

CJJC2025 Program

Please note that some changes may occur due to cancellations of presentations.

October 27th, 2025

Registration (Middle hall of Aubade Hall)

15:30-18:00 Registration

October 28th, 2025

Registration (Middle hall of Aubade Hall)

9:15-11:30 Registration

Opening Session (Middle hall of Aubade Hall)

9:30-9:45 Greetings from the Organizers of Japan and China

9:45-10:00 Group Photo

Session 1 Waste Management Systems, Environmental Impacts (Middle hall of Aubade Hall)

10:00-12:00 Chair : Kentaro Miyawaki (Meisei University)

- 1-1 Overlooked risk of microplastics from municipal solid waste-storage site, Yuyang Long (Zhejiang Gongshang University) (Canceled 10/22)
- 1-2 Using cognitive dissonance induced by waste presented as art to improve perceptions of waste, Bo Wang (Institute of Science Tokyo)
- 1-3 Study on atmospheric CO₂ neutralization of high-PH leachate at offshore disposal sites, Kentaro Miyawaki (Meisei University)
- 1-4 Natural-selected plastics biodegradation species and enzymes in landfills, Liyan Song (Anhui University)
- 1-5 Spectral discrimination of landfill sites in Africa: an analysis using HISUI hyperspectral data, Leeme Arther Baruti (Kyushu University)
- 1-6 Environmental economic modeling of sustainable marine litter collection activities by fisherman ~ Focusing on Tsushima city, Daiki Nakagawara (Kyushu University)
- 1-7 Optimization of municipal solid waste collection and transportation routes in Odawara City, Nanako Ohno (Kanadevia Corporation)
- 1-8 Nutrient recovery from anaerobic digestate through struvite precipitation: process performance and economic analysis, Shunchang Yang (The Institute of Zhejiang University-Quzhou)

Lunch (Room Houou Nishi-No-Ma (鳳凰西の間) of Oaks Canal Park Hotel Toyama)

12:15-13:15 Lunch

Session 2 Hazardous Waste, Innovative Treatment (Middle hall of Aubade Hall)

13:30-15:00 Chair : Sun Yingjie (Qingdao University of Technology)

- 2-1 Survey of PFAS at a solid waste final disposal site (tentative), Teppei Komiya (Kyushu University)
- 2-2 Optimization of wet alkali hydrolysis process for treating dead livestock and poultry, Hongzhi Ma (University of Science and Technology Beijing)
- 2-3 Evaluation of heavy-metal leaching in returned and crushed concrete aggregates, Mitali Nag (National Institute for Environmental Studies)
- 2-4 Aeration-enhanced acid leaching of heavy metals from municipal solid waste incineration fly ash, Pengfei Li (Kyushu University)
- 2-5 Crystallization process enhanced by quaternary ammonium salt surfactant for dewaterability improvement of waste-activated sludge, Yawen Ye (Tongji University)

2-6 Low-temperature, ambient-pressure and rapid mineralization of per- and polyfluoroalkyl substances by molten alkali, Huan Zhang (Tongji University)

Poster session 1 with Coffee break (2F Foyer of Aubade Hall)

