Global Water Knowledge & Expertise

IWA Specialist Groups
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The International Water Association (IWA) is a global knowledge hub for water professionals and anyone concerned about the future of water, which connects scientists to practitioners and communities, pioneering research, fostering technological innovation, and driving best practice through international frameworks and standards. The unique strength of IWA is bringing together experts from across sectors, geographies and disciplines into communities of practice.

The water leaders of IWA Specialist Groups work together to share knowledge and best practices that help develop sustainable water solutions. This is obtained through events and publications, online and offline opportunities and tools, and stimulating dialogues and collaboration that help share the latest science, technology and practice.

The IWA Specialist Groups organise specialised conferences and workshops that bring world-leading water professionals together to share topical high quality content and new findings to bridge the chasm between researchers and practitioners, and accelerate the diffusion of innovation.

Specialist Groups develop game-changing tools and publications that influence the entire water sector. From the renowned Activated Sludge Models, Performance Indicators or the IWA Water Balance, to the Water Research Journal, and Journal of Water Science and Technology, as well as the Biological Wastewater Treatment IWA Book, authors and editors of these publications provide exceptional contributions to the water sector.

A joint effort of all of our Specialist Groups is on the Global Trends and Challenges in Water Science, Research and Management compendium, which identifies the hot topics, innovations and global trends in water science, research and management that will have a long-lasting impact in solving global water challenges.
IWA 51 Specialist Groups

- Advanced Oxidation Processes
- Anaerobic Digestion
- Assessment and Control of Hazardous Substances in Water (ACHSW)
- Benchmarking and Performance Assessment
- Biofilms
- Chemical Industries
- Design, Operation and Costs of Large Wastewater Treatment Plants
- Design, Operation and Maintenance of Drinking Water Treatment Plants
- Diffuse Pollution and Eutrophication
- Disinfection
- Efficient Urban Water Management
- Environmental Engineering Education
- Forest Industry
- Groundwater Restoration and Management
- Health Related Water Microbiology
- Hydroinformatics (Joint IWA/IAHR/IAHS)
- Institutional Governance and Regulation
- Instrumentation, Control and Automation
- Intermittent Water Supply (IWS)
- Lake and Reservoir Management
- Marine Outfall Systems (Joint IWA/IAHR)
- Membrane Technology
- Metals and Related Substances in Drinking Water
- Microbial Ecology and Water Engineering
- Modelling and Integrated Assessment
- Nano and Water
- Non-Sewered Sanitation
- Nutrient Removal and Recovery
- Odours and Volatile Emissions
- Particle Separation
- Pretreatment of Industrial Wastewaters
- Public and Customer Communications
- Rainwater Harvesting & Management (RWHM)
- Resources Oriented Sanitation
- Sanitation and Water Management in Developing Countries
- Sludge Management
- Small Water and Wastewater Systems
- Statistics and Economics
- Strategic Asset Management
- Sustainability in the Water Sector
- Sustainable Coastal and Estuarine Development
- Tastes, Odours, and Algal Toxins in Drinking Water Resources and Aquaculture
- Urban Drainage (Joint IWA/IAHR)
- Wastewater Pond Technology
- Water and Wastewater in Ancient Civilizations
- Water Loss
- Water Reuse
- Water Safety Planning
- Water Security and Safety Management
- Watershed and River Basin Management
- Wetland Systems for Water Pollution Control

Sharing knowledge, opinions and news online through the IWA website and IWA Connect enables the Specialist Groups and their members to share solutions, recognise and promote the work of group members and group activities.

IWA Task Groups and Clusters

Formed by one or more Specialist Groups, Task Groups are one of the ways IWA brings together academia and practice. Task Groups deliver critical work through Scientific and Technical Reports, or Manuals of Best Practice, that describe the state-of-the-art in certain disciplines, or a consensus to move forward in certain fields.

Another way in which IWA Specialist Groups are organised is in Clusters. These facilitate systematic conversations across Specialist Groups, addressing cross-cutting issues that one Specialist Group cannot address alone. There are currently three clusters: the IWA/ISME Bio Cluster, the new Cluster on Wastewater-based Epidemiological Surveillance, and the Resource Recovery from Water Cluster.

The 51 Specialist Groups are the engine of IWA. They cover the whole spectrum of the water cycle.

To know more about the IWA Specialist Groups, visit: iwa-network.org/iwa-specialist-groups
Join IWA Specialist Groups

Knowledge exchange and collaboration between research and practice are paramount for a sustainable, water-wise world. Being part of the IWA Specialist Groups enables IWA members to delve into a deeper understanding of the complex challenges we face and cooperate with other top leaders in the field. IWA Specialist Groups are an exceptionally effective means to break down the silos in the sector, and to connect internationally to share knowledge, extend your personal network, further your professional development and explore the latest career and collaboration opportunities.

“The challenges facing the water industry are global and while solutions will be local, having access to the IWA Specialist Groups’ international body of topic-specific water knowledge – through sharing and collaborating on case studies and applied research, as well as the opportunity to forge critical relationships, is unprecedented.”

Melissa Meeker, The Water Tower
Member of the Management Committee of the IWA Water Reuse Specialist Group, USA

“The world is a complex place with a hodgepodge of interacting problems and possibilities. We are facing complex problems like global warming, climate change, water scarcity, droughts, floods, food crises, energy limitations, air pollution, and absurd economic inequalities between nations and people. Complex problems cannot be solved by looking at one component at a time. Most incidents are connected to others. In our world of specialisation, solutions require cooperation, mutual respect, and an understanding of what to expect from other specialists.”

Prof. Gustaf Olsson, Lund University
IWA Honorary Member and Distinguished Fellow, Sweden

Join the International Water Association today and explore, contribute, learn and network with the world’s leading water professionals: iwa-network.org/iwa-specialist-groups