

General sessions

10-minute oral presentation & 4-minute discussion

14, March 2023, Tue.

Room A (Online) (13:00-14:30, March 14th, Tue.)

OL1: Sustainable waste management

Chair: Rokuta Inaba, National Institute for Environmental Studies, Japan

- OL1-1 Development of a model to describe life extension of solid waste final disposal site
Kana Nakamura, Toyo University, Japan
- OL1-2 Assessment of the wood waste potential for sustainable development in mountainous area: A case study of Maniwa city, Japan
Takeshi Fujiwara, Okayama University, Japan
- OL1-3 Assessment of greenhouse gas emissions from municipal solid waste management practice in Phnom Penh, Cambodia
Vimean Pheakdey Dek, Hiroshima University, Japan
- OL1-4 Compositional characteristics, greenhouse gases mitigation, and recycling potential of municipal solid waste generated in West Bank area, Palestine
Yosrea Ramadan, Ministry of Local Government, Palestine
- OL1-5 Environmental sustainability assessment of direct and syngas fermentation of banana peels
Michael Villagante Torres, University of the Philippines Diliman, Philippines
- OL1-6 Effect of microbes on food waste compost using horse dung as an independent variable
Amanuel Tesfay Gebreslassie, Okayama University, Japan

Room B (Online) (13:00-14:30, March 14th, Tue.)

OL2: Circular economy and policy

Chair: Tetsuji Okuda, Ryukoku University, Japan
Kohei Watanabe, Teikyo University, Japan

- OL2-1 Accelerating a circular economy in South Korea
Ji Hye Jo, Korea Environment Institute, Korea
- OL2-2 Assessment of EPR in Thailand for plastic pollution management
Eunji Shin, Asian Institute of Technology, Thailand
- OL2-3 Use of modern technology for the improvement of solid waste management in developing countries: Case study of a database system in the Western province of Sri Lanka
Akifumi Kanachi, EX Research Institute Ltd., Japan
- OL2-4 Assessment of challenges for plastic waste management at the national level
Sayaka Ono, Asian Institute of Technology, Thailand
- OL2-5 Municipal policies for preventing single-use plastics in Japan
Hajime Yamakawa, Kyoto Prefectural University, Japan

Room C (Online) (13:00-14:30, March 14th, Tue.)

OL3: Plastic waste

Chair: Fumitake Takahashi, Tokyo Institute of Technology, Japan

- OL3-1 The environmental policy latent effects on plastic waste recycling: A comparison between the United States and Japan
Chaoxia Shan, Waseda University, Japan
- OL3-2 A comparative study on green-branded toothbrushes and consumers attitudes in Bulgaria and Japan
Dima Kirilova Genova, Kyoto University, Japan
- OL3-3 Spatio-temporal variation and seasonal dynamics of stranded beach anthropogenic debris on Indonesian beach from the results of nationwide monitoring
Muhammad Reza Cordova, The Indonesian National Research and Innovation Agency, Indonesia
- OL3-4 Plastic waste composition analysis for floating villages in Tonle Sap Lake, Cambodia
Sakinah Binti Abdullah, Okayama University, Japan
- OL3-5 Development of plastic discrimination sensor
Koji Yanagida, RICOH COMPANY, LTD., Japan

Room A (Online)**(14:45-16:15, March 14th, Tue.)****OL4: Hazardous and R&D waste**

Chair: Muhammad Reza Cordova, The Indonesian National Research and Innovation Agency, Indonesia
Tepei Nunoura, The University of Tokyo, Japan

