

OPA3**Passive Air Sampling of Polychlorinated Biphenyls and Polychlorinated Naphthalenes in East Asia - Preliminary Results Across Japan**

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Polychlorinated biphenyls (PCBs) and polychlorinated naphthalenes (PCNs) were measured in air through passive air sampling (PAS) across Japan as a part of the wide scale-monitoring program in East Asia. PASs were exposed to air for eight weeks from March 21 to May 16, 2008 using polyurethane foam (PUF) disk at 57 sites (39 rural, 14 urban and 4 suburban). Air concentrations (pg m^{-3}) were estimated using an average sampling rate of $3.5 \text{ m}^3 \text{ day}^{-1}$ and ranged as follows: PCBs (16.3 – 2910) and PCNs (1.34 – 161). Air concentrations of PCBs were higher at all sites compared to those of PCNs. Exceptionally high concentrations for both the PCBs (2910) and PCNs (161) were observed at Kushimoto (Wakayama) which was a rural site (Sample 25) but higher concentrations of PCBs and PCNs for the most samples were observed at urban sites compared to rural sites. Homologue profiles of PCBs and PCNs suggested that there were two types of pollution in Japan. One was predominant with lower chlorinated (di- to tetra-) congeners and the other was predominant with both the lower and higher chlorinated PCBs and PCNs. Principal component analysis (PCA) further confirmed the existence of the two types of polychlorinated organic pollution across Japan.

OPA4**Chemical Assessment of Water Quality of the Karnafuly River**

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The study was carried out to assess water quality of the Karnafuly river. It is the main river of the Chittagong Division. A large number of chemical and fertilizer industries have been established since the independence. Effluents from these industries are reportedly being directly discharged into this river. Water quality parameters of this river were examined for samples collected from different distances from the estuary. Samples were collected at high