Name of Special Session

POPs in Pets and their Applicability as Models for Human Health

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Objective

Pet dogs and cats can be exposed to many different environmental contaminants, including organohalogen compounds (OHCs) such as polychlorinated biphenyls (PCBs) and polybrominated diphenyl ethers (PBDEs) and so on. Recently, a number of investigations reported residue levels of organohalogen compounds in cats and dogs from countries all over the world. They reported that PCB and PBDE concentrations were higher in cats than in dogs, suggesting that differences of size, class, dietary exposure, xenobiotic metabolizing systems and/or toxicity exist between the species.

Polycyclic aromatic hydrocarbons (PAHs), perfluoroalkyl substances (PFASs), PCBs, PBDEs, organophosphorus flame retardants (OPFRs), plasticizers and pesticides are ubiquitous prevalence and use in household items and consumer products. Therefore it is suspected that pet animals may ingest these indoor contaminants via food, grooming, inhalation, and bite, and the application of non-target screening of environmental contaminants in pet animals and indoor dust is needed to identify the complex mixture. Also, indoor contamination may be a significant source of human exposure to OHCs, especially for toddlers. Pets, especially cats, share similar environments with toddlers and have been presented as a potential bio-sentinel for indoor pollution exposure.

However, information relevant to the research of pet animals are scattered through a wide range of fields, and the information status of toxicological effects in pets is limited. Therefore, we strongly feel the necessity to share information about chemical hazard research in pet animals including contamination status monitoring, risk assessment, effectivity such as sentinels and so on.

We welcome presentations about how all kinds of pet animals can be used as models for human exposure and health..