

NORMAN: Suspect and non-target screening with high resolution mass spectrometry– current status and new developments

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Non-target methods for the identification of emerging organic substances and their transformation products in the environment are of great interest and increasing popularity. This workshop aims to give participants an overview of the latest developments in suspect and non-target screening.

The workshop will start with the results of two collaborative trials that arose from the initial trial on a water sample in 2014. The **non-target screening collaborative trial on indoor dust** was started in 2015 where a single, well-defined dust sample was sent to many laboratories across Europe and beyond. The outcomes of GC-and LC-HRMSMS analysis will be presented and the impact for future non-target screening discussed. Further, the **collaborative trial on polar compound analysis** was organised in 2016, where water samples with 20 very polar compounds were distributed to laboratories across Europe, to compare and evaluate the different analytical techniques that are used in various laboratories within the NORMAN network to detect very polar compounds. The results will be shown and the implications be discussed.

Updates on other NORMAN activities pertinent to non-target screening will then be presented, including suspect list and mass spectral exchange, retention time prediction and finally NormaNEWS. The concept of NormaNEWS is that when one group identifies a new contaminant of emerging concern identification criteria are sent to other members of the group who use retrospective analysis techniques to check their own samples. This way we can rapidly establish the occurrence of newly identified compounds of emerging concern across Europe and beyond.

This satellite event will be followed by a short meeting of the cross-working group activity non-target screening in NORMAN (all are welcome) and internal meetings for the participants of the two NORMAN collaborative trials.

Preliminary Programme

Wednesday 21 June

Common dinner on own costs, location to be announced via email

Thursday 22 June

- 8:30 **Welcome and introduction to the Norman non-target screening activities**
Juliane Hollender, Eawag
- 8:40 **Outcome of the NORMAN Collaborative Trial on non-target analysis of indoor dust**
Peter Haglund, Umea and Pawel Rostkowski, NILU
- 9:30 **Outcome of the NORMAN Collaborative Trial on analyses of polar compounds**
Patrick Bäumlein, KWR
- 10:15 **Coffee Break**
- 10:45 **Progress with the retention time prediction/index in liquid chromatography**
Nikolaos Thomaidis, UoA
- 11.30 **NORMAN Information Exchange: suspect lists and mass spectra**
Emma Schymanski, Eawag
- 12:00 **Application of data exchange in NormaNEWS, results of 1st round**

Nikiforos Alygizakis, EI

12:30 **End of the Open Part of the Satellite Event**

12.30 **Lunch** (all welcome)

13:30 **Meeting of the NORMAN NTS group**

14:15 **Internal meeting of the participants of the Collaborative Trials on dust/polar compounds
(2 separate rooms)**

17:00 **End of satellite event**