



## **2<sup>nd</sup> NORMAN Collaborative Trial for Non-target and suspect screening of organic contaminants in indoor dust**

### **Background**

In 2016, non-target and suspect screening collaborative trial was conducted using a dust from North America. The exercise was partially a success – more than 20 laboratories collectively found more than 2300 compounds in the dust samples (c.f. *Anal. Bioanal. Chem.* 411:1957). However, it also became evident that there is room for considerable improvements. Most compounds were only detected by one single laboratory. The purpose of this 2<sup>nd</sup> collaborative trial is to draw from the experiences gained and the database generated to improve the performance of European laboratories in performing exhaustive and reliable non-target and suspect screening.

### **Organisation**

This Collaborative Trial is organised by Umeå University in collaboration with NILU (Norway), Antwerpen University (Belgium), Vrije Universiteit Amsterdam (The Netherlands) and Environmental Institute (Slovakia) as part of the NORMAN Joint Programme of Activities in 2020 (NORMAN JPA 2020).

### **Invitation and registration**

We would like to invite you to participate in the 2<sup>nd</sup> non-target and suspect screening collaborative trial on indoor dust. Registrations are made on-line, using the following link:

<https://www.surveymonkey.com/r/CKMJ2RC>

Registration deadline: 28 February 2020.

### **What will be analysed?**

- a) One dust homogenate from pooled European house dust
- b) One dust homogenate from pooled dust from European public buildings

### **Aim of the trial:**

The aims of this study are:

- a) to compare non-target and suspect screening workflows,
- b) train new laboratories in dust screening methodologies at a workshop,
- c) evaluated the performance of improved suspect screening approaches, and
- d) create a database of compounds found in composite European dust samples.

### **Extraction and clean-up methods:**

Generally, the samples should be treated by the individual laboratories in the same way as any dust sample. However, preferred extraction solvents, etc., will be discuss at the workshop (see below).

### **Time plan:**

- Workshop at the Free University, Amsterdam 31 March - 1 April (lunch to lunch)



- Dust homogenates and reporting protocols sent to the participants: End of April 2020
- Deadline for the report from participants: End of September 2020
- Overview of the results presented at the NORMAN General Assembly meeting: end of 2020
- Draft report of the results: spring 2021
- Scientific paper and final workshop: autumn 2021

**Preliminary workshop topics:**

- Outcome of the first NORMAN Collaborative Trial on non-target analysis of indoor dust
- Introduction to the 2nd NORMAN Collaborative Trial on non-target analysis of indoor dust
- Lessons learned and recommendations
- Progress in the retention index and response factor prediction in LC-MS
- On-line resources for suspect and non-target screening
- Presentation of Digital Sample Freezing Platform, incl. evaluation tools
- Group discussions (experience sharing)

**Contacts:**

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