

G1_Waste utilization and treatment

Chairs		Dr. Dhasindrakrishna Kitnasamy				University of Southern Queensland
		Prof. Jai-Young Lee				University of Seoul
		Prof. Hiroshi UYAMA				Osaka University
Onsite pitch talk and poster (16th 10:30-12:00) and Poster (16th 15:00-17:00)						
C000043	G1-1	Evaluation of waste incineration system with O ₂ /CO ₂ combustion and CO ₂ capture technologies	Tetsushi		Okamoto	Kyoto University
C000050	G1-2	Optimizing Lipid Extraction from Fat Balls as a Sustainable Biodiesel Resource	Febrian		Rizkianto	Kyoto University
C000067	G1-3	Effect of Granular Activated Carbon on Methane Fermentation Efficiency with High and Low Organic Load Conditions	Hikaru		Kaneko	Toyohashi University of Technology
C000096	G1-4	Characteristics of cellulose content and extraction in wood biomass resources in Korea	Kyunghoon		Choi	Chungnam National University
C000021	G1-5	Sustainable Utilization of Fe-Rich Automotive Industrial Waste for Synthesizing Advanced Ceramic Pigments and Environmental-Friendly Management	Siriwan		Chokkha	Suranaree University of Technology
C000107	G1-6	Conversion of PET waste into the effective adsorbent to remove heavy metals in the contaminated water	Jae Hwan		Yang	Chungnam National University
C000005	G1-7	Higher order use of degraded plastic (Styrofoam) as insect repellent	Mitsutake		Suematsu	Sony Group Corporation
C000045	G1-8	Decoding Resident Behavior and Motivation in Waste Management: A Logistic Regression Approach	Made Adi		Widyatmika	Indian Institute of Technology Delhi
C000016	G1-9	CO ₂ Mineralization for Production of CaCO ₃ using Oyster Shell Waste	Kyumin		Jang	Yonsei University
C000091	G1-10	Consumption & carbon footprint of plastic packaging by food delivery in Korea	Hakyun		Song	Chungnam National University
C000072	G1-11	A Study on the application of spectral indices for monitoring stabilized soil with oyster shell	Woori		Cho	University of Seoul
Sponsors		Hitachi Zosen Corporation: Waste-to-Energy (WtE) and Biogas Technologies	Yuri		Tsujino	Hitachi Zosen Corporation
Sponsors		JFE Engineering Corporation	Kiyosato		Sasaki	JFE Engineering Corporation
Online talk (16th 10:30-12:00)						
C000006	L	Livestock manure processing methods and the use of processing by-products in Japan	Izumi		Sasaki	Japan Industrial Waste Information Center
C000022	L	Efficient Removal of Methyl orange by Shrimp Shell-derived Adsorbent: Adsorption Isotherm, Kinetics, and Mechanism	Kanokwan		Yamsomphong	Tokyo Institute of Technology
C000070	L	Impacts of interactivity between activation energy of biomass decomposition and gas composition during pyrolysis	Muhammad Ismail Bagus		Setyawan	Tokyo Institute of Technology
C000114	L	Evaluation of resource utilization of livestock and poultry wastes in China	Yujun		Shen	Academy of Agricultural Planning and Engineering, MARA

G2 Demolition, disaster, industrial, hazardous waste

Chairs	Prof. Weena Lokuge				University of Southern Queensland
	Dr. Sirintornthep Towprayoon				King Mongkut's University of Technology Thonburi
	Prof. Reiko SODENO				Shibaura Institute of Technology

Onsite pitch talk and poster (16th 13:00-14:30) and Poster (16th 15:00-17:00)

