XVIII World Water Congress

Water for All:
Harmony between Humans and Nature

11–15 September 2023, Beijing, China

Hosted by
International Water Resources Association (IWRA)
Ministry of Water Resources of the People's Republic of China (MWR)

Organised by
General Institute of Water Resources and Hydropower Planning and Design, MWR
China National Committee of IWRA

www.worldwatercongress.com
congress@iwra.org
+33-6-44-00-07-93

IWRA Executive Office
21, rue de Madrid 75006 Paris, France
+33-6-44-00-07-93
congress@iwra.org
www.iwra.org
It gives me great honour that the XVIII World Water Congress will be held in Beijing. On behalf of the Ministry of Water Resources of the People’s Republic of China, the co-host of the Congress, I wish to extend a sincere welcome to leading experts, researchers, decision-makers, and professionals from all over the world to participate in the Congress, exchanging experiences and sharing achievements regarding a wide range of topics related to water.

Water is the essence of the earth, the foundation of humanity and the source of civilization. With rapid population growth and economic and social development, issues regarding water resources have become increasingly prominent. At present, a large population in the world lives in water-scarce areas or even has no access to clean drinking water. The increasing effects arising from global climate change and the frequent occurrence of extreme weather events such as floods, droughts, and other natural disasters have posed severe challenges to global water security. In response to these problems, the United Nations has called for global action to share advanced development concepts and technologies in the field of water resources and to take energy-saving, environmental protection, and eco-friendly comprehensive measures to achieve the water-related goals of the UN 2030 Agenda for Sustainable Development.

The Chinese nation has an outstanding heritage of water management, echoing through the 5000 years of Chinese civilization. From the Emperor Yu’s combat against the floods, the Dujiangyan Irrigation System and the Beijing-Hangzhou Grand Canal, to the Three Gorges Reservoir and the South-to-North Water Diversion Project, all of them have demonstrated the wisdom of the Chinese nation in flood control, water conservation, and utilisation from ancient to modern times. In the face of global water security challenges, China adheres to the new development philosophy of innovation, coordination, green, open, and sharing. We thoroughly implement the water governance philosophy of “prioritising water conservation, balancing spatial distribution, taking systematic approaches, and giving full play to the roles of both government and market”, and integrate this approach in the mitigation of floods and droughts disasters, optimisation of water resources allocation, protection of ecosystems and improvement of water environment. In this way, China has safeguarded the water use for nearly 20% of the world’s population with 6% of the world’s freshwater resources, making a great contribution to the realisation of the 2030 UN Sustainable Development Goals and the vision of jointly building a community with harmony between humans and nature.

The XVIII World Water Congress is under the theme of “Water for All: Harmony between Humans and Nature”. We cordially welcome you to join us at the XVIII World Water Congress, to have dialogues on better scientific policies and solutions, and to contribute to an exciting and inspiring water event.

I look forward to seeing you in Beijing!
THE XVIII WORLD WATER CONGRESS

The XVIII World Water Congress will take place in Beijing, China, from 11 to 15 September 2023. With the theme of “Water for All: Harmony between Humans and Nature”, the XVIII World Water Congress will facilitate knowledge and experience sharing, focusing on investigating the relationship between water, humans and nature, identifying and reconciling all water-related factors in a coordinated manner, and making and implementing water management strategies and policies using systematic approaches.

CONGRESS THEME AND SUB-THEMES

Water for All: Harmony between Humans and Nature

Water is for all, including humans and nature. As a precious natural resource, water plays a vital role in meeting human needs, preserving the environment and developing our countries. With the theme of “Water for All: Harmony between Humans and Nature”, the XVIII World Water Congress aims to promote coordination and balance between the water needs of humans and nature and facilitate knowledge and experience sharing in the field of water.

View more details of the sub-themes through the official website.

