



The 3rd
International Forum on
**Water Security &
Sustainability**

One of
The ESTDS Forums sponsored by
The Chinese Academy of Engineering
(Yangtze Conservation and Green
Development Forum)

Nanjing, China
21 - 24 April 2021

2nd Announcement

Feb 2021



Background

Water lies at the heart of life and well-being, yet it is a finite resource which is quickly outpaced by the global demand in rapid growth. The UN SDG 6 aims at "availability and sustainable management of water and sanitation for all", prioritising the importance of water security and sustainability in the societal and environmental welfare. However, such welfare is challenged by the current water availability. On a global scale, more than two billion people live in countries experiencing high water stress. In China, 30% of its land area is suffering from high or extremely high water stress. About two thirds of Chinese cities are having problems sustaining sufficient water supply. Therefore properly managed water has a major stake in the future.

Global changes are bringing immensely profound impacts to the earth system and hence the future. Under a warming climate, extreme events like floods and droughts are staged at an increased intensity and frequency. The rising sea level poses major threat of coastal flooding, and impacts estuary systems drastically. These changes also stagger the ecological systems with symptoms such as biodiversity loss and rapid degradation. The success and resilience of water management is highly dependant on our technical innovations and institutional capacities. We need to change our ways of thinking, living and managing to adapt to such global changes.

In 2015 and 2017, two Forums on water security and sustainability have been held in Nanjing, attracting attention of researchers both in China and around the world. Hence, YICODE, HHU and NHRI, sponsored by the Chinese Academy of Engineering, are proudly announcing the 3rd Forum of the series in 2020 to continue our discussion on water security and sustainability. We sincerely hope this could provide an open, frank, productive and multi-disciplinary forum for researchers and practitioners in the field. Researchers and practitioners around the globe are welcome to take part in the two-day discussion from cross-cutting perspectives.





ESTDS Forums

This Forum is one of the International Top-level Forums on Engineering Science and Technology Development Strategy (ESTDS) sponsored by the Chinese Academy of Engineering. The ESTDS Forums were conceived in 2011 when the Academy started to vision the future of engineering in the upcoming 20 years and even further through strategic discussions and studies. ESTDS Forums are best-known for their inter-disciplinary and international ways of thinking. They try to break disciplinary boundaries for synergy in innovation and bridge the physical distances between world's leading experts for international cooperation. ESTDS Forums focus on themes that are macro-scale, strategically significant, and forward-looking.

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Yangtze Conservation & Green Development Forum

The Yangtze River is one of China's economic axles. The Yangtze Economic Belt, covering 11 provinces, accounts only less than one quarter of the country's territory but more than 40% of its population and economy. However, development demands in the past for a long time drain the region for natural resources and therefore bring about many environmental and ecological problems, challenging the region's sustainability. Under global changes such as the warming climate, the Yangtze Basin and the Economic Belt faces more uncertainties and challenges. The Forum will be a indepth discussion on these problems and solutions

Theme

- Water Security and Sustainability

Topics

- **Integrated River Basin Management**, including but not limited to river basin sustainability, institutions, eco-compensation, modern water governance
- **Climate Change and Risks**, including but not limited to climate change and projections, extreme climatic events, scenarios and uncertainties, climate impacts and adaptation, flood risk management, urban flooding
- **Aquatic ecology and water engineering**, including but not limited to aquatic environment and ecology, eco-friendly water engineering, river and lake health assessment, resilience of water infrastructures
- **Water resources protection and development**, including but not limited to high efficiency water use, water saving, water allocation, unconventional water sources and risk control, groundwater protection and development



Organisations

Sponsors

- Chinese Academy of Engineering
- Hohai University
- Nanjing Hydraulic Research Institute
- Chinese Hydraulic Engineering Society
- China Three Gorges Corporation
- Jiangsu Development and Reform Commission (Yangtze Economic Belt Development Office)

Hosts

- Yangtze Institute for Conservation and Development
- CAE Division of Civil, Hydraulic and Architectural Engineering
- State Key Laboratory of Hydrology-Water Resources and Hydraulic Engineering
- International Joint Research Center of Water Science and Engineering
- MWR Research Center for Climate Change
- State Key Lab of High-Performance Civil Engineering Materials
- National Engineering Research Center of Water Resources Efficient Utilization and Engineering Safety

Partners

- UNESCO-IHP
- IAHS
- IAHR
- Key Lab of Water Science and Hydraulic Engineering of MWR
- Key Lab of Failure Mechanism and Safety Control Techniques of Earth-rock Dam of MWR
- International Joint Lab of Global Changes and Water Circle, Ministry of Education

* This list is to be updated further



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Time & Venue

The Forum will take place from 21 - 24 April 2021 at the International Conference Center of Hohai University (Junheng Hotel).

- Address: 1 Xikang Road, Gulou District, Nanjing, China
- Phone: +86-(0)25-69627788



Programmes

The overall programmes of the Forum are:

- 21 April: Registration
- 22 April: Opening, Plenary Session
- 23 April: Plenary Session, Parallel Sessions
- 24 April: Technical Tour

More details about the programme are available on the official website of the Forum. Please stay tuned.

Parallel Sessions

The Parallel Sessions are going to be organised by:

- Integrated River Basin Management: Junguo Liu, Ke Zhang
- Climate Change & Risks: Zhongbo Yu, Guoqing Wang
- Aquatic Ecology & Water Engineering: Qiuwen Chen, Zulin Hua
- Water resources protection and development: Chunmiao Zheng, Chunhui Lu

Facilitation

To cope with the COVID pandemic, the Forum will be convened both online and in-person. All sessions (unless other wisely noted) will be live-streamed online to interact with global audience. The Opening and Plenary Session will be working under both English and Chinese languages with simultaneous interpretation. Parallel Sessions will be in English only.



Registration

To comply with disease control rules, participations are required to register to take part in the Forum depending on the way they choose to join the discussions.

- Joining the discussions online will be free of charge and participants will only need to register with required brief information.
- Participants who choose to take part in person will be required to register beforehand, and the charges are:

<p>Early Birds</p> <p>2450 RMB</p> <p>350 USD</p> <p>2021/3/1-21</p>	<p>General</p> <p>3500 RMB</p> <p>500 USD</p> <p>2021/3/22-</p>
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Participants who are enrolled students will be eligible for our special discounted registration charges:

<p>Early Birds</p> <p>1000 RMB</p> <p>140 USD</p> <p>2021/3/1-21</p>	<p>General</p> <p>1500 RMB</p> <p>200 USD</p> <p>2021/3/22-</p>
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