

The conference 'Testing the waters: first international multidisciplinary conference on detecting illicit drugs in wastewater' will be the first ever international conference to focus solely on the fast-growing scientific field known as 'wastewater sampling for drugs', 'drug wastewater analysis', or 'drug sewage epidemiology'. Put simply, this is a new discipline with exciting potential for monitoring population-level trends in illicit drug consumption and for assessing the efficacy of drug control interventions. The conference will bring together a multidisciplinary network to explore recent technical advances and their application.

Research into wastewater analysis has been largely pioneered by European scientists but is of increasing global interest and relevance. This conference will aim to assess the state of the art in this scientific discipline, consolidate research findings, and identify a common approach and set of methodologies for wastewater analysis and monitoring. This new field will benefit from interdisciplinary focus and consensus building at a relatively early stage in its development (e.g. chemical degradation in sewers, optimal sampling strategies, appropriate consumption indexes). On the policy side, there is the opportunity to match wastewater testing with relevant and 'real world' research questions. The conference will act as a catalyst, exploiting the potential to generate longer-term research funding and to have a major impact on the field.

A multidisciplinary approach is a central requirement for developing this area, and contributions to our knowledge of the topic are being made by a number of different research areas. For this reason, the conference will be targeted at various disciplines. Analytical chemistry has traditionally been the science most closely involved in this type of work. More recently, within environmental toxicology, a specialism has been developed that is concerned with the surveillance, detection and quantification of drug residues whether these have been legally or illegally introduced into the environment. This conference will combine the perspectives of analytical chemistry, physiology and biochemistry, sewage engineering, spatial epidemiology and statistics, and conventional drug epidemiology. By bringing together chemists, toxicologists, pharmacologists and drug epidemiologists, the conference aims to generate improved understanding of the wastewater topic.