

The 122nd GIST Seminar

(The 12th GIST-DX Seminar)

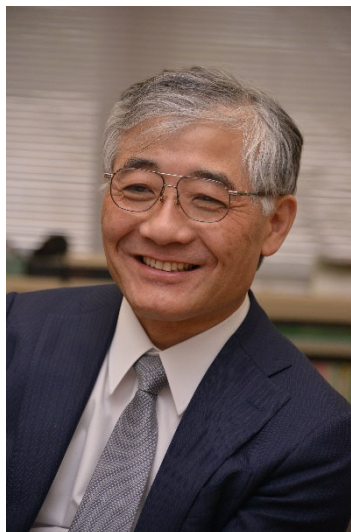
River Basin Disaster Resilience and Sustainability by All

- A typical practice of the Society 5.0

Speaker:

KOIKE, Toshio

**Executive Director, International Centre for Water Hazard and Risk
Management (ICHARM), Public Works Research Institute (PWRI)**



- ◆ **Date:** 18:30-20:00, September 14, 2023 (18:00 Open)
- ◆ **Venue:** 5th Floor, Lecture Room M, GRIPS
7-22-1 Roppongi, Minato-ku, Tokyo
<http://www.grips.ac.jp/en/about/access/>
- ◆ **Organizer:** GRIPS Innovation, Science and Technology Policy Program (GIST)
- ◆ **Language:** English (No Interpreter)
- ◆ **Outline**

As human emissions of greenhouse gases increase, unprecedented heavy precipitation events are occurring more frequently and more widely. The IPCC's Sixth Assessment Report, published in 2021, states that "it is unequivocal that human influence has warmed the atmosphere, ocean, and land" and that "extreme daily precipitation events are projected to intensify by about 7% for each 1 °C of global warming".

In Japan, a method has been established using datasets obtained by combining the large-scale ensemble climate projection and dynamic downscaling to obtain rainfall change rates for extreme rainfall, which are then multiplied by the design rainfall to modify flood control plans. As a new flood management policy capable of responding to this change, "River Basin Disaster Resilience and Sustainability by All" are currently being implemented. In addition to further accelerating measures taken by river administrators in river areas, this new policy aims to improve rainwater retention functions in catchment areas, reduce flood-prone areas, and promote damage mitigation and rapid restoration/rehabilitation measures, thereby making society more resilient to external forces that are greater than planned. This policy aims to minimize damage and create a sustainable community, which requires the cooperation of all stakeholders in the watershed.

◆ **Speaker's Short bio**

Toshio Koike is Executive Director of International Centre for Water Hazard and Risk Management (ICHARM) under the auspices of UNESCO, Professor Emeritus of the University of Tokyo, Council Member of the Science Council of Japan, Cabinet Office, and Chair of the River Council of Japan. While leading the development of the Data Integration and Analysis System (DIAS) for the integrated use of Earth observation data and conducting research on the observation and prediction of the water cycle from the river basin to the global scale, he has also contributed to consensus building practices related to river projects based on his research on psychological processes. Some of the prominent awards he has won recently include the following: "Award for Contribution to the IPCC NOBEL Peace Prize" from WMO and UNEP" in 2008, "Science Award" from the Japan Society of Hydrology and Water Resources in 2015, "Friendship Award" from the Government of China in 2019, "Individual Excellence Award" from the Group on Earth Observations (GEO) in 2020, and "AGU Ambassador Award" from the American Geophysical Union in 2022.

◆ **Moderator**

Kenzo Hiroki (Professor, GRIPS)

◆ **Program**

18:30-18:35	Introduction by Moderator
18:35-19:35	Presentation by Speaker
19:35-20:00	Open discussion and close

◆ **Registration**

Please register at this registration form (<https://forms.gle/Ua8C2JaM6JSKtovk6>) by

17:00, September 12 (Tue.). Due to the venue, the number of participants will be limited to 70 on a first-come, first-served basis.

If you cannot open the form, please send email to GIST Secretariat, gist-ml@grips.ac.jp.

Registration email must include: 1) your name, 2) institution, 3) position, and 4) e-mail address.