

The 1st and 2nd WMCC conferences held in 2016 (Spitsbergen, Norway) and 2020 (Harbin, China) focused on water management in cold climates. Responding to the needs of the scientific community, from now on the WMCC will focus on Water Management in Changing Conditions. The conference will specifically cover three aspects (1) Changing temperatures – especially colder climates, (2) Changing climate – causing changing precipitations, (3) Changing populations – due to seasonal activities increasing populations to serve.

The conference will be hosted by IFAT-Munich – the world’s leading trade fair for water, sewage, waste and raw materials management, giving a unique opportunity to learn about market-leading suppliers and technologies. The European Water Association (EWA) is organizing the WMCC 2024 with the support of the International Water Association.

Category	Before 31st March	After 1st April
EWA Research Members/ IWA Members	220 €	260 €
Presenters	220 €	260 €
Non members	270 €	320 €
Students	150 €	200 €
Dinner*	85 €	85 €

*Conference Dinner (seats are limited): The Conference Dinner will take place in the heart of Munich (exact location to be confirmed) during the official Bavarian Evening, hosted by IFAT Munich. This evening promises to be a complete immersion into Bavarian culture, offering attendees the chance to savor local beverages, indulge in traditional Bavarian cuisine, and enjoy authentic Bavarian music.

Entry to IFAT exhibition: Included in the registration, which also includes free public transport in selected systems.

Venue and transfers: The fairgrounds of IFAT are directly connected to the subway stop Messestadt Ost on the U2 subway line. From Munich Central Station, Please see <https://ifat.de/en/trade-fair/plan-your-visit/travel-journey/> for details.

Accommodation: Please visit <https://ifat.de/en/trade-fair/plan-your-visit/accommodation/>

Getting to IFAT Munich – plan your journey

Getting to IFAT Munich—choose from a range of travel options to get to Messe München: By car, train, plane, or public transport.

Book hotels in Munich for IFAT

Whether a hotel or private accommodation: Find and book your perfect overnight accommodation for your visit to IFAT in Munich.

<http://www.wmcc2024.net>



3RD INTERNATIONAL CONFERENCE ON WATER MANAGEMENT IN CHANGING CONDITIONS

Co-organizers:



14-15 May 2024

INVITATION TO REGISTER
AND CONFERENCE PROGRAM

14th May 2024	
11:20-11:40	Welcome and opening Wendy Francken, President-European Water Association Kala Vairavamoorthy, Executive Director, International Water Association Harsha Ratnaweera, Chairman of the Conference
11:40-13:00	Technical Session-A
12:00-14:00	Lunch
13:00-17:30	Technical Session-II
19:00	Conference Dinner
15th May 2024	
09:20-13:00	Technical Session-III
13:00-14:00	Lunch
14:00-17:20	Technical Session -IV
17:20-17:30	Closure, Arthur Guischet, Deputy Secretary General, European Water Association

LIST OF PRESENTATIONS (TENTATIVE)

Innovative Treatment Technologies

- Membrane fouling in MBR induced by change in biopolymers under low temperatures: Kimura K., Kakuda T., Japan
- Novel measurement device and application for aeration optimization in wastewater treatment: Ukkonen P., Mulas M., Mikola A., Finland
- Enhancing aerobic phosphorus removal by midway sludge returning under rainfall flow conditions: Wei Z., Dong L., China
- Submerged aerated filter can offer high-rate robust nitrification at different temperatures: Sarosh S., Ramaswami S., India
- Studies for an initial estimation of microplastic emissions by MBBRs: Hilliges R., Montau B., Leonhard S., König J., Germany
- A Novel Non-Destructive Defect Detection Approach for Urban Water Supply Tunnels Using Autonomous Inspection Robots and Deep Learning: Yu J., Chen W., Zhao Q., Wang J., Li P., Cai S., Wang W., Luo D., China
- Achieving simultaneous nitrification and endogenous denitrifying phosphorus removal in anaerobic/intermittently-aerated moving bed biofilm reactor for low carbon-to-nitrogen ratio wastewater treatment: Yanan L., Changqing L., Zhonghong G., China
- Adsorptive recycle of phosphate by MgO-biochar from wastewater: evidence from batch and column experiments: Yin Y., Liu C., China
- Analysis and effective separation of pollutants from water resources using a novel A/O-MBBR system at low temperatures: Don X., Wang S., Chen D., Cheng L., China
- NPHarvest – economic recovery technology for nutrients in liquid waste streams: Uzkurt Kaljunen J., Mikola A., Finland

