

The 1st International Symposium for Water-Energy-Food Nexus in Wastewater Reclamation & Reuse

July 25th, 2023

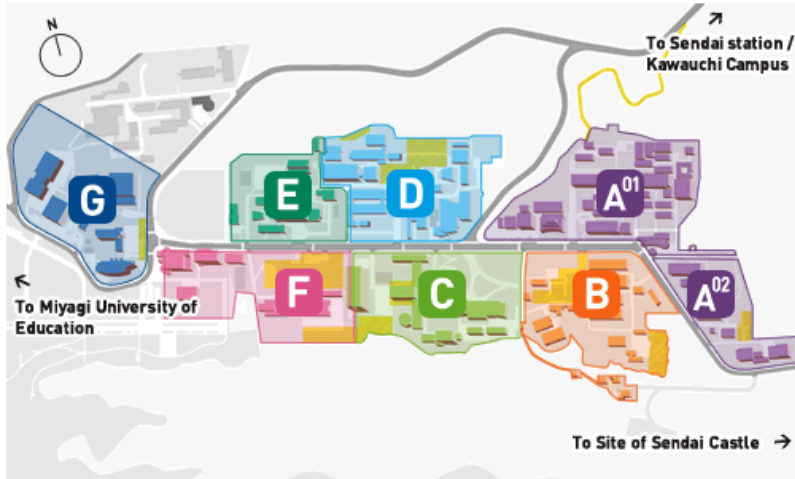
**Department of Civil and Environmental Engineering
Graduate School of Engineering, Tohoku University**

**School of Environment and Municipal Engineering
Xi'an University of Architecture and Technology**



VENUE

Graduate School of Engineering, Aobayama campus, Tohoku University
Aoba 6-6-06, Aramaki, Aoba-ku, Sendai, Miyagi 980-8579, Japan



- A⁰¹** Mechanical and Aerospace Engineering
- A⁰²** Quantum Science and Energy Engineering
- B** Materials Science and Engineering
- C** Center Square
- D** Electrical Engineering and Applied Physics
- E** Applied Chemistry, Chemical Engineering and Biomolecular Engineering
- F** Civil Engineering and Architecture
- G** Various Area

10:00~12:00

Lab visiting & communication

Room 305, Bldg of Civil Eng. & Architecture Education & Research

[F01] 人間・環境教育研究棟 305室



13:00~17:30

Lectures & presentations

3F Meeting Room, Bldg of Laboratory for Rare Metal Research

[J02] レアメタル総合棟 3階会議室



18:00~20:00

Networking Dinner

Four Seasons Dining, Engineering Laboratory Complex Building

[C10] 総合研究棟 1階 四季彩



PROGRAM

Date & Time: 13:00~17:30, July 25th 2023.

Place: 3F Meeting Room, Laboratory of Rare Metals Research

13:00-13:10 **Opening remarks by Prof. Daisuke SANO**

13:10-13:50 **Prof. Chen RONG, Xi'an University of Architecture & Technology**
Anaerobic wastewater treatment and resource recovery - the introduction of ER Team
in XAUAT

13:50-14:10 **Gaojun WANG, Xi'an University of Architecture & Technology**
Biochar-assisted anaerobic digestion: Principle, application, and outlook

14:10-14:30 **Yuan YANG, Xi'an University of Architecture & Technology**
Integrating membrane filtration with anaerobic digestion for efficient organic carbon
capture and methane production from low-strength wastewater.

14:30-14:50 **Panlong LV, Xi'an University of Architecture & Technology**
Simultaneous nitrogen removal and methane mitigation in coupling DAMO and
Anammox

14:50-15:10 **Bei ZANG, Xi'an University of Architecture & Technology**
Interface behavior and removal mechanisms of pathogenic viruses in anaerobic
membrane bioreactor

(Coffee Break)

15:30-16:10 **Prof. Daisuke SANO, Tohoku University**
Development of soft sensor technology for real-time monitoring of virus removal
efficiency in wastewater reclamation processes

16:10-16:30 **Tianjie WANG, Tohoku University**
Predictive modeling based on artificial neural networks for membrane fouling in an
anaerobic membrane bioreactor for treating municipal wastewater

16:30-16:50 **Guangze GUO, Tohoku University**
Enhanced methane production and nutrient removal by the Integration of high-solid
AnMBR and one-stage PNA process treating concentrated Johkasou sludge

16:50-17:10 **Aken Puti WANGUYUN, Tohoku University**
Chlorine disinfection and population genetics of murine norovirus

17:10-17:30 **Shun TAKAYAMA, Tohoku University**
Quantitative microbial risk assessment for pathogenic bacteria via hydroponically
grown vegetable

17:30-17:35 **Closing remarks by Prof. Yu-You LI**

PARTICIPANTS

Xi'an University of Architecture & Technology

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Prof. Qian LI

Gaojun WANG

Yuan YANG

Panlong LV

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