Persistent organic pollutants (POPs), are a group of organic chemical substances which enter the environment as a consequence of human activities. Their characteristic is to ‘persist’ in the environment, ‘bioaccumulate’ through the food web and become ‘toxic’ to human health and the environment make them a topic of global concern and research. There are no restricted boundaries for the POPs; once they are released from their source point, they can be transported for long distances through the atmosphere and the ocean, and can accumulate in regions such as the Arctic, where the low temperatures induce their deposition.

Arctic temperatures have increased at almost twice the global average rate over the past 50 years.  Since 1975 the Arctic has warmed at about twice the rate of the globe as a whole. This changing climate is expected to alter the environmental factors which can influence the fate of POPs in the Arctic. As the climate warms, POPs which were deposited or locked in the ice/snow can revolatilize and can enter into the atmosphere again.

I present the results of a few studies carried out which indicate that a wide range of POPs have been remobilized into the Arctic atmosphere over the past two decades, apparently as a result of a warming Arctic.