IAHR Tsinghua University Young Professionals Network

2023 Annual Report of Activities

IAHR YPN

Young Professionals Network

Hosted by
Spain Water and IWHR, China

1. Our vision and mission

The IAHR Tsinghua University YPN was established in 2015 and is an organisation of students and young professors from Tsinghua University working in fields related to hydro-environmental sciences. Our goal is to provide a platform for members to communicate with other researchers worldwide.

2. Main goals and key objectives in 2023

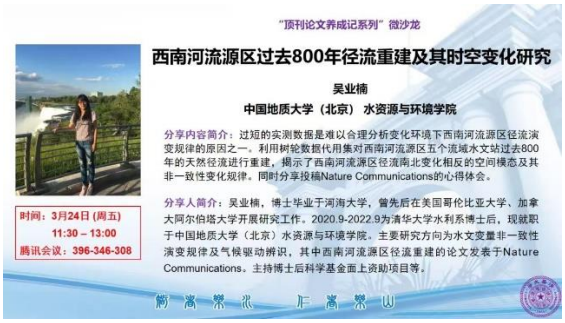
The main goal of the Tsinghua YPN is to provide a variety of online and offline communication opportunities to excellent scholars for our members and carry out some offline activities under an appropriate condition.

3. Activities in 2023

Activity 1

	Underwater intelligent equipment and integrated marine engineering solutions
	Date/s 3 March 2023
	Venue Beijing, China
	Objectives *Introducing advances in underwater intelligent equipment.*
	Description We invited an engineer to introduce edge-cutting underwater intelligent equipment and integrated marine engineering solutions.

Activity 2



	Study on the reconstruction of runoff and its spatiotemporal changes in the southwestern river source area in the past 800 years
	Date/s 24 March 2023
	Venue Beijing, China. Accessible online.
	Objectives *Advances in hydroscience*
	Description The tree-ring data proxy set was used to reconstruct the natural runoff from five basin hydrological stations in the southwestern river source area over the past 800 years, revealing the opposite spatial pattern of north-south runoff changes in the southwestern river source area and its inconsistent change patterns. She also shared experience in publishing a paper in Nature Communications.

Activity 3

	Multiscale, multiphase modeling of debris flow and its mitigation
	Date/s 4 April 2023
	Venue Beijing, China. Accessible online.

Objectives

Advances in hydroscience

Description

Professor Zhao explained the background of his research in terms of the composition, movement characteristics, and hazards of debris flows, focusing on the role of flexible protective nets in the prevention and control of debris flows.

Activity 4

Inversion and prediction of terrestrial water reserves in the Tibetan Plateau

Date/s

13 April 2023

Venue

Beijing, China. Accessible online.

Objectives

Delivering opportunities for professional development

Description

Li introduced her study by proposing a water storage inversion and prediction method coupled with multi-source information. She also shared her experience in submitting to *Nature Climate Change*.

Activity 5

Eight issues for high-quality development of Three Gorges.

Date/s

12 May 2023

Venue

Beijing, China.

Objectives

Raising awareness about water issues

Description

Professor Zhang introduced eight significant issues for the high-quality development of Three Gorges.

Activity 6

Sharing experiences of studying abroad

Date/s

25 May 2023

Venue

Beijing, China

Objectives

Delivering opportunities for professional development

Description

Five students shared their experiences abroad about how to

	adapt to a new environment, how to get over difficulties in language, how to communicate with people from different culture, how to find strategies for travelling, etc.

Activity 7

	Hydroinformatics for water management at the catchment scale: challenges & and operational solutions
	Date/s 16 June 2023
	Venue Beijing, China. Accessible online.
	Objectives *Raising awareness about water issues*
	Description Prof. Philippe gave a lecture about energy allocation and water management at the catchment scale.

Activity 8

	The 40th IAHR World Congress
	Date/s

21-25 August 2023

Venue

Vienna, Austria.

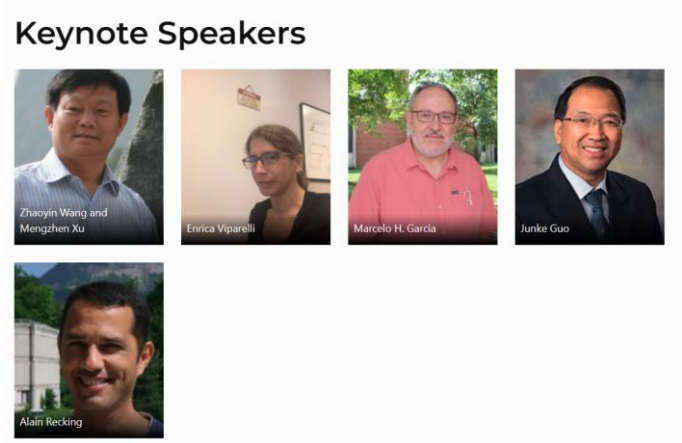
Objectives

Advances in hydroscience

Description

A congress about “Rivers – connecting mountains and coasts”.

Activity 9



ISRS2023 (15th International Symposium on River Sedimentation)

Date/s

5-8 September 2023

Venue

Florence, Italy.

Objectives

Advances in hydroscience

Description

Theme: Sustainable Sediment Management in a Changing Environment.

Activity 10

Hydro- and morphodynamics of turbidity currents induced by river inflows into lakes

Date/s

19 September 2023

Venue

Beijing, China. Accessible online.

Objectives

Raising awareness about water issues

Description

Prof. Blanckaert introduced the phenomenon of hyperpycnal flow in river and lake systems, its hydrodynamic characteristics, and the resulting topographic and landform evolution characteristics.

Activity 11

RCEM2023 (13th Symposium on River, Coastal, and Estuarine Morphodynamics)

Date/s

25-28 September 2023

Venue

Illinois, USA.

Objectives

Advances in hydroscience

Description

Symposium on River, Coastal, and Estuarine.

4. Partnerships and collaborations

4.1. Partnerships

[Please include a list of partner organisation/s and a description of the partnership]

4.2. Collaboration with other YPNs

[Please include other YPNs name and a brief description of the collaboration]

5. Communication channels

Website: https://www.iahr.org/index/committe/48