- OL4-1 Managerial implication of mercury release: A case study in waste treatment sector in China
Habuer, Okayama University, Japan
- OL4-2 Stochastic estimation of location-independence earthquake disaster risk of temporal storage facility of mercury wastes
Fumitake Takahashi, Tokyo Institute of Technology, Japan
- OL4-3 Production and mechanical properties of recycled aggregate concrete from construction and demolition waste in Hanoi, Vietnam
Ha Tan Nghiem, Hanoi University of Civil Engineering, Viet Nam
- OL4-4 Effect of alkaline-treated coal fly ash on water evaporation mitigation capacity of soil: A preliminary trial
Pu Yang, Tokyo Institute of Technology, Japan
- OL4-5 Shrimp shell-derived adsorbent for nutrient recovery from shrimp pond wastewater: A preliminary test using methyl orange as a model nutrient
Yamsomphong Kanokwan, Tokyo Institute of Technology, Japan
- OL4-6 Indoor and outdoor airborne levels of per and polyfluoroalkyl substances at a waste recycling facility
Isamu Kuribara, Chemicals Evaluation and Research Institute, Japan

Room B (Online)**(14:45-16:15, March 14th, Tue.)****OL5: Systems, life cycle and substance flow analysis**

Chair: Katsuyuki Nakano, Ritsumeikan University, Japan

- OL5-1 Material flow analysis of a large-scale landfill mining: Case study Thailand
Anupong Muttaraid, The Joint Graduate School of Energy and Environment, Thailand
- OL5-2 Research on quality of life (QOL) of road sweepers in Chattogram City, Bangladesh
Rikae Kodani, Yachiyo Engineering Co., Ltd., Japan
- OL5-3 Points to be considered to implement a sustainable material recovery facility in Chattogram City, Bangladesh
Saiful Islam Chowdhury, Chattogram City Corporation, Bangladesh
- OL5-4 Evaluation of attitudes and knowledge toward organic waste recycling practices through house composting: A pilot project in Gaza Strip, Palestine
Mostafa Alashi, Joint Service Council for Solid Waste Management in Gaza and North Gaza Governorates, Palestine
- OL5-5 Paper or bioplastic bags for food waste collection: a comprehensive assessment
Mario Grosso, Department of Civil and Environmental Engineering, Italy

Room C (Online)**(14:45-16:15, March 14th, Tue.)****OL6: Waste management technology**

Chair: Hiroki Harada, Kyoto University, Japan

- OL6-1 Synergistic effect of co-pyrolysis of polyvinyl chloride (PVC) and oil sludge on pyrolysis kinetics
Yanlei Chen, Tokyo Institute of Technology, Japan
- OL6-2 Shaping strategy for the preparation of CuBTC-embedded activated carbon beads using expanded polystyrene filler for toluene removal and anti-pathogen
Huyen Ngoc Ly, Hallym University, Korea
- OL6-3 Environmental friendly and efficient approach for the recovery of metals from waste random access memory using greener solvents
Amrita Preetam, Indian Institute of Technology, India
- OL6-4 Environmental impacts estimation of printed circuit boards recycling scenarios in Thailand
Wiranpat Simadhamnand, Tokyo Institute of Technology, Japan

Room B (Online) (16:30-18:00, March 14th, Tue.)

OL7: MSW characterization and management

Chair: Mario Grosso, Politecnico di Milano, Italy
Kosuke Kawai, National Institute for Environmental Studies, Japan

- OL7-1 Development Stage of waste management in ASEAN cities
Souphaphone Soudachanh Soudachanh, University of Natural Resources and Life Sciences Vienna, Austria
- OL7-2 Activities to Increase Awareness for the Wastes Issues in Palestine
Reem Abu Laban, MoLG-JICA Project for Capacity Development in Solid Waste Management in Palestine Phase-III, Japan
- OL7-3 Comparative study of international technical cooperation projects for 3R promotion and waste minimization in municipal solid waste management - Approach, effectiveness, impacts, and sustainability
Mitsuo Yoshida, Japan International Cooperation Agency, Japan
- OL7-4 Effectiveness and challenges of awareness raising on 3Rs for school children - A case study at schools in Ramallah, Palestine
Takaaki Murata, Overseas Environmental Cooperation Center (OECC), Japan
- OL7-5 Time-trend and categorical analysis of artworks which use wastes
Bo Wang, Tokyo Institute of Technology, Japan

15, March 2023, Wed.

Room A (13:15-14:30, March 15th, Wed.)

