

12th International Workshop on Decentralized Domestic Wastewater Treatment in Asia Organized by Ministry of the Environment, Government of Japan (MOEJ)

# Testing and evaluation system for decentralized wastewater treatment facilities

13:00 - 17:30 11th November 2024

( Japan Standard Time )

Language: English / Japanese | Venue: Hybrid (JECES & Webinar via Zoom)

Please register from the website link below

https://zoom.us/web inar/register/WN 9h HbrQKkQJ-IXzgEJ2FXLA



In recent years, economic development in Asian countries has led to the rapid construction of In recent years, economic development in Asian countries has led to the rapid construction of sewerage facilities in urban areas and decentralized wastewater treatment facilities in suburban and rural areas, increasing the need for high-performance decentralized wastewater treatment facilities. In some countries, research and development on decentralized wastewater treatment and the production of factory-produced plants are progressing. Product standards and performance evaluation test methods are being formulated and product certification systems are being considered and implemented.

The purpose of this workshop is to share knowledge about systems and test methods related to performance evaluation tests for decentralized wastewater treatment facilities in Asia, organize common issues and specific issues to each country, and discuss measures to resolve these issues, thereby promoting the strong and sound spread of high-performance decentralized wastewater treatment facilities in Asia in the future.

### **PROGRAM**

Moderator Dr. Pierre Flamand, Manager - International Affairs, Japan Sanitation Consortium

**Opening Remarks** 

Mr. Masaki Numata, Director, Office for Promotion of Johkasou, Waste Management Division, Environmental Regeneration and Material Cycles Bureau, MOEJ

Keynote

Value chain and components of decentralized wastewater management

Dr. Yoshitaka Ebie, Prime Senior Researcher, Waste Management Engineering Research Section, Material Cycles Division, National Institute for Environmental Studies (NIES)

#### Presentation

Testing system for decentralized wastewater treatment plants in Thailand

Dr. Thammarat Koottatep, Professor and Co-Director, Global Water & Sanitation Center, Asian Institute of Technology, Thailand

Testing system for decentralized wastewater treatment plants in Indonesia

Dr. Elis Hastuti, Researcher at Directorate of Engineering Development of Human Settlements and Housing, Directorate general of human settlements, Ministry of public works and housing, Indonesia

Japan's Johkasou Performance Evaluation Testing System

Mr. Kentaro Kuwabara, Manager, Testing Laboratory for Wastewater Treatment Tanks, Technical Appraisal Department, The Building Center of Japan (BCJ)

- Progress of decentralized wastewater management in Vietnam and the expected testing system for decentralized wastewater treatment plants
  - Dr. Tran Thi Viet Nga, Professor, Dean, Faculty of Environmental Engineering, Hanoi University of Civil Engineering (HUCE)
- Product Standards and Performance Evaluation Testing system for Decentralized Wastewater Treatment Plants in India
  - Dr. Absar Ahmad Kazmi, Professor, Environmental Engineering, Department of Civil Engineering, Indian Institute of Technology Roorkee
- Performance evaluation test of decentralized wastewater treatment plants in China Dr. Min Yang, Professor, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences

#### Panel Discussion

Theme: Towards the appropriate dissemination of high-performance decentralized wastewater treatment facilities (ex: Johkasou) - Challenges and measures to overcome-

Panelists: Speakers of Presentation Session, Officials from MOEJ, and other invited attendees

Dr. Kiyoshi Kawamura, Former Professor of Graduate School of Science and Engineering, Saitama University Dr. Pierre Flamand, Manager - International Affairs, JSC

**Closing Remarks** 

Mr. Ryoma Sato, Section Chief, Office for Promotion of Johkasou, Waste Management Division, Environmental Regeneration and Material Cycles Bureau, MOEJ

## **KEY PERSONS**



### Dr. Yoshitaka Ebie

Dr. Yoshitaka Ebie is a Prime Senior Researcher in Material Cycles Division at National Institute for Environmental Studies (NIES), Japan. His research fields are wastewater treatment, greenhouse gas emissions and disaster waste management. He is one of the authors of IPCC Guidelines for National Greenhouse Gas Inventories. He is also involved in ISO TC224/WG8 for on-site domestic wastewater services.



#### Dr. Thammarat Koottatep

Prof. Thammarat is widely known for his works on fecal sludge management, sanitation systems, wastewater treatment, and marine plastic pollution. Thammarat has penned 8 books, contributed to over 90 journal papers, and supervised the dissertations of 17 accomplished PhD graduates. His innovations include 34 patents including sanitation technologies and spearheading innovative Master's degree programs at AIT in "Marine Plastics Abatement" and "Inclusive Sanitation".



