Friday, June 29, Session 1B (29-1B)
(Oral: 13:15-14:25, Room B; Poster: 14:25-15:25, Hall) Chair: IMAI Tsuyoshi

29-1B-17

Study on Environmental Behavior of HBCD and its degradation Products in River Sediment, Japan.

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Hexabromocyclododecane (HBCD), a brominated flame retardants (BFRs) additive in polystyrene foams and textile products, has been manufactured worldwide because of its remarkable flame retardancy. However, debate on whether its consumption should be henceforward prohibited has become a serious issue in that HBCD has been recently reviewed as one of candidate persistent organic pollutants (POPs) under the Stockholm Convention. Occurrence of HBCD in biotic and abiotic environment has so far been studied extensively during the past two decades. Furthermore, there is a rising interest on its degradation products which have been reported to be detected in abiotic environment and microcosm studies. Curiously, despite the rise of monitoring studies of HBCD, few have attempted to address the degradation products and enantiomeric patterns in the environmental media. It is necessary to examine those minutely as degradation products have higher binding affinities to human transthyretin receptor than parent HBCD and even thyroxine. The purpose of this study is to offer not only monitoring data of HBCD, but identification of its degradation products in river sediments which were collected from a Japanese river highly contaminated by HBCD.