OS1: Plastic Recycling Technologies

Chair: Fauziah binti Shahul Hamid, Universiti Malaya, Malaysia
Hirofumi Nakayama, Kyushu University, Japan

- OS1-1 Comparing different type of marble processing wastewater treatment sludge in thermochemical upcycling of polypropylene (PP) type plastic wastes
Esra Yel, Konya Technical University, Turkey
- OS1-2 Co-pyrolysis characteristics of polylactic acid and petroleum plastics
Wakana Adachi, Tohoku University, Japan
- OS1-3 Recovery of NaCl by electrodialysis to establish chlorine circulation
Haruki Yanagawa, Tohoku University, Japan
- OS1-4 Glycolysis process for chemical recycling of PET derivatives
Dieu Minh Ngo, Kumoh National Institute of Technology, Korea
- OS1-5 Purification of polyethylene in waste plastics using solvent extraction method
Kazutoshi Ikenaga, Sojo University, Japan

Room B (13:15-14:30, March 15th, Wed.)

OS2: Biomass waste utilization

Chair: Nopparit Sutthasil, Mae Fah Luang University, Thailand
Kosuke Kawai, National Institute for Environmental Studies, Japan

- OS2-1 Gasification characteristics of biochar from mushroom waste media of three kinds of carbonization reactors
Sunyoung Woo, Daegu University, Korea
- OS2-2 The unutilized biomass grouping in Korea for alternative fuel by principal component analysis (PCA) and cluster analysis
Yujin Ju, Daegu University, Korea
- OS2-3 Evaluation of air pollution emission during recycling process of carbonization disposable chopsticks waste into charcoal
Supin Jodnok, Khon Kaen University, Thailand
- OS2-4 Pyrolysis of sewage sludge as an alternative to incineration
Matej Husek, University of Chemistry and Technology Prague, Czech Republic
- OS2-5 Production of C5 sugar fatty acid esters (SFAEs) from renewable resources
Preetanshika Tracy, CSIR-Indian Institute of Petroleum, India

Room C (13:15-14:30, March 15th, Wed.)

OS3: Hazardous waste treatment 1

Chair: Satoshi Mizutani, Osaka Metropolitan University, Japan

- OS3-1 Freshwater phytoplankton: Uptake and biotransformation of arsenate under salinity gradients using single-cell ICP-MS and CT-HG-AAS
Md Shah Alam, Kanazawa University, Japan
- OS3-2 Removal of cesium using *Rhodococcus Erythropolis* and identification of the cesium accumulation location
Chang-hyun Jeon, Kyungpook National University, Korea
- OS3-3 Influences of thermal dechlorination treatment on polychlorinated naphthalenes in municipal solid waste incineration fly ash
Satoshi Mizutani, Osaka Metropolitan University, Japan
- OS3-4 Improvement of H₂S selective oxidation using N-doped mesoporous carbon catalyst
Seul Yi Kim, Chungnam National University, Korea
- OS3-5 Preparation of adsorbent by surface modification for heavy metal adsorption using PET waste
Sang Gyu Lee, Chungnam National University, Korea

Room A (14:45-16:15, March 15th, Wed.)

OS4: Plastic pollution

Chair: Jhy-Chern Liu, National Taiwan University of Science and Technology, Taiwan
Izumi Iwamoto, Osaka Metropolitan University College of Technology, Japan

- OS4-1 Development of long term and cost-effective monitoring method for riverine plastic debris in the lower Mekong river basin
Kotone Iwamoto, IDEA Consultants, Inc., Japan
- OS4-2 Preventing mangroves from plastic pollution: Some good practices
Ellen Putri Edita, Economic Research Institute for ASEAN and East Asia (ERIA), Indonesia
- OS4-3 Microplastic contamination in selected Malaysian mangroves: prevalence, distribution, and characteristics
Fauziah Shahul Hamid, Universiti Malaya, Malaysia
- OS4-4 Microplastic contamination of commercially purchased blood cockles (*Anadara granosa*) from local markets in selected states of peninsular Malaysia
Priya Mohan, Universiti Malaya, Malaysia
- OS4-5 Development of eco-friendly hydrogen production technology based on waste floating ocean plastics
Mino Woo, Korea Institute of Industrial Technology, Korea

Room B (14:45-16:15, March 15th, Wed.)