#### Dr. Elis Hastuti

Dr. Elis is a Researcher of Directorate of Engineering Development of Settlement and Housing, Ministry of Public Works and Housing (Ministry of PUPR) of Indonesia. She has been involved in many sanitation and water management sector in Indonesia such as a Team leader of drinking water and sanitation study, and Teaching staff of Sanitation Training for Local Government, and has more than 26 years experiences. She is also an expert of Indonesia National Standard and contribute to create many type of standard related to the domestic wastewater treatment facilities.



#### Mr. Kentaro Kuwabara

During his student days, he conducted environmental measurements and research on river and sea water and sediments using chemical methods, and then he got a job at a water environment inspection company. He had inspected wastewater treatment facility and analyzed the quality of the effluent and environmental water. He was in charge of analysis and sampling for environmental certification projects, and was also seconded as a researcher for joint research program on improving the environment of lakes and ponds. In 2001, he became a BCJ employee as a staff member of the Johkasou Testing Laboratory, which was established following the revision of the Building Standards Act in 2000, and since then he has been involved more than 23 years at the Johkasou Testing Laboratory, to conduct the test based on the Johkasou performance evaluation method.



### Dr. Tran Thi Viet Nga

Professor Tran Thi Viet Nga is a senior researcher/lecturer and also Dean of Faculty of Environmental Engineering, Hanoi University of Civil Engineering. She holds M.Eng in Environmental Engineering from Asian Institute of Technology (1999) and Ph.D. in Environmental Engineering from the University of Tokyo (2002). She also completed a JSPS postdoctoral program on Environmental and Sustainable Development at United Nation University (2005). Since 2009, she resumed her position in HUCE. The focus of her research is water and wastewater treatment technologies, water pollution control and water-related health risk management. She is author of more than 80 academic papers and books chapters.



#### Dr. Absar Ahmad Kazmi

Professor A. A. Kazmi is currently a Professor in the Department of Civil Engineering at IIT Roorkee. His major research and technological development interests are in advanced wastewater treatment, reuse and solid waste management. He has published over 200 papers in peer-reviewed journals > with an index of 45 and ~7,560 citations. He is a member of several technical committees in various states, ministries, and the National Green Tribunal. He is one of the key committee members of CPHEEO Manuals on Sewerage and Sewage Treatment and Technical Options for Solid and Liquid Waste Management, published by the Ministry of Drinking Water Supply and Sanitation. He has also authored a book on O&M of Sewerage Works jointly published by the Governments of India and Japan. He has been involved with several research and consultancy projects sponsored by the Government of India and international agencies.



He is a world's leading scientist in drinking water research. He has been involved as a vice team leader of the expert team responsible for the national drinking water research program more until 2020, and made a great contributions to the modification of national drinking water standard. He has also been leading the drinking water taste and odor research, and has established the methods for the identification and detection of taste and odor compounds, and developed technologies for the on-site control. These methods and technologies have been applied widely in the drinking water industry. He has also devoted a lot of energy to the identification and control of AMR risks in antibiotic manufacturing wastewater, and has contributed as a lead expert to WHO WASH-AMR Policy Brief (Water, sanitation and hygiene, and Antimicrobial Resistance: Preventing Infection and Preparing for a Post-Antibiotic World).



#### Dr. Kiyoshi Kawamura

He was formerly a Professor, Graduate School of Science and Engineering, Saitama University. Prior to that, he served as a section chief of the waste management division in a research institute of the Ministry of Health and Welfare (now the Ministry of Health, Labor and Welfare), and then as the director of a research institute for the environment in Saitama Prefecture. In these institutes, he had conducted research and teaching, and also contributed to many committee activities at the national and local governments, and the related agencies. Through these experiences, he had made many efforts on the improvement of domestic wastewater management and supporting for the dissemination of johkasou technology world wide. He is one of the pioneers in Japan to contribute to the promotion of the healthy water environment and sanitation system.



#### Dr. Flamand Pierre

He is the Manager of International Affairs at the Japan Sanitation Consortium (JSC). He has over 20 years of experience in sanitation, with particular focus on fecal sludge management. Since joining JSC in 2009, he has been involved in sanitation projects in Viet Nam, Malaysia and Bhutan. He is the co-author of 'Sanitation and Sustainable Development in Japan' (ADB 2016) and 'Accountability Mechanisms for Inclusive City-Level Public Services in Asia' (ADBI 2023). Since 2015, he has been involved in several Working Groups of ISO/TC 224 as an expert representing Japan for the development of international standards. Pierre holds a doctoral degree in regional development studies and is also a visiting researcher at Toyo University in Japan.

## SECRETARIAT CONTACT

Japan Education Center of Environmental Sanitation (JECES) is a secretariat of this Workshop. If you have any questions in advance, please contact Secretariat (shirakawa@jeces.or.jp) via email.



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