

## Proposals for NORMAN Joint Programme of Activities 2022

<b>Title</b>	<b>Consolidation of PFAS suspect HRMS lists and lists of PFAS containing products</b>
<b>Type of activity</b>	Inter-lab collaboration activity
<b>Leader</b>	Pradeep Dewapriya / Sarit Kaserzon (University of Queensland, QAEHS, Australia) Sara Valsecchi (Water Research Institute of the National Research Council of Italy) Saer Samanipour (University of Amsterdam)
<b>Topic / activities</b>	<p><b>Background / Justification for the proposed activity:</b></p> <p>Per- and polyfluoroalkyl substances (PFAS) are a group of synthetic chemicals that have been manufactured since the late 1940s. Due to their unique surfactant properties and chemical stability, PFAS has been used in a wide array of consumer and industrial products. These consumer and industrial products have actively contributed to the widespread release of PFAS into the environment. However, current PFAS analysis and identification methods are limited despite the wider range of PFAS and their sources. Non-target analysis (NTA) with high-resolution mass spectrometry (HRMS) is emerging as an important tool to characterise PFAS, but informative suspect lists are still very limited, as is knowledge of their occurrence in products.</p> <p>This JPA aims to foster knowledge exchange of PFAS NTA and consolidate and harmonise PFAS suspect lists. A curated PFAS suspect list generated via this joint effort will be used to investigate their occurrence in products through joint analysis, data processing and reporting exchanges.</p> <p><b>Description of the proposed activity and expected outcomes for 2021 (and beyond):</b></p> <p>We propose consolidating available PFAS lists, curated data including PFAS MS/MS libraries and information on PFAS containing products. Then, this information will be used to analyse and report different PFAS in products and contaminated matrices.</p> <p>The types of samples and products that will be considered will be defined at the initiation phase of the JPA and input will be sought from the other participating organisations.</p> <p>A broad range of PFAS containing consumer and industrial products and contaminated matrices will be collected to perform non-target and suspect screening analysis. The sample will be exchanged among the labs to examine the interlaboratory performance of identifying the PFAS. The knowledge and expertise of PFAS identification and reporting will be shared among laboratories.</p> <p>Expected outcomes; In the first semester of 2022, the activity will be initiated, setting up the goals and exchanging suspect lists and product information. Analysis and reporting on PFAS and contaminated matrices are expected to be completed in late 2022/2023. Interlaboratory exchange for assessment of data analysis and reporting is expected in 2023.</p> <p><b>Added value / Link with other NORMAN activities and/or other projects</b></p> <p>NTA Cross-Working Group Activity (CWG-NTS); Norman NDS; NORMAN EMPODAT Suspect; <b>NORMAN Suspect List Exchange (NORMAN-SLE) and Substance Database (SusDat)</b>; PFAS analytical exchange Synergies with PARC "European Partnership for the Assessment of Risks from Chemicals (PARC)" and WP4 Monitoring and exposure</p>
<b>Participants</b>	University of Queensland, QAEHS, Australia, Water Research Institute of the National Research Council of Italy, University of Amsterdam, Environmental Institute <b>Any interested participants</b>
<b>Proposed in-kind contribution</b>	QAEHS: Costs associated with sample extraction for analysis, QAQC, data curation, consolidation and interpretation
<b>Contribution needed from NORMAN Association<sup>1</sup></b>	Sample shipping costs for samples in 2023.

<sup>1</sup> Please, provide here a transparent justification of the requested resources and of the in-kind contribution, thereby distinguishing between the costs associated with "person-months" for the organisation, the "travelling costs" for invited speakers and the costs for the logistics (e.g. meals, room rental etc.)