OS5: E-waste and ELV

Chair: Kazuyuki Oshita, Kyoto University, Japan

- OS5-1 Analyzing waste photovoltaic panels generation and influence based on the long-term capacity
Ken Matsuoka, University of Tokyo, Japan
- OS5-2 Wet process debromination of waste printed circuit boards
Wataru Shimomura, Tohoku University, Japan
- OS5-3 Metal assessment in the vehicle sector to establish recycling as a proposal of circularity strategy in Latin America
Estefana Isabel Orquera, Tohoku University, Japan
- OS5-4 Analysis of WEEE plastics for secondary raw materials
Yuko Saito, Tohoku University, Japan
- OS5-5 Characterization of flame retardants pollution on plastics from WEEE using a chromoprodut approach
Andres Ramirez Restrepo, Kyoto University, Japan

Introduction movie from Dowa Holdings Co., Ltd.

Room C**(14:45-16:15, March 15th, Wed.)****OS6: Hazardous waste treatment 2**

Chair: Tepei Nunoura, The University of Tokyo, Japan

- OS6-1 Extractive remediation of fluoride-contaminated soil using biodegradable chelators and surfactants
Shoji Yoshioka, Kanazawa University, Japan
- OS6-2 Prediction of emission potential of per- and polyfluoroalkyl substances during recycling of waste coated by water repellents using pyro-GC/MS
Hidetoshi Kuramochi, National Institute for Environmental Studies, Japan
- OS6-3 Source estimation of atmospheric polychlorinated naphthalenes (PCNs) in Japan by chemical mass balance (CMB) model
Junichiro Koshihara, Kyoto University, Japan
- OS6-4 Detection of asbestos of wasted building-materials by staining for on-site analysis
Masaki Tabata, Saga University, Japan
- OS6-5 Redox transformation of As reacted with redox-activated natural clay minerals
Ji-Hyun Park, Chungnam National University, Korea
- OS6-6 Synthesis of high iron-containing clay minerals for removal of arsenic from groundwater
Jeong-Hyun Yu, Chungnam National University, Korea

16, March 2023, Thu.**Room A****(10:30-12:00, March 16th, Thu.)****OS7: Waste to energy**

Chair: DY Kyden, Ministry of Environment, Kingdom of Cambodia

Eiji Yamasue, Ritsumeikan University, Japan

- OS7-1 Preliminary evaluation of landfill gas to energy project development by measuring surface methane emissions: A case study of Pulau Burung sanitary landfill-phase 1, Malaysia
Komsilp Wangyao, King Mongkut's University of Technology Thonburi, Thailand
- OS7-2 A research on technology and application of bio-waste to energy in Taiwan
Bo-Rui Lin, National Taipei University of Technology, Taiwan
- OS7-3 Compilation of environmental thermodynamics from material cycles through a field of methanation 2: Consideration of activity between gas and aquatic phase
Nobuhisa Watanabe, Osaka Institute of Technology, Japan
- OS7-4 Effect of recirculation on starting up two-phase anaerobic digestion for biohydrogen and biomethane recovery from organic solid waste
Yu Qin, Tohoku University, Japan
- Presentation from JFE Engineering Corporation
"Waste-to-Energy, best solution for Circular Economy and Carbon Neutrality"
Gen TAKAHASHI, JFE Engineering Corporation

Room B**(10:30-12:00, March 16th, Thu.)****OS8: Challenges for waste plastics 1**

Chair: Jaewook Myung, KAIST, Korea

Shogo Kumagai, Tohoku University, Japan

- OS8-1 Environmental sustainability assessment of municipal and small-scale plastics waste management
Jhud Mikhail Aberilla, University of the Philippines Diliman, Philippines
- OS8-2 A perception survey of plastic waste recycling in households of Tonle Sap Lake, Cambodia
Yuxin Du, Okayama University, Japan
- OS8-3 Japanese consumers' necessity of plastic products and awareness of plastic issues revealed from questionnaire survey
Yuta Ando, Kyoto University, Japan
- OS8-4 Single-use plastic products from households through waste composition survey in 2019-2022
Kazuki Hirota, Kyoto University, Japan
- Introduction of EX Research Institute Ltd. and examples of waste education in developing countries
Mie Nagayasu, EX Research Institute Ltd.