Water Supply and Management Challenges

- Application of relevant membrane treatment approaches for potable water supply in emergency and low resource context: Senavirathna B., Wei J., Beck S., Finsrud G., Maletskyi Z., Bérubé P., Canada/Norway
- Efficient Leakage Monitoring and Control in Water Distribution Networks: A Collaborative Approach with SCADA and Hydraulic Modelling Software: Chasiotis A., Feloni E., Chasiotis S., Mathiou P., Manthos T., Bousdeki M., Gialama S., Nastos P.T., Greece
- Modelling the Upgrade of Storm Tanks for Water Reuse through Proactive Real-time Control using Rainfall Forecast data: Kroll S., Raes B., Donckels B., Verbeke M., Raemdonc M., Belgium
- Drinking water availability for the human settlements distributed along the Sulina Channel from the Danube Delta, Romania: Cretescu I., Soreanu G., Ratnaweera H., Romania
- Water Management in Changing Conditions: A Case Study of COVID-19's Impact on Inequality in Water, Sanitation, and Hygiene (WASH) Services among Informal settlements in Kampala, Uganda: Semyalo R., Batega D W., Uganda

- Geo-spatial an temporal relations between flood incidence and water-borne disease: PS Sokpe1, R Seidu3, SA Bawua1,2, JN Fobil1,2 & J Arko-Mensah, Ghana
- Drought Resiliency: Securing Drinking Water Supply in Northern Italy with Satellite Leak Detection: Rabinovitch J J, Israel
- Challenges in Water Supply and Wastewater management in Greek islands: Tsitsifli S., Kyriakidis Th., Nielsen V., Ratnaweera H., Louta M., Greece
- MWA Water Management during saltwater intrusion: Takeonglap J., Thailand
- Challenges in Water Supply and Wastewater management in Greek islands: Zhang Z., Chen F., Zhang X., Yan D., Zhang Y., Li Y., Ding B., Zhang X., China
- Isotopic signatures ($\delta^{18}O$ and δ^2H) as indicators of climate change effects in Sri Lanka's dry zone: Implications for water management of Tank Cascade Systems during the rainy season: Glińska-Lewczuk K., Gunaratne J., M K N Kumari, Poland

Environmental Sustainability and Safety

- Environmental forensics for ensuring microbial safety in critical settings: Tarabara V., USA
- Global Pandemic Effect on Wastewater Treatment with Focus of Virus and Antiviral Drug Load: Eryildiz-Yesir B., Yavuztürk-Gül B., Koyuncu I., Turkey
- Cyanobacteria in Stabilization Ponds: Risks and Challenges in Brazilian Environmental Legislation: Silva Brito S., Moraes Soares R., Brazil
- Economic Growth and Water Consumption: Public Awareness Influence the Sustainable Development of Water Resources: Tang-worachai S., Taiwan
- Effect of Global Warming on Temporal Availability of Water; A Case Study in Nyankpala, Ghana: Kranjac-Berisavljevic G., Dogbey R. K., Ghana
- Assessing the efficiency of the usage of Low Impact Development in rainwater management in a housing estate: Widomski M.K, Czerpak J., Staniszewski M., Kozłowska A., Poland
- Evaluation of test kits for better water management in changing conditions
- Water-Energy Nexus in Gaza: Shortages and Prospective Solutions: Rantissi T., Gitis V., Israel
- Temperature fluctuations and backwashing frequency impacting biological activity in granular activated carbon filters: Graß L., Hillebrandt D., Aumeier B.M., Palmowski L. and Wintgens T., Germany
- Stormwater Pollutant Interrelationship in an Urban Catchment for Stormwater Harvesting: Ekanayake D., Aryal R., Kandasamy J., Ratnaweera H., Vigneswaran S., Australia
- Increase of Natural Organic Matter in source water due to frequent and intense precipitation - signs of a changing climate: ASM Mohiuddin , Loadman F., Blayney B., Chia K., Vigneswaran S., Australia
- Mobile treatment solution for the treatment of wash water from road tunnels: Rathnaweera S.S., Manamperuma L.D., Kjønnø O., Hoel E. and Vik E.A., Norway

Technological Advancements in Water Management

- Effects of Ambient Temperature and Other Parameters on the Variability of DBP Concentrations in a Large Drinking Water Distribution System: Data of Online Monitoring: Sandaa K., Ratnaweera H., Korshin G., Norway/USA
- The Digital Future of Water Management: Pasaoglu M. E., Koyuncu I., Turkey
- Harmonizing Design and Sustainability: A Comprehensive Framework for Bioretention Systems: Roghani B., Rathnaweera S.S., Paus K.H. & Maletskyi Z., Norway
- Closure

Other issues

- Transforming the Trade-offs in the Water-Food-Energy Nexus into Synergies in Developing countries: Mutua F., Kenya
- Development of a soft sensor for measurement of cod and phosphate in a sewer network in Norway: Hykkerud A., Ratnaweera H., Norway
- Microbiological assessment of water consumed by residents in flood-prone communities in Accra: AA Baffoe , SA Bawua, R Seidu, JN Fobil1, Arko-Mensah, Ghana
- Potential risks of metals in major sources of water for domestic use in Kasoa: F Marful-Sau, R Seidu, SA Bawua, JN Fobil. J Arko-Mensah, Ghana
- Towards A Methodological Framework to Address Data Challenges in Lake Water Quality Predictions: Bae J., Cascone C., Borzooei, S. Steinhauer H.J., Heildin T., Karlsson A., Fridén H., Strandberg J., Sweden