



Tailor-made Analysis for Environmental Challenges

We develop analytical methods to investigate the fate of chemicals and microorganisms in complex systems. Besides laser analysis, particle analysis, and bioanalytics, research at the Institute of Water Chemistry (IWC) is focused on compound-specific isotope analysis to measure isotope effects at natural abundance.

Key areas are the assessment of water quality by (i) analyzing and characterizing transformation of chemical pollutants, (ii) rapid detection of pathogens by innovative bioanalytical methods, and (iii) characterizing microorganisms and particles such as microplastics and aerosols.

Through innovation in analytical methods, our Institute contributes to improvements in the management of chemicals in the environment, helps to establish the self-purification potential of natural systems and aids in the optimization of turnover in technical systems.

