

AARHUS UNIVERSITY

EXTERNAL SEMINAR

DEPARTMENT OF ENVIRONMENTAL SCIENCE

Frederiksborgvej 399, 4000 Roskilde

5 April 2019, 13.00 – 14.15

Venue: Aarhus University, Risø Campus, K1.36, East

Title: Gas/particle partitioning for semi-volatile organic compounds in the atmosphere

Speaker: Professor Yi-Fan Li, Harbin Institute of Technology, China

Formerly employed at Environment Canada, Prof. Li worked extensively with global emission inventories for contaminants (for example hexachlorocyclohexane (HCH) and toxaphene) and long-range transport to the Arctic, where he identified the different pathways of α - and β -HCH to the Arctic. Since his return to China, his research has focussed on the topic presented today, besides many other studies on the environmental fate and occurrence of persistent organic pollutants (POPs) in China and the Arctic.

Abstract: Gas/particle partitioning for semGas/particle (G/P) partitioning process is an important factor governing the transport and fate of chemicals in the atmosphere. In this talk, I will first introduce our newly developed steady-state equation for G/P partition for SVOCs, which is different from the common equilibrium equations used for the past 2 decades. The applications of the steady-state equation will be introduced, including the way how BDE-209 enters the Polar Regions via long-range atmosphere transport, and the slope and intercepts from log-log correlations of gas/particle partition quotient and vapor-pressure and octanol-air partition coefficient for semi-volatile organic compoundsi-volatile organic compounds in the atmosphere.

Host: Katrin Vorkamp, Senior Scientist, Section for Environmental Chemistry and Toxicology **and Henrik Skov**, Professor, Section for Atmospheric Environment,
Department of Environmental Science, Aarhus University

External Guests interested in attending the presentation should e-mail Department Secretary Christel Ege-Johansen, cej@envs.au.dk