Theme

Water for All: Harmony between Humans and Nature

Sub-themes


Promoting Water Efficiency Productivity and Services

Innovation for Water Governance and Management

Building Resilience for Disaster Prevention and Mitigation

Establishing Sustainable Water Infrastructures

Supporting Aquatic Ecosystem Health and Functions

Congress Overview

<table>
<thead>
<tr>
<th>Title</th>
<th>IWRA’s XVIII World Water Congress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme</td>
<td>Water for All: Harmony between Humans and Nature</td>
</tr>
<tr>
<td>Date</td>
<td>11–15 September 2023</td>
</tr>
<tr>
<td>Venue</td>
<td>GUOCE, Beijing, China</td>
</tr>
<tr>
<td>Scale</td>
<td>More than 1,000 water experts and professionals from all over the world</td>
</tr>
<tr>
<td>Hosted by</td>
<td>International Water Resources Association (IWRA)</td>
</tr>
<tr>
<td>Organised by</td>
<td>Ministry of Water Resources of the People’s Republic of China (MWR)</td>
</tr>
</tbody>
</table>

General Institute of Water Resources and Hydropower Planning and Design, MWR

China National Committee of IWRA

Programme

Sessions: High-Level Plenary Sessions, Regular Sessions, Special Sessions, Side Events and Posters.

Official Events: Opening and Closing Ceremonies, IWRA Awards Ceremony, Gala Dinner, and Welcome Reception etc.

Exhibitions: The exhibition of scientific and technological achievements in water resources, including advanced water science and technology achievements, water management experience, the latest water related instruments and equipment, unique products and producing technology and process.

Technical Field Trip: Visit the relevant water conservancy projects in China.
CALL FOR ABSTRACTS

The organisers of the XVIII World Water Congress welcome abstracts for oral and poster presentations at the XVIII World Water Congress, which will be presented during the main congress programme. Experts, academics, policymakers, water professionals, private and public sector practitioners, and civil society stakeholders, from all disciplines and perspectives, who wish to share their work and experiences during the Congress are invited to submit an abstract. Abstracts can only be submitted on-line through the official Congress website.

Abstract must be prepared in English and should be closely relevant to the Congress theme and topics. Abstract cannot include graphs, charts, diagrams, images, references, or citations. An abstract should be around 300–400 words and should contain the following parts:

A. The purpose of the work
B. The key issue(s) or problem(s) addressed
C. The methodology or approach used
D. The results or conclusions derived from the research/project/practices

CALL FOR SPECIAL SESSIONS

Special Session proposals are welcome from organisations or groups that wish to run a session or workshop that presents their work on subjects related to the sub-themes of this Congress. The format can vary from panel discussions to workshops. Innovation is welcome. These sessions are part of the main programme and open to all Congress attendees. There is no charge to hold a special session, but all speakers should be registered, and any additional expenses beyond the provision of the room and standard audio-visual equipment will be managed by the session organisers. Special session proposals can only be submitted online through the official Congress website.

A. Title, a short description of the session's topic and alignment with the Congress theme and the specified sub-theme(s)
B. Name of the lead and partner organisation(s)
C. Objectives, justifications, and projected outcomes of the session
D. How the session will be organised
E. A list of preliminary presenters and the title of their presentation proposals (indicating those who have already committed)
F. A description of financial and other resources that could be committed to realising the session

CALL FOR SIDE EVENTS

A side event is a conference, workshop, or meeting, independently organised and funded by the applying organisation(s), which may be formally associated with the Congress for mutual interests and benefits. It should have a theme or purpose that is connected to the Congress theme, and take place immediately prior to, during, or following the main Congress programme.

The organisers of the XVIII World Water Congress welcome proposals for side events to take place in conjunction with the Congress. All relevant governmental, non-governmental, and inter-governmental organisations, as well as private sector organisations, who wish to organise a side event or provide support and services to the side events, please submit your proposal to side@worldwatercongress.com.

