IAHR Xi'an University of Technology Young Professionals Network

2024 Annual Report of Activities

IAHR YPN

Young Professionals Network

Hosted by
Spain Water and IWHR, China

1. Our vision and mission

[A brief text about the YPN, its vision and main objectives. This text will be included in your YPN webpage. Check your page at: https://www.iahr.org/index/ypn]

IAHR Xi'an University of Technology Young Professionals Network (IAHR-XUT-YPN) is an academic organization composed of youth members, which was officially established on June 5, 2018. It is the ninth university in China to establish YPN. The number of registered members has reached 58, mainly PhD and master students and teachers from the Xi'an University of Technology, and the majors included are mainly hydraulics and river dynamics, hydrology and water resources, environmental engineering, etc. The establishment of the IAHR-XUT-YPN has received great attention and support from Xi'an University of Technology, which has also provided convenient conditions for the development of the association. With the international communication platform of IAHR, we make reasonable use of our technical and scientific research advantages, uphold and carry forward the scientific research spirit of Xi'an University of Technology, pay close attention to the scientific and practical problems of prospective and fundamental nature in the development of water resources and environmental engineering, and carry out various activities extensively, such as: holding academic lectures and academic salons; carrying out lectures of the doctoral supervisors and outdoor large scale water resources engineering investigation and practice; actively participate in domestic and international conferences, as well as interaction with other universities, and research institutes to fully promote the exchange and discussion of association members in the field of water resources engineering, civil engineering and other disciplines.

2. Main goals and key objectives in 2024

1. Active Involvement in Guiding Undergraduate Students

In 2024, the IAHR-YPN organization continued to strengthen its engagement with undergraduate students, particularly in areas such as undergraduate thesis guidance and professional knowledge training. By organizing specialized

lectures, academic exchanges, and practical guidance, we aimed to enhance undergraduates' professional skills, foster their interest in the field of hydrodynamics and water resources engineering, and encourage innovative thinking. Through guiding undergraduate theses, we improved students' practical abilities and provided them with real-world project experience.

2. Organizing Professional Skills Training Sessions

In 2024, IAHR-YPN hosted several professional skills training sessions targeted at graduate students. Experienced PhD candidates were invited to share their expertise in using various professional software, including SWMM, GIS, Paraview, and more, with a focus on hydrodynamic and urban stormwater modeling. Additionally, training on academic paper search, download, and management was conducted to help graduate students improve their efficiency in utilizing academic resources and enhance their research capabilities.

3. Hosting the 7th China-Japan-Korea Water Science Forum - 2024 Seminar on Flood Simulation and Management

In 2024, IAHR-YPN successfully hosted the 7th China-Japan-Korea Water Science Forum - 2024 Seminar on Flood Simulation and Management. The seminar invited numerous domestic and international experts and scholars in the field of water resources to present their research on the latest advancements in flood simulation and management. By organizing this international academic event, we not only increased the organization's academic influence but also provided an excellent opportunity for members to engage in academic exchanges with leading professionals in the field.

4. Active Participation in YPN's Online and Offline Activities

In 2024, IAHR-YPN actively participated in various online meetings and offline exchange events organized by YPN. These platforms allowed members to stay updated on the latest developments in the global water resources field and provided a space for cross-regional experience sharing and problem-solving discussions. These activities strengthened our collaboration with other YPN

organizations and promoted knowledge sharing and technical exchange among members.

3. Activities in 2024

潘鑫鑫、官保君

Activity 1

The 2024 Tsinghua University "Theory of Governance and Water" and the Third International Young Scholars Forum of the International Association for Hydro-Environment Engineering.

Date/s

13-14 April 2024

Venue

Tsinghua University

Objectives

Strengthen academic exchange and communication cooperation between sister institutions in the fields of hydraulic and environmental engineering, promote interdisciplinary integration, enhance graduate students' awareness of innovation, and improve their innovation capabilities.

Description

This forum provided a platform for participants to exchange academic ideas, share research experiences, and strengthen mutual friendships,

	while exploring cutting-edge issues in the development of water science and water environmental engineering. The event offered a rich and rewarding experience for all attendees.

