

The 5th International Symposium on Sustainable Sanitation
PROGRAM

Day 1 : September 19th

Opening: 10:00 – 11:00

Moderator: Mr. Shigeo Masuda

Opening Address: Professor Mushiake

Key note speech: Professor Funamizu

Session 1: Agriculture 11:00 – 12:00

Moderator: Prof. XIN Qian (Nanjing University)

11:00-11:20 Study on the effect of remains from Bio-Toilet on the growth of Corn
Lianxi Sheng (Northeast Normal University)

11:20-11:40 Characterization of Albizzia Sawdust from Bio toilet and it's Utilization
for Jatropha Planting
Jovita Triastuti (Indonesian Institute of Sciences)

11:40-12:00 Characteristics of sawdust as the matrix for bio-composting in a bio-toilet
and evaluation of its fertility
Xiaochang Wang (Xi'an University of Architecture and Technology)

12:00-12:40 Lunch

Session 2: Evaluation 12:40 – 14:20

Moderator: Prof. Xiaochang Wang (Xi'an University of Architecture and Technology)

12:40-13:00 Life Cycle Assessment of a Decentralized Wastewater Treatment System
with a Composting Toilet—Case Study in Chichibu City—
Naoko Nakagawa (Ochanomizu University)

13:00-13:20 Non-point Source Pollution Control in Taihu Lake Basin with
Composting-type Bio-toilet
Xin QIAN (Nanjing University)

13:40-14:00 Comprehensive evaluation of environmental impacts by installation of
sanitation systems

- Toshiya Aramaki (The University of Tokyo)
- 14:00-14:20 Development of methodological framework for integrated assessment on decentralized sanitation systems
Ngoc Bao Pham (The University of Tokyo)
- 14:20-14:40 Evaluation of potential application of new type sanitation system to a small town
Guangheng Ni (Tsinghua University)

Session 3: Case Study -1 14:40 – 16:00

Moderator: Dr. Masahiro Otaki (Ochanomizu University)

- 14:40-15:00 Practical model of Sustainable Sanitation System for Urban Slum in Bandung
Ken Ushijima (Water Resources Environment Technology Center, Japan)
- 15:00-15:20 Culture Barriers on Introducing Dry Toilet Technology in Indonesia
Neni SINTAWARDANI (Indonesian Institute of Sciences)
- 15:20-15:40 The feasibility of popularizing Bio-Toilet in the rural area of Changchun, China
Chunguang He (Northeast Normal University)
- 15:40-16:00 Tadaharu Ishikawa (Xi'an University of Architecture and Technology)
- 16:00-16:20 Coffee Brake

Session 4: Case Study – 2 16:20 – 17:40

Moderator: Dr. Chunguang He

- 16:20-16:40 Sustainable Sanitation in Households
Katuyoshi Ishizaki (Environment of Hydrology Corporation)
- 16:40-17:00 Development of sustainable sanitation systems to supply and sanitize water in rural and urban areas
MIGUEL ANGEL LÓPEZ ZAVALA
- 17:00-17:20 Ryusei Ito
- 17:20-17:40 Mitsumasa Yokota

Day 2: September 20th

Session 5: Black Water 10:00 – 12:00

Moderator: Prof. Yutaka Sakakibara

- 10:00-10:20 Development of a safety device to prevent falling accidents of infants
Masahiro Takahashi (Hokkaido University)
- 10:20-10:40 Shunji Tanabe
- 10:40-11:00 Application effect and practical problem of composting toilet, installed at facilities concerning dam
Ken Ushijima (Water Resources Environment Technology Center, Japan)
- 11:00-11:20 Model prediction of aerobic biodegradation of human feces in composting toilet with sawdust matrix
Shinya Hotta (Hokkaido University)
- 11:20-11:40 Laboratory study of urea hydrolysis and precipitation for N and P recovery enhanced by activated sludge
LI Zhihua (Xi'an University of Architecture and Technology)
- 11:40-12:00 Bio-Toilet System Using Sawdust as an Artificial Soil Matrix – Characterization of sawdust before and after use and conversion of the used sawdust into multifunctional recyclables –
Minoru Terazawa (Universal Niupu Organization)
- 12:00-12:40 Lunch

Session 6: Gray Water 12:40 – 14:00

Moderator: Prof. Masahiro Takahashi

- 12:40-13:00 Characteristics of kitchen wastewater treatment by slanted soil treatment system using various soils
Chika Tada (Okinawa National College of Technology)
- 13:00-13:20 Slanted Soil Chamber Systems as a Decentralized Gray Water Treatment
Yohitaka Ebie (National Institute for Environmental Studies)
- 13:20-13:40 Effects of Operational Conditions on the Performance of Gray Water Treatment by Slanted Soil Chamber System
Takashi Kondo (National Institute for Environmental Studies)
- 13:40-14:00 Treatment of higher-load graywater using membrane bioreactor

Aileen HUELGAS (Hokkaido University)

14:00-14:20 Coffee Break

Session 7: Micro-pollutants, Pathogens and their risk 14:20 – 15:40

Moderator: Dr. Toshiya Aramaki

14:20-14:40 A Mathematical Model for Electrochemical Treatment of Trace
Environmental Pollutants

Yutaka Sakakibara (WASEDA UNIVERSITY)

14:40-15:00 Electrolytic Treatment of Trace Toxic Substances in Raw and Synthetic
Urines

Taiki Ono (WASEDA UNIVERSITY)

15:00-15:20 Effect of pH and temperature on the treatment of pharmaceuticals in
composting toilet

Takashi Kakimoto (Center for Environmental Science in Saitama)

15:20-15:40 Development of Simultaneous Analysis of Pharmaceuticals in Bio-Toilet
Compost

Yu Onoda (IDEA Consultants, Inc)

15:40-16:00 Coffee Break

Session 8: 16:00 – 17:00

Moderator: Guangheng Ni (Tsinghua University)

16:00-16:20 Risk assessment of waste water and composting toilet matrix
Hiroko Isoda (University of Tsukuba)

16:20-16:40 Hygienic Risk Assessment and Control in Using Composting Toilet
Masahiro Otaki (Ochanomizu University)

16:40-17:00 Microbial characteristics and biodegradation of organics in a bio-toilet
Xiaochang Wang (Xi'an University of Architecture and Technology)

Closing: 17:00 – 17:10

Closing remark: Prof.Funamizu