

Microplastics in karst systems: distribution, transport, sourcing, and storage mechanisms

Dr. Teresa Baraza

Anthropogenic microparticles, including microplastics as well as non-synthetic and modified materials (e.g., cotton), are pervasive, emerging contaminants that present both known and unknown human and ecological risks. However, research on their distribution and transport in groundwater and other subsurface environments is lacking. This talk will explore novel research conducted in caves and karst springs in Missouri and Illinois (United States) that provides new insights on how anthropogenic microparticles move through karst systems under varying flow conditions, and how land attributes such as urbanization and karstification influence their distribution. Additionally, we will discuss how sediments within cave passages can store anthropogenic microparticles within the system, leading to legacy contamination and potentially acting as a contaminant source when sediments are mobilized and resuspended.

Dr. Teresa Baraza is a post-doctoral research associate with a joint position at National Great Rivers and the Saint Louis University WATER Institute (United States). Her primary responsibilities are to design and conduct research on contaminant sources and transport mechanisms in the environment. Her expertise spans traditional contaminants like road salt, nutrients, and toxic metals, as well as emerging contaminants such as microplastics. She is originally from Barcelona (Spain), where she graduated in Geology, and later on moved to the United States for her doctoral degree in Environmental Geoscience at Saint Louis University.

<https://fu-berlin.webex.com/fu-berlin/j.php?MTID=mbd6d27391763d83aeadc2ac204eaa4c4>



**05.11.2024
16 Uhr
via Webex**