

## Regional Environment and Sustainable Development (RESD) program

**Topic: Environmental Protection and Sustainable** 

**Development** 

Term: 2025/7/2-14.

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# REGIONAL ENVIRONMENT AND SUSTAINABLE DEVELOPMENT CERTIFICATE PROGRAM Since 2008

- ❖ The RESD is an international certificate program designed to allow highly scientific skilled PhD students to pursue advanced training in environmental science, engineering and management while simultaneously developing workplace skills at international institution and having deep field study experience for the future world.
- ❖ The RESD Program consist of several times of Asian field study cross-training in the complicated environmental issues, interdisciplinary area, along with a professional component that may include advanced training in management, and giving solutions.
- ❖ All have been developed to train Asian international leaders to act positively to environment and society based on Asian based concept of Environmental studies. The RESD Program will find future environmental leaders for sustainable Asia.

## **RESD TOPICS**

Year	Topic
2014	Resource Recovery of Urban Wastes
2015	Water Shortage: Challenges and Solutions - Reclamation,
	Desalination and Transportation
2016	Biotechnologies for water treatment
2017	Air pollution control
2018	Green energy from waste
2019	Advanced materials for environmental applications
2023	Carbon neutrality and sustainable development
2024	Sustainable Urban Water System
2025	Environmental Protection & Sustainable Development

## Participents of RESD PROGRAM-2025



### **Activities and Site Visits**

#### July 2-5th Tsinghua University

- Lab visits
- Temple of Heaven
- Segway-Ninebot Company

#### July 5-8th Tongji University

- City tour
- Shanghai Museum (East)
- World Skills Museum
- Lab Visits

#### **July 8th Soka University**

- Water Treatment (RD lab)
  - Prof. Tatsuki Toda (Explained by Dr. Ebot)
- Soil Science/ Biochar Lab(SATREPS-EARTH Project)

Prof. Shinjiro Sato

#### **July 9th Tokyo Institute of Technology**

• Applications of Plasma in contact with liquid

Assoc. Prof. Nozomi Takeuchi

#### **July 9-10th Kanazawa University**

- Venture Business Laboratory (VBL)
- Enironment and Power Enginnering Lab
- Biomass Green Innovation Center (BGIC)
- Water treatment related laboratory
- Old waste liquid treatment equipment at Environmental Conservation Center
- Higashi Chaya District
- Kenroku-en Garden and Kanazawa Castle
- 21th Century Museum of Contempora

### Lectures

#### July 2-5th Tsinghua University

- Prof. Weenjia Cai
   Climate Change, Climate Action and Human
   Health
- 2. Prof. Kebin He
  Synergic pathways of China's carbon neutrality
  and clean air

#### **July 9th United Nations University**

1. Yoko Tomita

Introduction United Nations University of Institute of Advanced Sustainability Operating Unit Ishikawa-Kanazawa(UNU-IAS OUIK)

#### July 5-8th Tongji University

- 1. Prof. Zong Huang
  - Climate Tech, Resilient City, Sustainable Finance
- 2. Mr. Hao Lv

Introduction of UNEP and IESD

- 3. Mr. Daniel Manaye
  Vanadium Redox Flow Batteries (VRFBs)
- 4. Prof. Muhe Diao

Interactions between microorganisms and oxic-anoxic transitions

#### July 9-10th Kanazawa University

1. Prof. Tatsuo Ishijima

Development of Environmentallyfriendly Photoresist of Film Removal Process using Microwave Excited Water Vapor Plasma for Semiconductor Fabrication

2. RESD participants introduce yourselve and research work

## Conclusion

**Company Visits**: Gained valuable insights into their advanced personal transportation devices and cutting-edge robotics technology.

**Institute Visits**: Explored the potential of plasma-liquid interactions for applications in water treatment and chemical synthesis.

**Lectures**: Engaged in informative lectures on diverse sustainability topics, including climate action, carbon neutrality, resilient cities, sustainable finance, microbial interactions, and ecofriendly plasma technologies for semiconductor fabrication.

**International Travel**: Visited China for the first time, enjoying the exchange of culture and food.

**Team Research**: Collaborated with colleagues from China, Korea, and Japan on interdisciplinary environmental protection and sustainable development.



















## Thank You for Listening