Activity 2

 	The First Forum on Hydrological Process Variability Simulation and Regulation **Date/s** 26-29 April 2024 **Venue** Shenzhen **Objectives** In response to extreme weather events caused by climate change, observing, simulating, and attributing changes in hydrological and related surface processes, along with implementing regulation measures, has become an urgent task and a cutting-edge research focus both domestically and internationally. **Description** To address extreme weather events caused by climate change, it is crucial to observe, simulate, and analyze changes in hydrological and surface processes. Developing regulation measures has become an urgent task.

	This issue is a key focus of both domestic and international research.

Activity 3

 	15th International Conference on Hydroinformatics **Date/s** 27-30 May 2024 **Venue** Beijing **Objectives** "From Natural to Digital Water: Challenges and Opportunities" covers six subtopics, including monitoring, modeling, big data, digital twins, climate adaptation, and digital water management. The goal is to advance water information technology and its practical applications. **Description** Experts and scholars from around the world gathered to discuss digital twin water infrastructure and water information technology through talks, exhibitions, and field visits, promoting technology development and application. They engaged in learning and discussions with other experts and scholars at the conference.

Activity 4

Seminar on Flood Modelling and Environmental Flows

Date/s

15-21 August 2024

Venue

Berlin, Germany

Objectives

To discuss the latest developments in flood modeling methods and sustainable development strategies for the ecological environment, in order to reduce disaster risks, enhance disaster resilience, and improve sustainable water resource management levels.

Description

The attendees had academic exchanges with relevant experts and researchers, comprehensively exploring the latest developments in flood modeling methods and sustainable development strategies for the ecological environment.

Activity 5

The 11th National Conference on Hydraulics and Hydraulic Informatics

Date/s

7-9 November 2024

Venue

Guangzhou, Guangdong Province

Objectives

The conference will exchange and discuss key and difficult issues, industry development plans, project application requirements, advanced hot technologies, etc. in the field of hydraulics and water conservancy informatics

Description

The attendees had academic exchanges with relevant experts and researchers, comprehensively exploring the latest technological products and technologies in the fields of hydraulics and hydraulic informatics.

Activity 6

The 7th China-Japan-Korea Water Science Forum - Flood Simulation and Management 2024

Date/s

22 November 2024

Venue

Xi'an, Shaanxi Province

Objectives

The meeting will discuss key research and application challenges in simulating urban and river flooding processes and disaster management, exchange experiences and ideas, and seek future cooperation opportunities

Description

	The attendees discussed various aspects of flood modeling and management with other experts and researchers, including modeling, prediction, and warning technologies; The application of artificial intelligence in flood modeling and management; The impact of constantly changing global risks on floods; Composite flood disaster; Sustainable methods for flood risk management; Lessons learned from recent flood disasters, etc.

4. Partnerships and collaborations

4.1. Partnerships

Organisation	Description of partnership
Tsinghua University	Conduct academic exchanges
Sun Yat-sen University	Conduct academic exchanges
IAHR	Conduct academic exchanges
Technische Universität Berlin	Conduct academic exchanges
China Society for Hydropower Engineering; IAHR China Chapter	Conduct academic exchanges
Xi'an University of technology; Jilin University; Japan Kumamoto University	Conduct academic exchanges

4.2. Collaboration with other YPNs

Participated in the 2024 Tsinghua University "Governance and Water Theory" and the 3rd International Young Scholars Forum of the International Water Environment Engineering Association.

The 2024 Tsinghua University "Theory of Governance and Water" and the Third International Young Scholars Forum of the International Association for Hydro-Environment Engineering.

Date/s

13-14 April 2024

Venue

Tsinghua University

Objectives

Strengthen academic exchange and communication cooperation between sister institutions in the fields of hydraulic and environmental engineering,

	promote interdisciplinary integration, enhance graduate students' awareness of innovation, and improve their innovation capabilities.
	Description This forum provided a platform for participants to exchange academic ideas, share research experiences, and strengthen mutual friendships, while exploring cutting-edge issues in the development of water science and water environmental engineering. The event offered a rich and rewarding experience for all attendees.

5. Communication channels

Website: [External website if any]

Facebook:

Twitter:

Instagram:

Linkedin:

Newsletter/s:

WeChat Official Account: 水模拟及灾害管理研究中心