

Proposals for NORMAN Joint Programme of Activities 2026

Title	Data Science for Monitoring of Emerging Environmental Substances
Type of activity	Shaping the AI working group
Leader	Anneli Kruve, Stockholm University, Sweden Jana Schor, UFZ, Germany
Topic / activities	<p>Background / Justification for the proposed activity:</p> <p>In October 2024 in Leipzig a NORMAN network AI workshop “Artificial Intelligence for environmental monitoring, assessment and prioritisation of chemicals and their mixtures” took place and based on JPA 2025 a NORMAN interest group “Data Science for Monitoring of Emerging Environmental Substances” started to be discussed. In 2025 we conducted a survey to map the interest of NORMAN more precisely. As of 2025-12-15 37 NORMAN members have responded. The preliminary results communicate the greatest interest in formulating research questions and finding points for collaboration.</p> <p>Description of the proposed activity and expected outcomes for 2026:</p> <ol style="list-style-type: none"> (1) Summarizing the findings from a survey conducted in 2025 for mapping the interest, experiences, on-going AI based research activities of NORMAN members as well as identifying the areas where NORMAN has most to contribute to the research scene but also at the science-policy interface. (2) A short communication on ‘hot topics for AI driven environmental research’ will be written based on the survey; (3) A match-making event to discuss collaborative AI projects within NORMAN; (4) Compiling overview of the datasets available through NORMAN participants and making this information available through NORMAN. <p>Added value / Link with other NORMAN activities and / or other projects</p> <p>Direct link to the activities on SusDat, MassBank, DSFP as the AI tools have potential to allow even better use of the data deposited in these databases and may aid curation. The AI tools may also allow us to indicate gaps in chemical space coverage by the existing data and direct further activities acquiring new data in regard to effects (bioassay endpoints, effect directed analysis), analytical characterization (HRMS, chromatography, IMS), as well as sampling (biota, marine environment, indoor environment).</p>
Participants	Open to all NORMAN members.
Proposed in-kind contribution	Work time for data collection, curation, and evaluation.
Contribution needed from NORMAN Association¹	Participating in the match making event, and sharing data and descriptions of data..

¹ 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.)