

Dioxin 2018 Session

Legacy and Emerging Flame Retardants II: Metabolism and Toxicokinetics

**PLEASE SHARE THIS INVITATION
WITH YOUR COLEGUES and STUDENTS!**

Dear Colleague,

You are invited to submit an Abstract to the **Dioxin 2018** Symposium Session on **Legacy and Emerging Flame Retardants II: Metabolism and Toxicokinetics** to be held in Kraków, Poland, 26-31 August 2018. Each registered author can submit as presenter up to two abstracts. Abstracts by students (for oral or poster presentation) can be accepted also for the Pre-Dioxin Students Session to be held on August 25.

Flame retardants (FRs) comprise a diverse group of chemicals, used in an array of commercial and industrial applications to delay or prevent the onset of fire. These compounds, particularly additive FRs, can enter the environment through spills, leaching and volatilization during their production, use and disposal or recycling. In the environment, Human and wildlife may be exposed to FRs via a multitude of pathways, including: ingestion, inhalation and dermal contact. This has raised concerns over the potential adverse health effects arising from such exposure, such as: endocrine disruption, neurodevelopmental and reproductive toxicity and even cancer. While several recent studies have assessed external exposure of human and wild life to FRs via different pathways, knowledge remains limited in the fate, behaviour and toxicokinetic profile of these chemicals in exposed organisms.

Metabolism is an important factor in determining the bioaccumulation, fate and toxicity of contaminants. It is evident that more research is required on FR biotransformation with respect to, e.g., metabolite identification, metabolic pathways, inter-species variation and the influence of congener and FR structure on metabolic susceptibility, as well as detection of FR metabolite residues as biomarkers in exposed species. There is also increased interest in understanding the uptake and elimination kinetics of FRs following external exposure, which is essential for understanding the bioaccumulation potential and consequently assess the risk arising from exposure to these chemicals. Exploring these themes will advance our knowledge and understanding of the consequences of environmental contamination with FRs and support mitigation strategies.

The platform and poster presentations in this session will highlight various research contributions, which include the following topics:

- *In vitro*, *ex vivo* and *in vivo* metabolic/metabolomics studies of FRs in human and wildlife.
- *In vitro*, *ex vivo* and *in vivo* toxicokinetic studies (e.g. ADME, uptake, bioavailability and/or elimination) of FRs in human and wildlife.
- Identification and monitoring of metabolite residues/biomarkers in exposed species (e.g. human urine or bird eggs).
- Biotransformation kinetics and its relation to bioaccumulation and biomagnification in target organisms.
- Elucidating the biotransformation pathways and profiles of various FR groups.
- *In vitro* and *in vivo* studies for assessment of the bioavailability/bioaccessibility of FRs and estimate internal exposure to FRs.

The oral presentation is to be 20 minutes in length (including time for questions). Ideally, all submissions are to be a one page abstract or a four page short paper (see the guidelines

established by the meeting organizers). A one page abstract should have up to 600 words. A short paper consists ~4 pages (see the guidelines established by the meeting organizers), and will be published on a USB stick and can be accepted and published in the 2018 volume of the Organohalogen Compounds journal (http://dioxin20xx.org/ohc_database_search.htm).

The Pre-Dioxin 2018 Symposium Students Session “All POPs and Pseudo-POPs” will be held will be held at the session venue located very close to the Old Downtown Kraków area. This is a session for students by students and only student presentations are accepted. Depending on the number of participants, one submission per registered student is permitted at this time. In addition to the standard 20-minute oral presentations (including time for questions) and poster presentations, there exists the possibility of presenting a short (5 min) poster highlight session in addition to a poster presentation. These short oral presentations will give young researchers the opportunity to present their work and initial results and will give an opportunity to receive constructive feedback. Awards for the best student presentation (oral or poster) will be granted to students for outstanding presentations at the Students Symposium.

Students applying for a Otto Hutzinger Award must submit a four pages short paper and for students attending the Pre-Symposium Students Sessions only the one-page abstract is required.

We welcome Abstracts that highlight new findings on human and wildlife exposure; suspected and known sources, environmental fate and exposure pathways, body burdens and patterns (isomer specific), spatial and temporal trends, and health effects.

Kindly let us know in advance if you plan to submit an Abstract for consideration as an ORAL presentation.

NOTE: Participation in the Students Session is free of charge for student presenters who are registered for the Dioxin 2018 Symposium, and have paid applicable registration fees. Other student attendants – please see for details at <http://dioxin2018.org/>.

Dioxin 2018 Abstract Submission – Deadline for an abstract submission is May 11, 2018. Your abstract can be considered as accepted unless you receive a notice of rejection.

We look forward to hearing from you -- and hope to see you at Dioxin 2018 in Kraków.

Chairs

Mohamed Abdallah¹ and **Malarvannan Govindan²**

¹Birmingham University (Birmingham, England); E-mail: m.abdallah@bham.ac.uk

²University of Antwerp (Antwerp, Belgium); E-mail: malarvannan.govindan@uantwerpen.be



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