanization treatment	O72	A314/ Dr. Kwok-Pan Ho/ Hong Kong/ Laboratory- scale and pilot-scale study on chemical co- precipitation treatment of old-age landfill leachate
1515-1530	O73	A076/ Ms. Xiaoyun Liu/ China/ Separation and purification of glabridin from deep eutectic solvents (DES) extract of <i>Glycyrrhiza glabra</i> residue by macroporous resin	O74	A006/ Mr. Rajat Kumar/ Hong Kong/ Bioprocess robustness of newer polyhydroxyalkanoate producers as sustainable and persistent industrial strains	O75	A036/ Ms. Xinyue Kang/ China/ Evaluation of bioaerosol risk during insect- protein-production of biowaste	O76	A047/ Mr. Udo Eduard Lange/ Germany/ Improvement of upstream SWM supporting the start up operation of four new sanitary landfills in Indonesia
1530-1540	SO45	A332/ Dr. Singanan Malairajan/ India/ The role of novel biocarbon on the treatment of industrial wastewater – A green concept/ Online	SO46	A090/ Mr. Yi Zheng/ China/ Untargeted metabolomics elucidated biosynthesis of polyhydroxyalkanoate by mixed microbial cultures from waste activated sludge under different pH values	SO47	A145/ Dr. Rajamani Sengoda Gounder/ India/ Remediation & reuse of mercury contaminated site by unique two stage process of waterwash and retord/ Online	SO48	A018/ Mr. Yuan Liang/ Hong Kong/ Prediction of illegal dumping by using Geographically weighted regression
1540-1550	SO49	A326/ Ms. Rabia Jalil Khan/ Hong Kong/ One-pot fractionation of endocarp waste for sustainable high value-added products/ Online	SO50	A180/ Mr. Sima Jingyuan/ China/ Identification and removal of microplastic pollutants in soil-like materials from landfills	SO51	A073/ Ms. Siu Ka Yi/ Hong Kong/ Performance of food waste pre-treatment system with the aid of solar-heated water/ Online	SO52	A218/ Mr. Anurag Tomar/ India/ Treatment of Black water by advanced baffled reactor
1550-1600	SO53	A086/ Ms. A. Umapathi/ India/	SO54	A325/ Dr. Sonam Paliya/	SO55	A277/ Ms. Pawena	SO56	A669/ Mr. Wei Sun/

