

Occurrence, fate and effects of emerging pollutants in the environment – chemical analysis and toxicological assessment.

Workshop at the Auditorium, VU University

Thursday 29 November

09:30-10:00 Registration

10:00-10:10 Introduction and welcome

Session 1. Occurrence and fate of new compound classes including metabolites and transformation products.

Chair: Pim Leonards, IVM

10:10-10:50 *Keynote* - **Dana Kolpin**, U.S. Geological Survey, United States; Expanding the knowledge of emerging contaminants in the environment: recent research by the USGS

10:50-11:10 Occurrence and fate of the main classes of emerging pollutants in the aquatic ecosystem of a highly urbanized area - **Sara Castiglioni**, Mario Negri Institute for Pharmacological Research, Italy

11:10-11:30 Pharmaceuticals as emerging contaminants in surface waters used for the production of drinking water - **Corine Houtman**, Het Waterlaboratorium, The Netherlands

11:30-11:50 Occurrence and fate of per- and polyfluoroalkyl substances in the environment - **Lutz Ahrens**, Swedish University of Agricultural Sciences, Sweden

11:50-12:10 Screening for biotransformation products of pharmaceuticals in water-sediment tests - **Zhe Li**, Stockholm University, Sweden

12:10-13:40 Lunch & poster session

13:40-14:00 Occurrence and fate of pharmaceuticals in the urban water cycle - acyclovir as a case study - **Carsten Prasse**, Federal Institute of Hydrology, Germany

14:00-14:20 Input, distribution and effects of regulated and emerging organic pollutants in a shallow mediterranean coastal lagoon using stir bar sorptive extraction, passive sampling and bioanalysis - **Concepcion Martínez-Gómez**, Instituto Español de Oceanografía, Spain

14:20-14:40 Evaluation of the efficiency of wastewater advanced treatments and sludge treatments through chemical analysis of 168 selected compounds and non-target analysis - **Marion-Justine Capdeville**, Irstea, France

14:40-15:20 Coffee

Session 2. Non-target analysis and identification strategies. Chair: Carsten Prasse, BfG

15:20-16:00 *Keynote* - **Félix Hernández**, University Jaume I, Spain; Strategies for investigation of metabolites of emerging contaminants in water by LC-QTOF-MS

16:00-16:20 Screening of organic micropollutants in wastewater and treated wastewater by liquid chromatography coupled with high resolution mass spectrometry - **Lauriane Barritaud**, Veolia, France

16:20-16:40 Recalibration and annotation of high accuracy MS/MS: implications for non-target screening - **Emma Schymanski**, EAWAG, Switzerland

16:40-17:00 A new scientific software approach for routine accurate mass screening - **Gerard Bondoux**, Waters, France

17:00-17:20 Multitarget screening and risk assessment of emerging pollutants in German rivers - **Tobias Schulze**, UFZ, Germany

17:20-17:30 Wrap up

18:30 - Workshop dinner at Amsterdam American Hotel. Details below.

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Friday 30 November

Session 3. Biological tools for effect assessment. Chair: Juliette Legler, IVM

- 9:00-9:40 **Keynote - Anders Goksøyr**, University of Bergen, Norway; Environmental genomics: complex methods to understand complex responses in complex systems
- 9:40-10:00 Endocrine disruption of real life mixtures of POPs in experimental models and wild fish - **Vidar Berg**, Norwegian School of Veterinary Science, Norway
- 10:00-10:20 Zebrafish as a tool to study mechanisms of developmental toxicity of environmental chemicals - **Jessica Legradi**, VU-IVM, The Netherlands
- 10:20-11:00 Coffee
- 11:00-11:20 Assessing toxic potential of pollutants in tilapia (*Oreochromis niloticus*) from lakes in Tanzania - **Mette Bjørge**, Norwegian School of Veterinary Science
- 11:20-11:40 Smart monitoring of the water cycle - **Ron van der Oost**, Waternet Institute for the Urban Water Cycle, The Netherlands
- 11:40-12:00 Sample preparation for integrated chemical analysis and bioassay application in water quality assessment - **Annemieke Kolkman**, KWR Water, The Netherlands

12:00-13:00 Lunch & poster session

Session 4. Effect-Directed Analysis – state of the art, trouble shooting and success stories. Chair: Corine Houtman, HWL

- 13:00-13:40 **Keynote - Elizabeth Hill**, University of Sussex, United Kingdom; Are we living in a world contaminated with anti-androgenic chemicals?
- 13:40-14:00 Characterization of AhR agonist compounds in roadside snow - **Martine Muusse**, NIVA, Norway
- 14:00-14:20 Identification of contaminants in marine waters using high resolution fractionation combined with high resolution mass spectrometry - **Petra Booy**, VU-IVM, The Netherlands
- 14:20-14.40 Identification of synthetic steroid compounds downstream of a pharmaceutical industry using effect-directed analysis - **Nicolas Creusot**, INERIS, France
- 14:40-15:00 Identification of thyroid hormone-disrupting compounds in polar bear plasma by effect-directed analysis (EDA) - **Eszter Simon**, BioDetection Systems, The Netherlands

15:00-15:10 Wrap up



Workshop venue Thursday-Friday 29-30/11

The workshop will be held in the Auditorium in VU University's main building. Signs will be set up in the building. The address is De Boelelaan 1105. To find connecting public transport you can use <http://9292.nl/en>.



Workshop dinner Thursday 29/11 at 18:30

Common workshop dinner will be held at Amsterdam hotel American, Leidsekade 97, on Leidseplein. From the VU University you can take the tram number 5 directly to Leidseplein. Contact person Jana Weiss +31 630953502