



## Call for abstracts Session HS 2.3.6

### Micropollutants and pathogens in the soil-groundwater-river continuum: modeling and monitoring

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#### Background:

A large number of pathogens, micropollutants and their transformation products (veterinary and human pharmaceuticals, personal care products, pesticides and biocides, chlorinated compounds, heavy metals) pose a risk for soil, groundwater and surface water. The large diversity of compounds and of their sources makes the quantification of their occurrence in the terrestrial and aquatic environment across space and time a challenging task. Monitoring programmes cover a small selection out of the compound diversity and quantify these selected compounds only at coarse temporal and spatial resolution. Carefully designed monitoring however allows to detect and elucidate processes and to estimate parameters in the aquatic environment. Modeling is a complementary tool to generalize measured data and extrapolate in time and space, which is needed as a basis for scenario analysis and decision making.

#### Topics:

This session invites contributions that improve our quantitative understanding of the sources and pathways, mass fluxes, the fate and transport of micropollutants and pathogens in the soil-groundwater-river continuum.

Topics cover:

- Novel sampling and monitoring concepts and devices
- New analytical methods, new detection methods for DNA, pathogens, micropollutants, non-target screening, CSIA, ESIA
- Experimental studies and modelling approaches to quantify diffuse and point source inputs
- Novel monitoring approaches such as high-frequency stable isotopes measurements and non-target screening as tools for improving processes understanding and source identification such as industries
- Comparative fate studies on parent compounds and transformation products
- Diffuse sources and (re-)emerging chemicals
- Biogeochemical interactions and impact on micropollutant behavior

Abstract submission: <http://meetingorganizer.copernicus.org/EGU2017/session/22966>

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