Room C**(10:30-12:00, March 16th, Thu.)****OS9: Challenges for waste management 1**

Chair: Munsol Ju, Korea Environment Institute, Korea
Yuko Saito, Tohoku University, Japan

- OS9-1 Occurrence, attenuation and dynamic modeling of pesticides transport along Pampanga River
Renato Guinitaran Agustin, University of the Philippines, Philippines
- OS9-2 Innovative business models - example interior finishing systems
Heinz Georg Baum, Fulda University of Applied Sciences, Germany
- OS9-3 Interventions to prevent household food waste with supporting tools: Evaluation by cloud-based weighing system
Yasuko Seta, Kyoto Prefectural University, Japan
- OS9-4 Barriers and policy implications for 2R behaviors in South Korea based on the survey targeting eco-friendly citizens
Munsol Ju, Korea Environment Institute, Korea
- OS9-5 Effectiveness of goods and ICT for managing food in refrigerators on the reduction of avoidable food waste
Tomoko Okayama, Taisho University, Japan
- OS9-6 Recovery of phosphate as hydroxyapatite from semiconductor wastewater
Jhy-Chern Liu Liu, National Taiwan University of Science and Technology, Taiwan

Room B**(13:00-14:30, March 16th, Thu.)****OS10: Challenges for waste plastics 2**

Chair: Yong-Chul Jang, Chungnam National University, Korea
Reiko Soden, Shibaura Institute of Technology, Japan

- OS10-1 Can a higher restriction on plastic waste import lead to a more sustainable plastic waste trade globally?
Duy Van Dang, Waseda University, Japan
- OS10-2 The intergenerational learning effects of a home study program for elementary and junior high school students on knowledge and awareness of plastic consumption
Maheshwari Kalyanasundaram, EX Research Institute Ltd
- OS10-3 Cumulative energy demand of single use plastic bags and their alternatives
Isaac Omondi, Kyoto University, Japan
- OS10-4 A review of the current situation of plastic bag policy in China
Ruilin Wang, Kyoto University, Japan
- OS10-5 Consumer knowledge and behavior on plastic consumption, reuse and disposal: Case study in Pemba, Mozambique
Zulmira Acha, Kyoto University, Japan
- Introduction movie and presentation from Hitachi Zosen Corporation "Waste to Energy, worldwide reference"
Makoto TAKANO, Hitachi Zosen Corporation

Room C**(13:00-14:45, March 16th, Thu.)****OS11: Challenges for waste management 2**

Chair: DEK Vimeanraksmey, Ministry of Environment, Kingdom of Cambodia
Tomoko Okayama, Taisho University, Japan

- OS11-1 Solid waste management on important buddhist days at the royal monastery of Phuket
Sineenart Puangmanee, Phuket Rajabhat University, Thailand
- OS11-2 Evaluating the key success factors for waste management of local level: Observational cases of RDF utilization and semi-aerobic landfill in Thailand
Panida Payomthip, National Institute for Environmental Studies, Japan
- OS11-3 A comparative study on creating a sustainable municipal solid waste management system in Gampaha city, Sri Lanka towards an eco-friendly city with special reference to Misato city, Japan
Fernando Chamila Jeewanee, Toyo University, Japan
- OS11-4 GHG mitigation potential of selected climate-friendly MSW treatment technologies in Thailand
Awassada Phongphiphat, King Mongkut's University of Technology Thonburi, Thailand
- OS11-5 A review of existing economic incentive schemes to promote waste separation and collection
Jie Sun, Kyoto University, Japan
- OS11-6 Recycling disposable diaper waste to building material: urban society insight
Siswanti Zuraida, The University of Kitakyushu, Japan
- OS11-7 Waste generation and characterization by tourism sectors in Jeju Island in Korea
Hakyun Song, Chungnam National University, Korea