1600-1615		Conversion of Food waste into lipid by oleaginous fungi/ Online		India/ Aerobic degradation of deca-brominated diphenyl ethers (Deca-BDE): Novel indigenous microbes, mineralization, dehalogenation, metabolites and degradation pathway/ Online Coffee B		Limpiteeprakan/ Thailand/ Development of cushioning materials from water hyacinth fibers and bagasse/ Online		China/ Carbon-driven persulfate activation for nonradical antibiotic degradation in aquatic surroundings
1615-1730	https	8: Bioenergy & Bioproducts :://hkbu.zoom.us/j/95059525618 Meeting ID 950 5952 5618 Code 909855	https:	: Bioplastics & Microplastics ://hkbu.zoom.us/j/93589215534 Meeting ID 935 8921 5534 Code 202306	C8:]	Hazardous & Industrial Waste Management ://hkbu.zoom.us/j/94192665943 Meeting ID 941 9266 5943 Code 153416	Dem https:// M	Code 347888
	Chair: Prof. Anurag Garg Co-Chair: Dr. Qiuxiang Xu		Chair: Prof. William Clarke Co-Chair: Mr. Rajat Kumar		Chair: Prof. Kouassi Benjamin Yao Co-Chair: Dr. Sook Fun Wong		Chair: Prof. Rainer Stegmann Co-Chair: Dr. Johnravindar Davidraj	
1615-1640	P29	Plenary Lecture: A364/ Prof. Pratap Pullammanappallil/ USA/ Thermo-mechanical treatment of nonrecyclable municipal solid waste to enhance organics recovery and biochemical processing	P30	Plenary Lecture: A759/ Prof. Sandhya Babel/ Thailand/ Microplastics contamination in compost produced from solid waste	P31	Plenary Lecture: A757/ Prof. Kaimin Shih/ Hong Kong/ Emerging pollutants in wastewater sludge: lessons learned from perfluorochemicals	P32	Plenary Lecture: A969/ Prof. Wilson Lu/ Hong Kong/ Sharing construction waste materials across different jurisdictions: Prospects and challenges for a smarter and greener Greater Bay Area/ Online
1640-1655	O77	A315/ Prof. Arun Alagarsamy/ India/ Development of low- cost proton exchange membrane (PEM) for microbial fuel cells (MFC)	O78	A044/ Mr. Huihuang Zou/ China/ Near-infrared spectroscopy based method for rapid detection of microplastics in complex environment	O79	A306/ Dr. Prasanta Dhak/ India/ Remediation of toxic effects of <i>Parthenium</i> hysterophorus through circular economy by using it for the removal of As, Sb, Cd, Cr, U, F and other heavy metals from wastewater	O80	A010/ Dr. Syeda Azeem Unnisa/ India/ Jawaharnagar municipal landill leachate treatment, Hyderabad, Telangana state/ Online
1655-1710	O81	A651/ Dr. Jiayu Zhang/ China/ Deciphering chloramphenicol biotransformation mechanisms and microbial interactions via integrated multi-omics and cultivation-dependent approaches	O82	A085/ Dr. Bhoomika Yadav/ Canada/ Concomitant production of value-added co-products during polyhydroxyalkanoate (PHA) production: Approaches for building circular bioeconomy in PHA	O83	A160/ Ms. Jiang Wenqian/ China/ Emission characteristics and QSAR model interpretation of PCDD/Fs in a large-scale hazardous waste incinerator under different operation conditions	O84	A360/ Mrs. Ishita De/ India/ Construction & demolition waste challenges – An analysis using the analytical hierarchy process/ Online

				process/ Online				
1710-1720	SO57	A283/ Mrs. Belhadri Mazouri/ Algeria/ Characterization and valorization of marine sediment/ Online	SO58	A106/ Ms. Tossou Ayoko/ Canada/ Production of PHA from pineapple residues by Cupriavidus Necator/ Online	SO59	A443/ Ms. Hayat El Amri/ Canada/ Electrooxidation treatment and dewatering of septic tank sludge/ Online	SO60	A203/ Ms. Anusha Atmakuri/ Canada/ Landfill leachate treatment using a combination of biological and electrochemical methods/ Online
1720-1730	SO61	A366/ Dr. Soulwene Kouki/ Tunisia/ Valorization of biowastes from wastewater phytoremediation process: A model for constructed wetlands integrated management in a South-Mediterranean region/ Online	SO62	A067/ Mrs. Chavan Shraddha/ USA/ Production of polyhydroxyalkanoate (PHA) biopolyesters by thermophilic bacteria using waste substrates/ Online	SO63	A174/ Dr. Kazeem Aderemi Bello/ Nigeria/ Toward the adoption of circular economy in Africa: Prospects and challenges/ Online	SO64	A661/ Ms. Benguit Alae/ Canada/ Tertiary treatment of a mixture of composting and landfill leachates using electrochemical processes/ Online
		Closing Session and Award Presentation						

1730-1800

Llosing Session and Award Presentation
https://hkbu.zoom.us/j/95059525618
Meeting ID 950 5952 5618

Code 909855

Notations: P: Plenary; I: Invited; O: Oral; SO: Short-oral

	03 June 2023						
	Technical Fieldtrips						
0830-1300	Field Trip A: Y-PARK (Facility for recycling of yard waste into useful materials) and T-PARK (Transformation park-Converting waste to energy)						
0830-1300	Field Trip B: Eco-PARK (Hong Kong's first recycling business park) and O-PARK (Hong Kong's first food waste treatment plant)						