

## Arctic contaminants: A perspective on 40 years of monitoring

**Time** September 21 (Wednesday), 20:00 (Beijing Time), 12:00 (GMT)

**Zoom Meeting ID:** 991 6754 8462; **Password:** 958195

The Arctic is a sentinel region for global contaminants including persistent organic pollutants (POPs) and mercury (Hg). Unique features of the Arctic, including its indigenous peoples with traditional diets that depend on local wildlife, such as polar bears, the proximity to urban and industrial areas at high latitudes in some circumpolar countries, as well as the remoteness of many sampling sites, have made it very suitable for research and monitoring of the long-range transport, deposition and biomagnification POPs and Hg. Circumpolar countries, particularly Canada, Kingdom of Denmark, Iceland, Norway, and Sweden, have supported development of unique long term time series on POPs and Hg, coordinated by the Arctic Monitoring and Assessment Program (AMAP). The Arctic is also warming at a more rapid rate than the global mean making it is now possible to examine the possible influence of climate change on long term trends of contaminants. This presentation will review the trends of important POPs such as PCBs, hexachlorocyclohexane, polybrominated diphenyl ethers, and perfluorinated alkyl acids in air, seawater, and wildlife. It will also touch on trends of mercury in some of the same environmental media. The trends will be compared with global use and emissions of the contaminants. Finally, possible future trends based on predicted climate warming during the 21st century will be discussed.



**Derek C.G. Muir**, Senior Research Scientist, Environment & Climate Change Canada, Fellow of the Royal Society of Canada, Academy of Science, Fellow and president (2008) of the Society of Environmental Toxicology and Chemistry, Fellow of the Chemical Society of Canada. Lead or co-lead the assessments of trends of contaminants in the Canadian Arctic and in the circumpolar Arctic for the Arctic Monitoring and Assessment Program (AMAP).

Refereed journals: 624; Refereed book chapters & conference proceedings: 51;  
Refereed technical reports: 50; Other technical reports: ~185.  
H-index: Google Scholar = 128; Citations: 39,270.