

Tuesday 29th November 2022, 4.15 pm – 5.15 pm

Occurrence, fate, environmental and human health impacts of plastic pollution

Dr. Florian Breider
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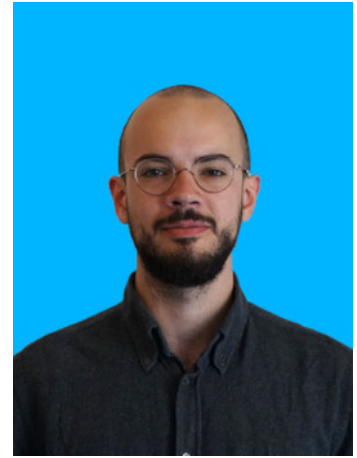
ABSTRACT. Plastic pollution affects all ecosystems from the Mariana Trench to the Himalayan peaks and has a devastating impact on living organisms and human health. This presentation will present some of the research projects conducted by the EPFL Central Environmental Laboratory to better understand the fate of microplastics in the environment and their potential impact on living organisms. Four themes will be addressed: the monitoring of plastic pollution in Lake Geneva via the LÉXPLORE research platform, microplastics as a vector of micropollutants, fate and toxicity of tire wear particles and the human exposure to microplastics.



BIO. Florian Breider obtained his PhD in the field of the stable isotope biogeochemistry from the University of Neuchatel in 2013. This was followed by seven months of postdoc at EPFL in the Atmospheric Particles Research Laboratory and two years as research associate at Tokyo Institute of Technology (Japan) where he conducted studies on nitrous oxide biogeochemistry in oceans. From 2015 to 2018, he was research scientist in the Laboratory for Water Quality and Treatment at EPFL where he conducted research on disinfection by-products and antibiotic resistant bacteria. Since May 2018, he is director of the Central Environmental Laboratory at the Institute of Environmental Engineering of EPFL. His research focuses mainly on the fate of micro-pollutants and nano/micro-plastics in aquatic and terrestrial environments, the development of cutting-edge analytical methods to detect organic and inorganic pollutants and the role of microorganisms in natural and engineered environments.

The presentation will be followed by a talk from
Adrian Grunder, doctoral candidate from the Soil
Science Group, on the topic:

*“Experimental design to investigate the influence of
microplastics on the soil physical and chemical
properties.”*



You are welcome to attend in person in
Hallerstrasse 12, seminar room 002.

