

## PFAS - Basics of PFAS diversity and a journey from routine to

### **Thematic introduction:**

PFAS (poly and perfluorinated alkylated substances) are ubiquitous in the environment, in materials and in biological samples and circulate in our blood. Some of these compounds are already explicitly listed in national and international legal texts containing the maximum loads of food and valuable substances due to their toxicological assessment. But PFAS is much more. The diversity of over 12,000 compounds, from small molecules to polymers, makes PFAS analysis a challenge. Routine mass spectrometric analytical approaches cannot be the long-term goal, but also the determination of sum parameters in view of legislative proposals requiring the total PFAS concentration.

### **Aim:**

The aim of the course is to present the chemical diversity of PFAS, the standard analytical methods (LC-MS/MS) and the special methods will be discussed.

### **Target group:**

The group participants are working in analytical laboratories and want to establish PFAS methods or are located in the environmental and life science sector and want to get an overview of the PFAS problem.

### **Contents: What is covered in the course?**

- Basics of PFAS diversity and what the sources of PFAS pollution are
- Legal requirements and regulations on PFAS in international comparison and what is expected in the future
- Setting up PFAS analysis for routine use with sample preparation and quantification strategies using LC-MS/MS
- The principle of total organofluorine determination (EOF and AOF) using CIC, HR GFMS and ICPMS and other methods is explained
- Research approaches for novel analytical methods for PFAS and total fluorine are presented.

### **Methodology: How the content is conveyed:**

Seminar and workshop character with interactive questions for more than 10 participants. Furthermore, publications and reports will be distributed in which the participants will be asked to identify the outstanding performance as well as the weak points of the work in group work in order to apply what they have learned. Presentation slides are passed on as pdf files.

### **Quality assurance:**

How is it checked whether the participants have understood the material

The contents of the exam are asked digitally and interactively after each unit and any content not understood is explained again.

### **Course language:**

Generally DE, lecture slides in EN. But could also be given entirely in EN.

### **Minimum number of participants:**

5 persons

## Event Properties

<b>Event Date</b>	Monday, 06 October 2025 - Monday, 06 October 2025
<b>Registration Start Date</b>	Monday, 30 November -0001
<b>Cut off date</b>	Monday, 30 November -0001
<b>Individual Price</b>	Mitglied CHF 600.00, Nichtmitglied CHF 750.00, Studierende/Doktorierende/AHV CHF 320.00
<b>Course language</b>	German
<b>Location</b>	Zürich, Nähe Hauptbahnhof, Zürich