C000094	G2-1	Novel CO2 Mineralization Technique for Upcycling Construction Waste and By-products into Cement-Based Materials	Nithurshan		Mylvaganam	Hokkaido University
C000111	G2-2	Chemical Resistance and Durability Performance of Graphene Enhanced Concrete	Danula		Udumulla	The University of Melbourne
C000035	G2-3	Greenhouse gas emissions from marine plastic collection and recycling: case studies in Tsushima and Osaka Bay, Japan	Katsuyuki		Nakano	Ritsumeikan University
C000060	G2-4	Dynamics of River Waste in Jakarta: Quantity and Environmental Influences	Afif	Faiq	Muhamad	National Institute for Environmental Studies
C000047	G2-5	Effects of Si/Al ratio on immobilization of Se in woody biomass fly ash based geopolymer	Yilan		Pei	Kyoto University
C000048	G2-6	The Chemical Speciation of As, Zn and Ni with Dredged Sediment by the Hydrothermal Technology (HTT)	Hye Won		Park	University of Seoul
C000074	G2-7	Effect of Temperature Rise on Arsenic Reaction and Speciation Changes in Paddy Soil	ChanMi		Choi	Chungnam National University
C000034	G2-8	Study on Adsorption Properties of Blast Furnace Slag-Modified Materials	Jiaqi		Wang	The University of Tokyo
C000110	G2-9	Graphene Oxide for Strength Enhancement of Recycled Aggregate Concrete	Pasadi	Litara	Devapura	University of Melbourne
C000064	G2-10	A Study on the Stabilization Effects of As-Contaminated Soil Treated with Fe-Steel Slag and Ecosta-A: Utilizing Bioconcentration	Jeong-Hyun		LEE	University of Seoul in Korea
C000066	G2-11	Thermal stabilization of Cs+-exchanged zeolite 13X with/without clay minerals	Minji		Park	Chungnam National University
Sponsors		Dowa Holdings Co., Ltd.	Yoshinori		Morita	Dowa Holdings Co., Ltd.

Online talk (16th 13:00-14:30)

C000012	L	E-waste management in Vientiane Capital, Laos	Souphaphone		Soudachanh	University of Natural Resources and Life Sciences Vienna
C000036	L	Simple Detection Method of Asbestos for Disaster Waste Building Materials	Masaaki		Tabata	Saga University
C000077	L	Effect of alkaline modified coal fly ash on water retention capacity and desiccation crack formation of soil	PU		YANG	Tokyo Institute of Technology
C000038	L	Separation of Strontium and Cesium Using Crown Ether Functionalized Mesoporous Silica from Aqueous Waste Matrices	Rashedul Islam		Ripon	Fukushima University
C000090	L	Mechanical response of waste tyre rubber reinforced cemented rockfill	Vidanagama	Mithushi Kanjana	Wickramasinghe	Deakin University

G3 Technology

Chairs		Dr. Yuguo Yu				RMIT University
		Dr. Yuko SAITO				Tohoku University
Onsite pitch talk and poster (17th 9:00-10:30) and Poster (16th 15:00-17:00)						
C000049	G3-1	Conversion of Polylactic Acid in Subcritical Water: Prospects for Products Recycling from Bioplastic Hydrolysis	Fan		Wu	The University of Tokyo
C000061	G3-2	Behavior of Mercury in Carbon Capture Process for Municipal Solid Waste Incinerator	Kanta		Funaki	Kyoto University
C000100	G3-3	Investigation of microplastics from granulated virgin materials and aged samples in digestion system: are they different?	Yanan		Li	Institute of Chemistry, Henan Academy of Sciences
C000054	G3-4	Research on the development of data infrastructure for the proper disposal and long-term use of waste photovoltaic panels	Yuko		Saito	Tohoku University
C000076	G3-5	Observation of changes in arsenic speciation according to various microbial metabolic conditions in paddy soil	Hyemin		Lee	Chungnam National University
C000108	G3-6	A numerical framework for modelling chloride transportation in alkali-activated slag concrete	Bin		Dong	The University of New South Wales
C000109	G3-7	Sustainable Design Optimization for Engineering Structures Considering Embodied Carbon	Enyong		Zhao	University of New South Wales
C000106	G3-8	Optimizing Recycling Bin Efficiency: Real-time Plastic Bag Identification with Detection Transformer	Minh	K.	Quan	Deakin University
C000046	G3-9	Biomimicry for Sustainable Seas: Harnessing Microbial Biodegradation to Combat Plastic Pollution in Da Nang City, Vietnam's Coastal Waters	Nguyen	Duong Gia	Bao	Phan Chau Trinh High School
C000088	G3-10	A Treatment of Antibiotic Contaminated Synthetic Wastewater Using Electrochemical Process	Tatiya		Wannomai	Burapha University
C000104	G3-11	Examining the Impact of Fly Ash in Glass Fine Aggregate Mortar	Vimukthi		Fernando	University of Southern Queensland
C000113	G3-12	Smart AI-Enabled Robotic Technologies for Plastic Waste Sorting	Shanaka		Kristombu Baduge	The University of Melbourne
C000102	G3-13	Enhancing Fly Ash-Based Geopolymer Concrete Performance through Machine Learning: A Predictive Model for Compressive Strength and Workability Optimization.	Madushan Priyankara Rathnayaka		Rathnayaka Mudiyansele	Royal Melbourne Institute of Technology (RMIT) University
C000007	G3-14	Stabilization of Desulfurization Wastewater through Mineral Carbonation Technology	Won Yong		Choi	Yonsei University
Sponsors		Introduction of TAKUMA "Waste treatment plants & Energy plants"	Yasuyuki		Fujita	Takuma Co., Ltd.
Online talk (17th 9:00-10:30)						
C000080	L	Investigation Into the Interactions during co-Hydrothermal Carbonization of Polyvinyl Chlorine and Biomass: Effect of Biomass	Hao		Xu	Tokyo Institute of Technology
C000009	L	Mathematical model for strength of alkali-activated materials	S.H.		Chu	Columbia University
C000082	L	Emission Resources Utilization to Climate Change Responses	Kazuya		Yasuhara	Ibaraki University & Local Resilience Research Institute, Japan
C000058	L	The investigation of shear strength parameter for municipal solid waste from open dumpsites using direct shear test apparatus	Parichat		Suknark	King Mongkut's University of Technology Thonburi
C000095	L	Exploring Intermediary Digital Platforms for a Circular Construction Economy: A Social Perspective	Sara		Pishgahi	Royal Melbourne Institute of Technology (RMIT) University