Room B**(14:45-16:15, March 16th, Thu.)****OS12: Challenges for waste plastics 3**

Chair: Heinz Georg Baum, Fulda University of Applied Sciences, Germany
Jun Nakatani, The University of Tokyo, Japan

- OS12-1 Changes in single-use plastic generation by households during COVID-19 in Asian cities
Chen Liu, Institute for Global Environmental Strategies, Japan
- OS12-2 Resource use of household plastic waste in Djougou, Benin
Rika Hirao, Kyoto University, Japan
- OS12-3 The review of remote sensing technology for plastic waste monitoring
Yoothapoom Potiracha, Kyoto University, Japan
- OS12-4 Material flow analysis and management of plastic waste in Korea
Byeonghwan Kim, Chungnam National University, Korea
- OS12-5 Plastic accumulation during the pandemic: bioplastic a step towards this challenge?
Jaewook Myung, KAIST, Korea
- Presentation from IDEA Consultants, Inc.
“Corporate profile and our work in marine litter and mercury management”
Kotone Iwamoto, IDEA Consultants, Inc., Japan

17, March 2023, Fri.

Room A (10:00-11:30, March 17th, Fri.)

OS13: Construction, demolition, and disaster waste

Chair: Sadhan K Ghosh, International Society of Waste Management, Air and Water (ISWMAW), India
Kenichi Hayakawa, Kobe Environmental Creation Co., Ltd, Japan

- OS13-1 How the COVID-19 lockdown measures impacted construction and demolition waste generation? A Canadian case study
Kelvin Tsun Wai Ng, University of Regina, Canada
- OS13-2 Physical properties of synthetics aggregate pelletized by waste concrete fines and fly ash in Vietnam
Cuong Tran Viet, Hanoi University of Civil Engineering, Viet Nam
- OS13-3 Compaction and particle breakage properties of recycled concrete aggregates blended with AAC grains for unbound road base and subbase materials in Vietnam
Van Nam Pham, Saitama University, Japan
- OS13-4 Built from rubble: A review of disaster waste for post-disaster house
Romi Bramantyo Margono, The University of Kitakyushu, Japan
- OS13-5 Flood waste governance towards community resilience in Jakarta, Indonesia: A preliminary study
Ajff Faiq Muhamad, National Institute for Environmental Studies, Indonesia
- OS13-6 Factors that improve elderly's access to external help for disaster waste clean-up
Kaoru Suzuki, National Institute for Environmental Studies, Japan

Room B (10:00-11:30, March 17th, Fri.)

OS14: Systems analysis, life cycle analysis and substance flow analysis I

Chair: Seong-Rin Lim, Kangwon National University, Korea
Junya Yano, Kyoto University, Japan

- OS14-1 Comparative life cycle CO₂ assessment of solar panels produced in regionally different country
Seong-Rin Lim, Kangwon National University, Chuncheon, Korea
- OS14-2 Life cycle assessment research and development in Africa: A bibliometric review
Mohammed Engha Isah, Tohoku University, Japan
- OS14-3 Supply risk of critical metals in photovoltaic industry in China
Guochang Xu, Tsinghua University, China
- OS14-4 Estimation of future copper demand and scrap in Vietnam
Van Le Thi, Ritsumeikan University, Japan
- OS14-5 Prediction of greenhouse gas emissions from municipal solid waste incinerators considering utilization of heat and captured CO₂ on the Tokyo waterfront area
Tasuku Matsuoka, Kyoto University, Japan
- Introduction from Mitsubishi Heavy Industries Environmental & Chemical Engineering Co.,Ltd.
"Mitsubishi Waste-to-Energy technology and worldwide experience to move a sustainable society forward"
Junki Oda, Mitsubishi Heavy Industries Environmental & Chemical Engineering Co., Ltd.

