



IUPAC: Chemistry of the Environment Division (DIV. VI)

The Environment, Health and Food Safety Impact of Microplastics

South America, World Forum, Churchillplein 10, The Hague, Netherlands
Monday, August 21, 2023

Workshop Background

A growing source of contamination in the environment is the degradation of plastics that leads to fragmentation into microplastics (<5 mm in diameter) and nanoplastics (<100 nm in diameter). Such plastics are known to have potential human health risks through direct contact and through entering the human food chain. The material composition of many personal hygiene products (e.g., wet-wipes, tampons, cosmetic products etc.) is poorly documented. Many such products are made with plastic compounds that can reach the environment when these products are incorrectly disposed or when they fragment into smaller plastics (i.e. microplastics or nanoplastics).

This workshop is based on an IUPAC Div VI project which aims to have a better understanding of the emerging issue of microplastics. The project seeks to analyze the existing data, review scientific methods, tracing the source, revealing the fate, and evaluating the impact on environment and food safety.

Agenda

- 08:45 -09:00 **Welcome & Gathering**
- 09:00-09:10 **Opening and General Introduction (to cover the topic and the project)**
Prof. Weiping Wu, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences,
- 09:10-11.:10 **Presentations**
Chair Prof Weiping Wu
- 09:10 -09:40 **Microplastics Threatening the Ocean well being**
Prof. Fani Sakellariadou, University of Piraeus, Greece
- 09:40 - 10:00 **Microplastic Challenges for Sustainability: Present and Future (video talk)**
Prof Nadia Kandile, Ain Shams University, Egypt
- 10:00 -10:20 **Coffee Break**
- 10:20 - 10:50 **An Overview of the Technologies for Microplastic Remediation**
Prof. Diane Purchase, Middlesex University, UK
- 10:50 - 11:10 **Microplastics: Environmental Occurrence and Analytical Challenges**
Prof. Roland Kallenborn, Norwegian University of Life Sciences, Norway
- 11:10 - 11:55 **Round table discussion**
Chair, Prof. Hemda Garelick, Middlesex University, UK
- 11:50 - 12:00 **CLOSING.**