Chemicals of Emerging Concern: Looking at Individual Contaminants, Chemical Mixtures, or the Exposome

Wednesday, 14 August 2024, 15:30-17:00
Harbourfront Room (Delta by Marriott Hotel, connected to MTCC South Building)









Description

Many different chemical contaminants, from different natural and anthropogenic sources, can be found in the environment, as increasingly revealed by the expansion of the chemical domain of substances that can be analysed (simultaneously) using classical and innovative water quality analysis methods. In this session we will discuss the arguments for and against different ways to look at chemical water quality.

In water practice, the assessment, characterization and management of exposures and risks is often still focused on individual substances. Health authorities are however increasingly interested in characterizing potential risks of aggregated exposures (combined exposure via different routes), and cumulative (mixture) exposures of comparable substances (e.g., PFAS). Meanwhile, the exposome, which is the integrated assessment of all external exposures over the course of a lifetime and their health impacts, is becoming increasingly visible in science and society.

The short presentations will be followed by round table discussions to address key questions, advantages, and challenges of monitoring and managing water quality, exposures, and risks at different levels of resolution.

Time	Item	
15:30-15:40	Walk in	
15:40-15:45	Welcome and opening	Milou Dingemans (Chief Science Officer and Principal Toxicologist, KWR Water Research Institute)
15:45-16:15	Short presentations (plenary)	
	Prioritized Chemicals of Emerging Concern Managing risks of one prioritized chemical at a time	Speaker: Rinnert Schurer (Senior Researcher, Evides Waterbedrijf)
	Grouping of Chemicals of Emerging Concern Managing risks of aggregated and mixture exposures	Speaker: Simon Ayley (Director, Water Research Centre)
	Water and the Exposome Health impact of all combined environmental factors throughout life	Speaker: Milou Dingemans
16:15-16:40	Round table discussions (parallel)	
Table 1	Tailor-made Water Chemicals of Emerging Concern, mixtures or the exposome in context of Future Scenario 'Tailor-made Water'	Moderator: Milou Dingemans
Table 2	Collective Water Chain Chemicals of Emerging Concern, mixtures or the exposome in context of Future Scenario 'Collective Water Chain'	Moderator: Arash Zamyadi (Senior Lecturer, Monash University)
Table 3	Dischargers are Dismissed Chemicals of Emerging Concern, mixtures or the exposome in context of Future Scenario 'Dischargers are Dismissed'	Moderator: Aleida Hommes (Scientific Researcher, KWR Water Research Institute)
16:40-16:50	Key messages from tables and closing (plenary)	Milou Dingemans