15:00-15:45

- P1-1 Urban-industrial synergies in sustainability: Evaluating the co-processing of MSWI fly ash in industrial kilns from environmental and economic perspectives, Run Shi (University of Science and Technology Beijing)
- P1-2 Interpretable machine learning framework for optimization and inverse design of catalytic pyrolysis of plastics, Zhengyu Wang (Tongji University)
- P1-3 Effect of load on temperature measurement using optical sensors, Yuto Yamakawa (Kyushu University)
- P1-4 Speciation analysis and extractability Potential of rare earth elements in landfill humus soil, Linhai Ye (Tongji University)
- P1-5 Risk assessment of long-term leaching of heavy metals during solidification/stabilization of MSWI fly ash landfill disposal under the coupling effect of freeze-thaw cycle and carbonation, Xue Li (Qingdao University of Technology)
- P1-6 Facilitating anaerobic digestion of kitchen waste through diatomite-mediated spatial ecological niches construction, Dong Li (Tongji University)
- P1-7 Destabilization of colloidal particles induced by in-situ calcium carbonate crystallization with implications on highly efficient removal of insoluble matter from anaerobic digestate liquor, Jieling Feng (Tongji University)
- P1-8 Fundamental study on drying treatment of incineration residues using non-power-generating solar energy, Yosuke Tsuru (Kyushu University)
- P1-9 Micro-granular sludge driven by powder carrier in membrane bioreactor: Highly efficient N & P removal and membrane fouling alleviation, Junqian Zhong (Tongji University)
- P1-10 Research on material flows of agricultural plastic materials by product type and region, Ryotaro Kawanishi (Kyushu University)
- P1-11 Molecular transformation mechanisms of humus soil biomaterial in enhancing humification process of anaerobic digestate composting, Zhengliang Du (Tongji University)
- P1-12 Emission characteristics and control mechanism of dioxins during the synergistic treatment of waste incineration fly ash during the sintering process, Rongrong Lei (University of Science and Technology Beijing)
- P1-13 Towards sustainable municipal solid waste treatment: Life cycle environmental-economic analysis under waste sorting, Rongxing Bian (Qingdao University of Technology)
- P1-14 Impact of biochar on greenhouse gas emissions: A literature review, Xiaona Wang (University of Science and Technology Beijing)
- P1-15 Study of the mechanism of hydrolysis of hemicellulose by density functional theory and experiment, Weiyun Wang (Shenyang Aerospace University)

Session 3 Recycling Technologies and Circular Economy (Middle hall of Aubade Hall)

15:45-17:30 Chair : Fumitake Takahashi (Institute of Science Tokyo)

- 3-1 Life cycle assessment of the effective utilization of low-grade plastics in melt separation systems for municipal solid waste incineration and non-combustible residues, Shuta Kawakami (Kyushu University)
- 3-2 Using large language models and machine learning to enable sustainable electrochemical conversion of biomass-derived HMF into value-added BHMF, Cheng Zeng (Tongji University)
- 3-3 Prediction of airborne bacterial concentrations and identification of critical factors in contaminated waste facilities Insights into interpretable machine learning models, Yanyan Guo (Tongji University)
- 3-4 Proper evaluation of environmentally safe municipal solid waste incineration bottom ash as a material for artificial stone, Koshiro Ikaruka (Kyushu University)
- 3-5 Insights into how microbial quorum sensing modulates sludge anaerobic digestion efficiency and resistome characteristics, Shaoqi Xu (Tsinghua University)
- 3-6 Design and validation of a novel contraction–expansion array conical grit remover for grit removal in wastewater sludge, Yi Xiong (Tongji University)
- 3-7 From brewery wastewater to bio-olefins: a comprehensive tea and LCA, Na Wu (The Institute of Zhejiang University-Quzhou)

Welcome dinner (Houou Higashi-No-Ma (鳳凰東の間) of Oaks Canal Park Hotel Toyama)

18:00-18:30 Registration (for participants attending the Welcome Dinner only)

18:30-20:30 Welcome dinner

October 29th, 2025

Registration (Middle hall of Aubade Hall)

9:15-10:30 Registration

Session 4 Resource Recovery and Thermal Processes (Middle hall of Aubade Hall)

9:30-10:45 Chair : Song Liyan (Anhui University)

- 4-1 Resource utilization potential of waste glass in a typical city of China and its carbon reduction and economic benefits evaluation, Jinfeng Tang (Guangzhou University)
- 4-2 Research on the characteristics and kinetics of co-pyrolysis of sludge and biogas residue, Jun Zhang (Harbin Institute of Technology)
- 4-3 Anti-fouling application for air-cooled condensers to improve power efficiency at waste-to-energy plant, Ryo Nakajima (Kurita Water Industries Ltd.)
- 4-4 Recycling Li from spent LiFePO₄ batteries through an economical and highly efficient strategy, Minhua Su (Guangzhou University)
- 4-5 Recovery of valuable metals from incineration ash as non-ferrous refining materials using melting technology, Motohiro Sakamoto (Kubota Corporation)

Poster session 2 with Coffee break (2F Foyer of Aubade Hall)

