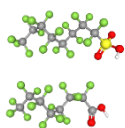


[Open PhD Position]

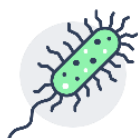
Project starts mid 2024

Development of mass spectrometry-based methods for the assessment of bioremediation of Per- and Poly-Fluoroalkyl Substances (PFAS)

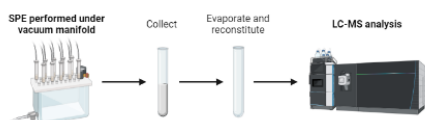
The **Institute of Analytical Chemistry** is looking for a **PhD candidate**, who wants to perform research in the field of **PFAS analysis**



PFAS are **persistent organic compounds** which consist of a hydrophilic head group and a hydrophobic alkyl chain of variable length partially (poly-) or completely (per-) fluorinated. They are ubiquitous contaminants of soil and water, and can cause harm to human health and the environment. PFAS are widely used in industrial and commercial products, e.g. fire-fighting foams, materials for cook-ware, high-temperature lubricants, ski wax, water repellent clothing and many more products. According to the Environment Agency Austria, PFAS contamination levels in Europe and also Austria are becoming critical, especially since official EU threshold levels recently have been drastically lowered.



To date, PFAS decontamination requires high energy and causes high operational costs and is mainly applicable to water and hardly to contaminated soil. Bioremediation would be a useful alternative to the existing methods. Based on a specific directed evolution approach, the **Institute of Molecular Biotechnology** plans to improve *Pseudomonas* spp. regarding their ability to degrade PFAS.



By developing **cutting-edge high resolution mass spectrometry**-based methods, you as analytical chemist, will be key for the evaluation of **PFAS-degradation** ability as well as quantification and characterization of transformation and degradation products generated by the selected mutant clones.

Requirements:

- Master's degree in the field of chemistry or master thesis in the field of analytical chemistry
- Advanced English speaking and writing skills
- Being creative and a good team player

We offer:

- international and motivated team
- possibility to perform your research on high-end analytical instrumentation (high resolution mass spectrometry, ion mobility) and opportunity to present at international conferences and workshops
- Contract: 3 years / 30 h per week, gross monthly salary: 2.684,10€ (14 x p.a.)
- Work place: Vienna, the most livable city in the world (Global Liveability Index 2023)