KEY DATES

- **16 September 2022**: Call for Abstracts, Special Sessions and Side Events Opens
- **31 December 2022**: Submission Deadline of Abstracts, Special Sessions, and Side Events
- **28 February 2023**: Acceptance Notification of Abstracts, Special Sessions, and Side Events

Visit the XVIII World Water Congress website (www.worldwatercongress.com) for more detailed information.
# INTERNATIONAL SCIENTIFIC COMMITTEE (ISC)

**Honorary Chairs**

- **Patrick Lavarde**
  Co-chair of the International Steering Committee of 9th World Water Forum, Past President of IWRA

- **Zhang Jianyun**
  Professor of Nanjing Hydraulic Research Institute; Academician of Chinese Academy of Engineering

- **Shi Qiuchi**
  Bureau Member of World Water Council (2019-2022); Chair of Water Security Task Force of World Water Council (2019-2022); Former Director of International Centre for Economic and Technical Cooperation and Exchange, MWR, China

- **Rabí H. Mohtar**
  Professor of Texas A&M University; Fellow of American Society of Agricultural and Biological Engineers; Adjunct Professor of American University of Beirut and Purdue University; Senior International non-resident Fellow of OCP, Morocco; Governor of the Pontificia Universidad Católica de Chile

- **Cecilia Tortajada**
  Professor in Practice of Environmental Innovation, University of Glasgow; Past President of IWRA

- **Guillermo Donoso**
  Chair of the Pontificia Universidad Católica de Chile

**Vice Chairs**

- **Rabi H. Mohtar**
  Professor of Texas A&M University; Fellow of American Society of Agricultural and Biological Engineers; Adjunct Professor of American University of Beirut and Purdue University; Senior International non-resident Fellow of OCP, Morocco; Governor of the Pontificia Universidad Católica de Chile

- **Huang Yan**
  Vice Chief Engineer of Changjiang Water Resources Commission

- **Guilleo Donoso**
  Chair of the Pontificia Universidad Católica de Chile

**Members**

<table>
<thead>
<tr>
<th>Names in Alphabetical Order</th>
<th>Nationalities</th>
<th>Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hassan Tolba Abolenga</td>
<td>Egypt</td>
<td>Arab Network for Sustainable Development at League of Arab States</td>
</tr>
<tr>
<td>Aurélien Dumont</td>
<td>France</td>
<td>UNESCO</td>
</tr>
<tr>
<td>Alberto Garrido</td>
<td>Spain</td>
<td>Universidad Politécnica de Madrid, Spain</td>
</tr>
<tr>
<td>Huang Guo</td>
<td>China</td>
<td>University of Regina</td>
</tr>
<tr>
<td>Hu Qingyi</td>
<td>China</td>
<td>Changjiang Water Resources Commission, MWR</td>
</tr>
<tr>
<td>Ojasvee Arora</td>
<td>Thailand</td>
<td>National University of Singapore</td>
</tr>
<tr>
<td>Julie Clark-Brown</td>
<td>UK</td>
<td>University of Strathclyde, Scotland</td>
</tr>
<tr>
<td>Ali Fares</td>
<td>USA</td>
<td>Prairie View A&amp;M University, US</td>
</tr>
<tr>
<td>Malcolm J. Gander</td>
<td>USA</td>
<td>US Department of Defense</td>
</tr>
<tr>
<td>Hou Jie</td>
<td>China</td>
<td>General Institute of Water Resources and Hydropower Planning and Design, MWR</td>
</tr>
<tr>
<td>Rashan Hassan</td>
<td>Spain</td>
<td>University of Barcelona, Spain</td>
</tr>
<tr>
<td>Geng Xiaojun</td>
<td>China</td>
<td>General Institute of Water Resources and Hydropower Planning and Design, MWR</td>
</tr>
<tr>
<td>Fang Yu</td>
<td>China</td>
<td>China Agricultural University</td>
</tr>
<tr>
<td>Hu Liting</td>
<td>China</td>
<td>Beijing Normal University</td>
</tr>
<tr>
<td>Jing Yangwen</td>
<td>China</td>
<td>China Institute of Water Resources and Hydropower Research</td>
</tr>
<tr>
<td>Elcin Kendal</td>
<td>Turkey</td>
<td>Middle East Technical University</td>
</tr>
<tr>
<td>Long Di</td>
<td>China</td>
<td>Tsinghua University</td>
</tr>
<tr>
<td>James E. Nickum</td>
<td>US/Japan</td>
<td>IWRA</td>
</tr>
<tr>
<td>Sun Dongya</td>
<td>China</td>
<td>China Institute of Water Resources and Hydropower Research</td>
</tr>
<tr>
<td>Vinender K. Sharma</td>
<td>USA</td>
<td>Texas A&amp;M University, US</td>
</tr>
<tr>
<td>Felipe Vásquez-Lavin</td>
<td>Chile</td>
<td>Universidad del Desarrollo, Chile</td>
</tr>
<tr>
<td>Xu Mengshen</td>
<td>China</td>
<td>Tsinghua University</td>
</tr>
<tr>
<td>Adriana Zuniga-Teran</td>
<td>Mexico</td>
<td>University of Arizona, US</td>
</tr>
<tr>
<td>Zhu Lei</td>
<td>China</td>
<td>Ningxia University</td>
</tr>
<tr>
<td>Zhu Yonghui</td>
<td>China</td>
<td>Changjiang Water Resources Commission, MWR</td>
</tr>
<tr>
<td>M. Dinaah Kumar</td>
<td>India</td>
<td>Institute for Resource Analysis and Policy, Hyderabad</td>
</tr>
<tr>
<td>Li Jianhua</td>
<td>China</td>
<td>Tongji University</td>
</tr>
<tr>
<td>Nidhi Nagabhata</td>
<td>India</td>
<td>United Nations University</td>
</tr>
<tr>
<td>Raya Stephan</td>
<td>France/Lebanon</td>
<td>Water International, IWRA</td>
</tr>
<tr>
<td>Tang Qiuhong</td>
<td>China</td>
<td>Institute of Geographic Sciences and Natural Resources Research, CAS</td>
</tr>
<tr>
<td>Navarun Varma</td>
<td>India</td>
<td>National University of Singapore</td>
</tr>
<tr>
<td>Stefanos Xenarios</td>
<td>Greece</td>
<td>Nazarbayev University, Greece</td>
</tr>
<tr>
<td>Zhang Conglin</td>
<td>China</td>
<td>Institute of Science and Development, Chinese Academy of Sciences</td>
</tr>
<tr>
<td>Zuo Qiting</td>
<td>China</td>
<td>Zhengzhou University</td>
</tr>
<tr>
<td>Zhai Zhongnan</td>
<td>China</td>
<td>General Institute of Water Resources and Hydropower Planning and Design, MWR</td>
</tr>
</tbody>
</table>