G4 LCA and Flow Analysis

Chairs	Dr. Chamila Gunasekara					RMIT University
	Dr. Habuer					Okayama University
	Dr. Junya YANO					Kyoto University
Onsite pitch talk and poster (17th 11:00-12:30) and Poster (16th 15:00-17:00)						
C000026	G4-1	Life Cycle Assessment and Cost Analysis of Municipal Solid Waste Management in Phnom Penh, Cambodia	Srey Pich		Poeung	The University of Tokyo
C000042	G4-2	Optimal Solid Waste Management Scenarios for Subic Bay Freeport Zone, the Philippines	Janelle Abby		Tan	The University of Tokyo
C000024	G4-3	The trade-off analysis between plastic recycling and material substitution for decarbonization based on life cycle assessment and equilibrium point analysis	Kazuma		Hirata	The University of Tokyo
C000044	G4-4	Environmental benefits from plastic waste recycling pathways in Japan	Chengyao		Zhang	The University of Tokyo
C000056	G4-5	A Year-Long Evaluation and Lessons Learned of Solid Waste Management Database System Operation in the Western Province of Sri Lanka	Akifumi		Kanachi	EX Research Institute Ltd.
C000015	G4-6	Cost-benefit Analysis of Establishing Material Recovery Facilities for Municipal Solid Waste in Chattogram City, Bangladesh	Md	Saiful Islam	Chowdhury	Toyo University
C000115	G4-7	Field Survey on the Disposal Status of Used Portable Batteries from Households	Junya		Yano	Kyoto University
C000071	G4-8	Environmental Assessment of a Local Resource Circulation Scheme: a Case Study on Integration of Anaerobic Digestion and Rice Cultivation in Keihoku, Kyoto	Wanseop		Jung	Kyoto University
C000062	G4-9	Material Flow Analysis of Lithium in Latin America	Estefania	Isabel	Orquera	Tohoku University
C000078	G4-10	Life cycle analysis of food containers made of biodegradable plastic, poly(3-hydroxybutyrate-co-3-hydroxyalkanoate) (PHBH)	Daichi		Yamada	Kyoto University
C000092	G4-11	Material flow analysis and life cycle assessment of PET bottles in South Korea	Chonghee		Lee	Chungnam National University
C000019	G4-12	Revealing the hidden flows under China's sustainable mobility transition	Binze		Wang	Tohoku University
C000093	G4-13	Waste Flow Analysis and Optimal Location Analysis of Bins in a Barangay in Manila, Philippines – Towards Improvement of Material Recovery Systems	Curt Jeremy		Bernardo	University of the Philippines Diliman
Sponsors		Creating infrastructure for the international resource circulation in Asia	Akira		Sakano	ECOMMIT Co.,Ltd.
Online talk (17th 11:00-12:30)						
C000053	L	Current recyclable waste flow in central Vietnam — Potential for heading toward circular economy	Cuong	Dinh	Le	Okayama University
C000069	L	Analysis of Informal Waste Sector Characteristics in Balikpapan City Using Pressure-State-Response (PSR) Framework, Indonesia	Muhammad	Maarij	Harfadli	The University of Kitakyushu
C000033	L	Development of plastic waste generation distribution model using remote sensing data product and machine learning	Elprida		Agustina	Institut Teknologi Bandung
C000041	L	Environmental Cost-Benefit Analysis of Community Waste Collection Service in Indonesia: Multiple Comparison between Door-to-door and Drop-off System	Machmuddin	Fitra	Miftahadi	The University of Kitakyushu
C000075	L	Potential and recovery of organic waste through household composting in	Dhundi Raj		Pathak	Engineering Study & Research Centre, Nepal

