



Global Seminar

UFZ HELMHOLTZ
Centre for Environmental Research

WWQA
World Water Quality Alliance

Solutions for the ONE WORLD: Monitoring Chemical Pollution under Low-Capacity Settings

Chemical pollution is a global problem with regionally different composition, sources and impacts threatening water resources, human health and ecosystems. While data bases on pollution are rapidly increasing in many high-income regions such as Europe, data on chemical pollution in low- and middle-income countries in Africa, Asia and Central- and South-America are rather scarce. While analytical instrumentation and common monitoring, assessment and mitigation strategies are widely lacking, awareness on pollution problems is increasing globally with dedicated scientists and practitioners ready to address pollution problems in their countries. The current workshop aims to bring international pioneers in chemical monitoring together with a specific focus on the Global South and the establishment of a sustainable network to find solutions to pollution all over the world.

WORKSHOP GOALS:

- 1) Initiative for a global network on monitoring, understanding and minimizing chemical pollution in the ONE WORLD.
- 2) Scientific exchange on chemical pollution, related risks and major drivers in the Global South and on needs, capacities and gaps in monitoring.
- 3) Pilot study to demonstrate the opportunities of monitoring of chemical pollution under low-capacity settings.
- 4) Initiative for a review/policy paper on the status, gaps and urgent needs in the field of monitoring, understanding and minimizing chemical pollution in the ONE WORLD.

EVENT INFORMATION

CHECK-IN: Wed, 17.09.2025, 8:30-9:00

END: Fri, 19.09.2025, 15:00

VENUE: Helmholtz-Centre for
Environmental Research UFZ
Permoserstr. 15
04318 Leipzig
Germany

REGISTRATION:

Registration closed.

ORGANISING TEAM:

Prof. Dr. Saeed Albaseer, Prof. Dr.
Werner Brack, Dr. Saskia Finckh,
Dr. Faith Kandie, Christina
Pietruska, Dr. Christian Schmidt,
Dr. Naeem Shahid

CONTACTS:

werner.brack@ufz.de
christina.pietruska@ufz.de

AGENDA DAY 1 – Wednesday, 17.09.2025

08:30	Check-in: Coffee & Arrival
09:00	Welcome: Introduction to the Aims of the Workshop, including the Agenda 15 min
SESSION 1: CURRENT STATUS AND CHALLENGES OF CHEMICAL POLLUTION IN COUNTRIES OF THE GLOBAL SOUTH	
09:15	The National Surface Water Monitoring Plan and other pollutant monitoring initiatives in Costa Rica Silvia Echeverría Sáenz
09:30	Aquatic Chemical Pollution in Sierra Leone: Current Status, Challenges, and Future Prospects Ishmail Sheriff
09:45	Status of Organic Micropollutants in Sri Lanka Keerthi Guruge
10:00	Discussion 15 min
10:15	Coffee Break 30 min
SESSION 2: CHEMICAL AND NUTRIENT POLLUTION IN FRESHWATERS – CASE STUDIES FROM COUNTRIES OF THE GLOBAL SOUTH	
10:45	Prevalence of Bisphenol Analogues in surface water and sediment of Chenab River, Pakistan Abdul Qadir
11:00	Assessment of industrial pollutants in the water bodies of Chennai Indumathi Nambi
11:15	Modeling the Seasonal Dynamics of Nutrient Export to Lake Tana, Upper Blue Nile Basin Goraw Goshu
11:30	Discussion 15 min
11:45	Lunch Break 60 min
12:45	POSTER SESSION 90 min
SESSION 3: POLLUTION BY INSUFFICIENT WASTEWATER TREATMENT AND INNOVATIVE SOLUTIONS	
14:15	Active biomonitoring of PFAS in two areas of Sao Paulo, Brazil marine coast using hemolymph of the amphipod <i>Parhyale hawaiiensis</i> Gisela Umbuzeiro
14:30	Impact of abattoir effluent on New Calabar River, Port Harcourt, Nigeria Chioma Blaise Chikere
14:45	Using Recycled Plastic Waste for the Water Treatment Muhammad Umer Shafique
15:00	Discussion 15 min
15:15	Coffee Break 30 min
SESSION 4: SCIENCE POLICY ACTIVITIES RELATED TO THE MONITORING AND MANAGEMENT OF CHEMICAL POLLUTION	
15:45	Not in the Data, Not on the Agenda: The Hidden Crisis of Water Quality Anham Salyani

16:00	Laws and Policies Addressing Chemical Pollution in Kenya: Trends and Challenges Clarice Wambua
16:15	Water quality monitoring and management in the Nile Basin countries Jean Namugize
16:30	Discussion 15 min
16:45	Identification of Topics for the World Café Discussions on the Following Day 15 min

AGENDA DAY 2 – Thursday, 18.09.2025

08:30	Coffee & Arrival
09:00	Welcome: Recap of Day 1, including World Café Topics 15 min
SESSION 5: BEYOND WATER QUALITY ASSESSMENT: POLLUTION MONITORING IN DIFFERENT ENVIRONMENTAL COMPARTMENTS	
09:15	PFAS Contamination in Underserved Regions: Environmental and Exposure Insights from Ghana and Suriname Arundhati Tewari
09:30	Silent Streams, Toxic Legacy: Tracing Organochlorine Pesticides (OCPs) and Polychlorinated Biphenyls (PCBs) in Sediment and Fish from Central Ethiopia Alemnew Berhanu Kassegne
09:45	Field-Based Monitoring of marine Pollutants under low-capacity settings: A Case from the Gulf of Kachchh and Gulf of Khambhat, Western India Jayanthi Ganapathi
10:00	Discussion 15 min
10:15	Coffee Break 30 min
SESSION 6: BIOMONITORING AND HUMAN HEALTH ASSESSMENT	
10:45	Contamination and Health Risk Assessment of Elements in Soils from a Gold Mining District, Ghana Lilian Sarpong
11:00	Air quality biomonitoring in Minas Gerais, Brazil: perspectives from a case study in Brumadinho Maria Clara Starling
11:15	Developing International Biospecimen Collection for Children's Environmental Health Kyungho Choi
11:30	Discussion 15 min
11:45	Lunch Break 60 min
12:45	KEYNOTE: A South African perspective on the application of effect-based methods (EBM) for water quality and safety Natalie Aneck-Hahn
13:15	WORLD CAFÉ 120 min (collaborative discussion rounds on preselected topics)
15:15	KEYNOTE: Environmental Characterization in World's Fastest Growing Regions: Challenges and Opportunities Shane Snyder

15:45 Coffee Break | 30 min

**SESSION 7: ASSESSING CHEMICAL FOOTPRINTS ON GLOBAL FRESHWATER RESOURCES:
METHODS AND CASES**

16:15 Mapping chemical footprints in Europe | Saskia Finckh

16:30 Hydrological informed monitoring | Christian Schmidt

16:45 Case study Western Kenya | Faith Kandie

17:00 Case study Lahore, Pakistan | Naeem Shahid

17:15 Discussion | 15 min