**INTERNATIONAL ORGANISING COMMITTEE (NOC)**

**Chair**

- **Yang Derui**
  Director General of Water Resources Management Department, MWR, China

**Vice Chairs**

- **Shen Fengsheng**
  President of the General Institute of Water Resources and Hydropower Planning and Design, MWR, China

- **Li Xiaolin**
  Deputy Director General of General Office, MWR, China

- **Yan Yong**
  Deputy Director General of National Office of Water Conservation, MWR, China; President of the China National Committee of IWRA

- **Li Ge**
  Deputy Director General of International Cooperation, Science and Technology Department, MWR, China

**Executive Vice Chair**

- **Li Yuanyuan**
  Vice President of the General Institute of Water Resources and Hydropower Planning and Design, MWR, China; President of the China National Committee of IWRA
HOST COUNTRY AND CITY

People's Republic of China

The People’s Republic of China is in the eastern part of the Asian continent, on the western Pacific rim. China abounds in rivers and lakes. Water resources are unevenly distributed in space and time, and floods and droughts occur frequently in China. From ancient times, Chinese people have already explored the practice of the philosophy of harmonious coexistence between man and nature. The water conservancy infrastructure and management system were built and established successively since the founding of the People’s Republic of China, especially after the reform and opening up, which has ensured water security and laid the foundation for the reform and opening up and sustainable development in China.

Beijing

Beijing is the capital of the People’s Republic of China. It is the political, cultural, international communication, scientific and technological innovation centre of the country. As a world-famous ancient capital and a modern international city, Beijing is the world’s first dual Olympic city and hosts 7 UNESCO World Heritage Sites. Nestled on the north of the North China Plain, Beijing has a higher northwest part and a lower southeast part, and a temperate, semi-humid continental climate, characterised by short springs and autumns, hot and rainy summers, and cold and dry winters.

For thousands of years, water has been indispensable in Beijing’s development and thriving. Beijing is the destination of the ancient Beijing–Hangzhou Grand Canal and the middle route of the modern South-to-North Water Diversion Project.