G5 Policy and behavior (mainly system analysis)

Chairs		Dr. Bhavna Middha				RMIT University
		Prof. MARIA ANTONIA TERESA TANCHULING				University of the Philippines
		Prof. Kohei WATANABE				Teikyo University
Onsite pitch talk and poster (17th 14:00-15:30) and Poster (16th 15:00-17:00)						
C000055	G5-1	Comparison of life-cycle greenhouse gas emission between reusable tumblers and single-use cups considering attached lids and straws	Junichiro		Koshiha	Kyoto University
C000065	G5-2	Study on public environmental awareness and behaviour towards regional plastic circulation: the case of Kurume City	Yuriko		Hayabuchi	Kyushu University
C000013	G5-3	Critical Path of a Circular Economy for Plastic	Tomohiro		Tabata	Kobe University
C000014	G5-4	Survey and analysis on the use and disposal of plastic shopping bags before and after the introduction of charges	Jun		Nakatani	The University of Tokyo
C000052	G5-5	Difference in consumption behavior toward green-branded toothbrushes among Japan, Bulgaria, and France	Yuta		Ando	Kyoto University
C000083	G5-6	Africa's Contribution to Waste Reduction: A Case of Plastic Repairing in Djougou, Benin	Rika		Hirao	Kyoto University
C000011	G5-7	Impact of the 2020 plastic bag charge policy on the amount of plastic bags From the material aspect of plastic bags	Hirotaaka		Kumamaru	Akita University
C000010	G5-8	Analysis of Household's participation for source separation towards a quality compost production, under the organic farming policy in Sri Lanka	Fernando	Chamila	Jeewanee	Toyo University
C000018	G5-9	Exploring the Path of Privacy Concerns on Chinese Consumers' Intention to Recycle Obsolete Cell Phones	XXX		Habuer	Okayama University
C000117	G5-10	Drivers to Consumer Environmental intention and behavior: a systematic review	JIE		SUN	Kyoto University
C000101	G5-11	Integrating Circularity in Purchasing: A SMART evaluation of Australian governmental purchasing policies	Aryana		Shahin	Deakin University
C000087	G5-12	The trend and current situation of food waste utilisation in Japan	Kohei		Watanabe	Teikyo university
C000119	G5-13	Improving Solid Waste Management Systems Thru Community-Based Waste Diversion Activities: Case of Two Urban Barangays in Metro Manila, Philippines	Ma. Brida	Lea D.	Diola	University of the Philippines Diliman
Sponsors		Mitsubishi Waste-to-Energy	Akihiro		Yamada	Mitsubishi Heavy Industries Environmental & Chemical Engineering Co.,Ltd.
Online talk (17th 14:00-15:30)						
C000031	L	A Pre-Survey to Explore the Influence of Object Attachment on Chinese Consumers' Intention to Recycle Obsolete Cell Phones	Yuxin		Du	Okayama University
C000025	L	Analysis of Plastics Recycling Business Feasibility in the Pacific Island Countries: A Case Study in Samoa	Yoko		Onuma	Japan International Cooperation Agency
C000118	L	Improvement of waste collection and its impacts on citizen's behavior, case study of Brod village, Dragash Municipality, Kosovo	Rie		Kawanishi	EX Research Institute Ltd.