Room C (10:00-11:30, March 17th, Fri.)

OS15: CO₂ capture, utilization and storage

Chair: Dongwoo Kang, Chungbuk National University, Korea
Makoto Tsukiji, Japan Society of Material Cycles and Waste Management, Japan

- OS15-1 Characteristics of carbon dioxide capture using deep eutectic solvent
Dongwoo Kang, Chungbuk National University, Korea
- OS15-2 CO₂ utilization processes to produce nano-sized CaCO₃ based on oyster-shell waste
Kyumin Jang, Yonsei University, Seoul, Korea
- OS15-3 Evaluation of carbon fixation during carbonization of municipal solid waste
Takeru Shinohara, Kyoto University, Japan
- Introduction from TOWA Technology Corporation "Research achievement on PCB destruction in Japan"
Ichita Komori, TOWA Technology Corporation
- Introduction movie from NIPPON STEEL ENGINEERING CO., LTD.

Room B (12:30-14:00, March 17th, Fri.)

OS16: Systems analysis, life cycle analysis and substance flow analysis 2

Chair: Choudhury Rudra Charan Mohanty, United Nations Centre for Regional Development (UNCRD)
Yasuhiko Hotta, Institute for Global Environmental Strategies, Japan

- OS16-1 Future effects of the Indonesia's national capital city relocation in the municipal solid waste management system: exploring the lessons learned from Brazil and Australia
Radhitiya Al Furqan, Tokyo Institute of Technology, Japan
- OS16-2 Assessment of Indonesian nitrogen footprint of agriculture sector using nutrient extended input-output (NutrIO) approach
Farah Wirasenjaya, Tohoku University, Japan
- OS16-3 Carbon footprint of plywood and laminated veneer lumber (LVL) manufactured in Japan
Yasuhiro Hirai, Kyoto University, Japan
- Presentation from ecommit Co.,Ltd. (Online) "Towards building circular value chain - case studies of ECOMMIT"
Teruyuki Kawano, Akira Sakano, ecommit Co.,Ltd

Room C (12:30-14:00, March 17th, Fri.)

OS17: Environmental technologies

Chair: Masaki Takaoka, Kyoto University, Japan

- OS17-1 Gold adsorption from aqua regia using dithiocarbamate-modified cellulose and comparison with commercial resins
Mohammad Mehedi Hasan Rocky, Kanazawa University, Japan
- OS17-2 Enhanced recovery of waste photoresister thinners from semiconductor industry by exploitation of fully intensified and integrated distillation
Moonyong Lee, Yeungnam University, Korea
- OS17-3 CFD study on decomposition characteristics of nitrous oxide inside reaction chamber of semiconductor scrubber system
Jonghyuk Yoon, Institute for Advanced Engineering, Korea
- OS17-4 Physico-chemical properties and pyrolysis study of Indian sludge
Rishiraj Purkayastha, Gifu University, Japan
- OS17-5 Phosphorus removal performance in a one-stage partial nitrification/anammox process with HAP-based granules
Yujie Chen, Tohoku university, Japan
- Introduction of TAKUMA "Waste treatment plants & Energy plants"

Room C (14:15-15:45, March 17th, Fri.)

OS18: Systems analysis, life cycle analysis and substance flow analysis 3

Chair: Habuer, Okayama University, Japan
Seiji Hashimoto, Ritsumeikan University, Japan

- OS18-1 The effect of age and income on waste separation behavior of Hanoi citizens
My Linh Nguyen, Toyo University, Japan
- OS18-2 Preliminary evaluation of greenhouse gas emission reduction from waste treatment and disposal systems in Nonthaburi, Thailand
Noppharit Sutthasil, Mae Fah Luang University, Thailand
- OS18-3 Estimation of greenhouse gas emissions from incineration of municipal solid waste in Seoul, Korea
Youngsun Kwon, Chungnam National University, Korea
- OS18-4 Estimation of greenhouse gas reduction potential-case study of household waste prevention at Kyoto city
Junya Yano, Kyoto University, Japan