

Workshop Title	Micro- and nanoplastics: small particles in water trigger big questions
Topic	<input checked="" type="radio"/> Improving water quality <input type="radio"/> Resilient water systems <input type="radio"/> Circular solutions: Reuse, Recover and Recycle <input type="radio"/> Transitions in water, agro/food and energy
Leading Challenges and Solutions	<p>Challenges and solutions</p> <p>The presence of micro- and nanoplastics in the water cycle is perceived as a health concern by the public and the authorities. Their composition and small size are still limiting their analytical detection making monitoring in natural water a true challenge.</p> <p>In this workshop, we will delve into the latest advancements in sampling and analytical methods, which provide fresh perspectives on the fate of nano/microplastics within drinking water and wastewater treatment facilities. We will explore potential solutions from various angles, including regulatory, academic, technological, and practical standpoints.</p>
Session Chair (shared Session Chair between KM Lompe & Stefan Kools)	<p>Kim Maren / Stefan (KWR is submitting)</p> <p>Lompe / Kools</p> <p>Delft University of Technology / KWR</p> <p>Netherlands</p> <p>k.m.lompe@tudelft.nl / stefan.kools@kwrwater.nl</p>
Session Description	<p>Considering the widespread presence of microplastics and nanoplastics in the environment, it is crucial to acknowledge the inclusion of microplastics on the EU watchlist and the potential for forthcoming legislation. Consequently, it is imperative to explore strategies aimed at reducing the influx of microplastics and nanoplastics into drinking water and wastewater treatment plants while simultaneously enhancing their removal in these plants. Addressing this issue should not solely rest on the shoulders of the water utilities. Instead, a comprehensive approach involving various stakeholders along the chain, such as the textile industry, is essential to identify the most effective solution(s).</p> <p>The objective of this workshop is to facilitate discussions on current legislative advancements, cutting-edge analytical techniques, removal mechanisms in water treatment processes, and potential strategies for</p>

	<p>reducing the influx of microplastics and nanoplastics in water treatment plants, particularly from large point sources. This will involve gathering insights from academia, research institutes, water utilities, and industry at both national and international levels.</p> <p><a href="#">Click here to enter text.</a></p>
<p>Learning Outcomes</p>	<ol style="list-style-type: none"> <li>1 Formulate strategies to reduce microplastic and nanoplastic influx into water treatment plants.</li> <li>2. Gain insight in removal mechanisms of micro and nanoplastics and possible ways to improve their removal during water treatment processes (e.g., rapid sand filters and river bank filtration).</li> <li>3. Update of legislation advancements concerning microplastics and nanoplastics.</li> <li>4. Explore state-of-the-art analytical techniques, their limitations, and possible ways to improve them.</li> </ol> <p>Up to 50 words (in total).</p>

<p>Structure (interaction required!)</p>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Speakers</li> <li><input type="checkbox"/> Panel discussion</li> <li><input type="checkbox"/> Training</li> <li><input type="checkbox"/> Roundtables discussion</li> <li><input checked="" type="checkbox"/> World Cafe</li> <li><input type="checkbox"/> Other. Which?</li> </ul> <p>The session will commence with 4 to 5 brief pitches, lasting 2 to 3 minutes each, addressing the aforementioned four learning objectives. The pitches will be presented by table moderators, with each moderator assigned to a specific table. Following the pitches, participants will have the opportunity to select a table, engage in discussions, and collectively identify challenges, limitations, and opportunities pertaining to the learning outcomes. The session chair(s)</p>
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	<p>will gather the obtained solutions and action points and lead a final 30 minutes discussion.</p>
<p>Speakers</p>	<ol style="list-style-type: none"> <li>1. Dr. Patrick Bauerlein, KWR Watercycle Research Institute, Netherlands: analytics (confirmed)</li> <li>2. Dr. Eelco Pieke, Waternet, Netherlands: How can we reduce the incoming plastic load into sewage treatment plants? MP monitoring of two sewage treatment plants and a textile washing facility. (confirmed)</li> <li>3. Dr. Kim Lompe, Delft University of Technology, Netherlands (confirmed) / or Dr. Marie-Pierre Denieul (Veolia Water Research, France): Removal mechanisms and performance of water treatment technologies. (to be confirmed)</li> <li>4. Dr. Ing. D.A.M (Matthijs) de Winter, RIVM, chair of the RIVM plastics working group : What is there to know about microplastic legislation (confirmed)</li> <li>5. To be confirmed - Practical solutions to reduce microplastic contamination in surface water</li> </ol>
<p>Preferred Room Layout</p>	<p><input type="checkbox"/> Theatre Style</p> <p><input checked="" type="checkbox"/> Roundtables</p> <p><input type="checkbox"/> Other. Which</p> <p>-----</p>
<p>Preferred Supporting Materials</p>	<p>Beamer for opening presentation and pitches. Blank poster size paper, post-its and markers will be brought by the organizers.</p>