10:45-11:30 Poster session 2

- P2-1 Bioaerosol contamination binds to PM_{2.5} during leachate treatment: Occurrence characteristics of human pathogens, virulence factor genes and antibiotic resistance genes, Yanan Wang (Qingdao University of Technology)
- P2-2 Mechanism of iron release from steel slag induced by denitrifying microorganisms and optimization of its phosphorus removal performance in wastewater, Yan Guo (University of Science and Technology Beijing)
- P2-3 Characterization and valorization of landfill-mineralized waste of Xizang, China as a potential biomass material: A physicochemical perspective, Peng Zhou (Xizang University) (Canceled 10/22)
- P2-4 Recycling of polymeric substances from sewage, Daqi Cao (Beijing University of Civil Engineering and Architecture) (Canceled 10/16)
- P2-5 Bioremediation of coking contaminated soil: MnOB boosts the degradation of high-molecular-weight PAHs, Huawei Wang (Qingdao University of Technology)
- P2-6 Efficiency optimization and mechanistic insights into microbial electrosynthesis of methane from CO₂ under high current density conditions, Yan Dang (Beijing Forestry University)
- P2-7 Automated two-stage partial nitrification/anammox system for treating actual dewatered liquid from food waste methane fermentation: Pilot-scale performance and control strategy optimization, Yuanyuan Ren (University of Science and Technology Beijing)
- P2-8 Research on low-carbon cementitious materials using MSWI fly ash and calcium-silicon based solid wastes, Jia Li (University of Science and Technology Beijing)
- P2-9 Study on detection method of waste disposal sites using object detection technology (YOLO) with satellite remote sensing in Japan, Yasuhiro Sugisaki (Kyushu University)
- P2-10 Study on synthesis of ethyl lactate by microbial-enzyme coupling esterification, Qunhui Wang (University of Science and Technology Beijing)
- P2-11 Enhancement of anaerobic fermentation for acid production and synergistic CO₂ fixation by granular activated carbon (GAC) in distillery's grains, Dezhi Sun (Beijing Forestry University)
- P2-12 Thermal hydrolysis of sludge and efficient anaerobic digestion, Dianhai Yang (Tongji University)
- P2-13 Straw-induced carbon dynamics in saline soils: insights from CO₂ emissions to soil organic carbon sequestration, Wenjun Xie (School of Environment and Municipal Engineering)
- P2-14 Construction and technological progress of a comprehensive carbon reduction system for CCUS in the steel industry, Yang Zheng (University of Science and Technology Beijing)
- P2-15 Research on social implementation of lithium-ion batteries (LIBs) detection methods using RFID

tags, Koji Sakakibara (Kyushu University)

P2-16 Process optimization for dissolving hemicellulose from corn bran in dilute acid pretreatment,
Qunhui Wang (University of Science and Technology Beijing)

P2-17 Porous polymethyl methacrylate monolith fabricated without organic solvent for cationic pollutant
removal: A preliminary study, Fumitake Takahashi, (Institute of Science Tokyo)

Closing Session (Middle hall of Aubade Hall)

11:30-11:45 Best Presentation Award Ceremony

11:45-12:00 Closing remarks from the organizers of Japan and China

Technical Visit

12:30 Departure from JR Toyama station (charter bus)

12:30-13:00 Bus Transportation

13:00-14:15 Lunch at Masunosushi museum

14:15-14:45 Bus Transportation

14:45-16:45 Toyama Kankyo Seibi (Waste treatment plant)

16:45-17:15 Bus Transportation

17:15 Arrival at JR Toyama Station

October 30th, 2025

Excursion

08:30 Departure from JR Toyama station (charter bus)

08:30-10:00 Bus Transportation

10:00-11:30 Shirakawa-go

11:30-11:40 Bus Transportation

11:40-12:30 Lunch at Kitanosho

12:30-13:30 Bus Transportation

13:30-14:30 Takayama Jinya

14:30-16:00 Hida Takayama

16:00-16:15 Bus Transportation

16:15 Dismissal at JR Takayama Station, Free

October 31st, 2025

09:00 Departure from JR Takayama Station (charter bus)

09:00-11:30 Bus Transportation

11:30 Dismissal at JR Toyama Station