

# **UN 2023 Water Conference Side Event**

The new and emerging science of water

March 22 online and March 23, 2023 at 2:00 PM, Blue Gallery – 222 East 46th Street New York City

Organized by: International Centre on Water and Transdisciplinarity - CIRAT, Ministério Público Federal- MPF, International Panel on Water Structure -IPWS, World Water Community, World Water Lab, University of Washington, Water Journal, Associação Brasileira dos Membros do Ministério Público de Meio Ambiente - ABRAMPA, Universidade Paulista - UNIP, Institute for Frontier Science, Hydration Foundation, Technical University of Denmark, Bion Institute, Brasilia Federal Institute- IFB, Brasilia University -CDS, AcquaMater, Water Connection Project, Peace University - UNIPAZ, Associação Alternativa Terrazul, GIRI, Buckminster Fuller Institute, Bion Institute, Aquaphotonic, Edge Institute.

#### Background on the event

The side-event counted with the participation of leading researchers from the molecular and nanostructure levels of water as well as specialists in cross-sector articulation to discuss the innovation that those researchers and interactions can bring. Nowadays, water, engineering and sanitation sectors do not know the enormous contribution that new discoveries in water properties can cause in different areas such as health, energy, agriculture, industry, climate adaptation etc. The event had the objective to start bridging the water sector and the frontier research on water properties in benefit of society and future generations. The application of a transdisciplinary approach to explore the molecular structures of water has provided a fertile field for new scientific and socio-economic potentialities and is a promise of other practical benefits of water for humankind, such as the maintenance of health and quality of life.

#### Water Action Agenda

The UN Water Conference is an opportunity to bring the emerging and advanced knowledge on aqueous systems to the world's stage. Further, the emerging science of water is an indispensable, accelerating path to achieve some of the UN Sustainable Development Goals, of which: (3) Good health and well-being, (6) Clean water and sanitation, (7) Affordable and clean energy, (9) Industry, innovation and infrastructure, (12) Responsible consumption and production, (13) Climate action and (17) Partnerships for the goals.

## **Key Issues**

- Necessity of an Intergovernmental Panel on Water Structure within UNESCO International Hydrological Programme- IHP;
- Water and Cooperation;
- New water science;
- Physicochemical and nano-structural properties of water.

### **Recommendations for action**

- Foster and fund water research through strengthening international, transdisciplinary networks of researchers and disseminate knowledge on water research to governmental, non-governmental, educational, private and research organizations;
- Promote scientific and educational events to bring together researchers from different knowledge areas and countries conducting studies on water;
- Create bridges between the research world and practical applications so that water-friendly technologies can be used to rapidly address the global water crisis;
- Foster the development of water-associated technologies to address climate change, and recover a healthy planet for people, animals, plants and soils;
- Stimulate the dialogue between the water sector and the frontier research on water properties;
- Give visibility and raise public awareness that a new understanding of water can bring solutions into many fields and promote educational capacity in the field of water;
- Stimulate partnerships between organizations from various sectors and create public policies to disseminate the best practices and innovative solutions that the emerging water science can bring;
- Foster the articulations and strengthen scientific journals on the theme of "physicochemical, nano-structural and macroscopic quantum properties of water and its functionalities" under different approaches, to reach at least one indexed journal in this field of research;
- Establish an Intergovernmental Panel on Water Structure within the framework of the International Hydrological Program of UNESCO, which will promote governmental commitment, awareness, and financing of research in the area for the benefit of humanity.