Research Centre
for Toxic Compounds
in the Environment

Kamenice 753/5, Pavilion A29, 625 00 Brno, Czech Republic, www.recetox.muni.cz

# INVITATION TO LECTURE

## Prof. Michael McLachlan

**Stockholm University, Department of Environmental Science and Analytical Chemistry, Sweden**

## Identifying chemicals that are planetary boundary threats

**Date:** **10. 4. 2018, 9:00**

**Venue:** **lecture room RCX1 (A29/252), 2nd floor, RECETOX, Kamenice 5, Brno**

**Syllabus of lecture:**

In 2009 Rockström et al. proposed a set of planetary boundaries that delimitate a "safe operating space for humanity". "Chemical pollution" was one of the original planetary boundaries, but no clear definition was provided. In this seminar Prof. McLachlan will propose a definition for the chemical planetary boundary, outline conditions for fulfilling this definition, and explore different scenarios under which chemical planetary boundary threats could develop. Then actions that can be taken to avoid chemical planetary boundary threats will be discussed.

**About the lecturer:**

Prof. McLachlan's research is about the behaviour of organic contaminants in the environment. The overall goal is to describe the relationship between emission of a chemical and its levels in tissue in humans and wildlife. This entails an understanding of the major processes that influence the environmental fate and bioaccumulation of organic chemicals. Prof. McLachlan studies chemical fate in both the terrestrial and the aquatic environments, whereby phase partitioning (e.g. to aerosols, soil, vegetation, plankton), chemical transport between environmental compartments (e.g. air-soil, air-vegetation, air-sea exchange), and bioaccumulation (from primary producers up to and including humans) have been the most active areas.