Stellenausschreibung

Art der ausgeschriebenen Position
☒ wissenschaftlich
☐ administrativ

Zielgruppe
☒ Graduierte
☐ Postdoktoranden
☐ weitere

<table>
<thead>
<tr>
<th>Titel</th>
<th>PhD Student Position in Environmental Microbiology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zur Institution</td>
<td>Universität Stuttgart, Institute for Sanitary Engineering, Water Quality and Solid Waste Management (ISWA), Department of Environmental Microbiology</td>
</tr>
</tbody>
</table>
| Zur Position | The Department of Environmental Microbiology at the Institute for Sanitary Engineering, Water Quality and Solid Waste Management (ISWA) at the University of Stuttgart is delighted to announce an open position for a PhD student who will work on: “Identification of surfactant impacts on N- and C-cycling microbial key players in soils and freshwater sediments”.

We are offering a PhD student position (3-4 years; TV-L 13 75%) in an interdisciplinary, international, and dynamic team of environmental microbiologists and microbial ecologists. The position provides the opportunity for the candidate to be creative and innovative, and to work on a challenging topic that combines various fields within environmental sciences. |
| Aufgaben | Glyphosate is the most widely applied herbicide on Earth, exhibits potential toxicity, and persists in the environment. Glyphosate is not used as single compound but as mixture, a formulation, with surfactants as the second most abundant ingredient. These surfactants are considered inert, and a critical knowledge gap exists regarding their impacts on microorganisms in the environment. Of particular interest are microbial key players that drive biogeochemical cycles and influence the fate of greenhouse gases.

The PhD project will identify glyphosate-based surfactant impacts on microbial key players that are involved in the N- and C-cycle (i.e., ammonium oxidizers, nitrifiers or heterotrophic C-cyclers). In particular, aerobic and anaerobic cultivation techniques will be used to enrich the target organisms. Subsequently, cultivation experiments will be established to unravel surfactant impacts on enriched microbial key players. Microcosm studies will be performed to identify surfactant |
impacts on complex microbial communities in agricultural soil and freshwater sediment using a suite of biogeochemical and molecular tools (e.g., 16S rRNA gene sequencing, metagenomics, and metatranscriptomics). This interdisciplinary project will further reveal if surfactants from glyphosate application can have effects on greenhouse gas formation. The project is funded by the European Research Council (ERC).

**Anforderungsprofil**

Ideal candidates should have a solid background in environmental microbiology and molecular ecology. Applicants must have the ability to work independently and in a team, have excellent management and communication skills and should be highly motivated and committed to pursuing interdisciplinary research. Very good computer and language skills (English) are necessary. The candidate will have the opportunity to present the results in international journals and on conferences.

**Zur Bewerbung**

Applications including CV, motivation letter, an overview about the methods used in the past, and contact information of academic references should be submitted before January 14th, 2024 to the JoinUS portal: https://careers.uni-stuttgart.de/job/Stuttgart-PhD-Student-Position-in-Environmental-Microbiology/962885255/

At the University of Stuttgart, we actively promote diversity among our employees. We have set ourselves the goal of recruiting more female scientists and employing more people with an international background, as well as people with disabilities. We are therefore particularly pleased to receive applications from such people. Regardless, we welcome any good application.

Women who apply will be given preferential consideration in areas in which they are underrepresented, provided they have the same aptitude, qualifications and professional performance. Severely disabled applicants with equal qualifications will be given priority.

As a certified family-friendly university, we support the compatibility of work and family, and of professional and private life in general, through various flexible modules. We have an employee health management system that has won several awards and offer our employees a wide range of continuing education programs. We are consistently improving our accessibility. Our Welcome Center helps international scientists
get started in Stuttgart. We support partners of new professors and managers with a dual-career program.

Information in accordance with Article 13 DS-GVO on the processing of applicant data can be found at https://careers.uni-stuttgart.de/content/privacy-policy/?locale=en_US

Kontakt
Contact person: Prof. Dr. Sara Kleindienst
Mail: sara.kleindienst@iswa.uni-stuttgart.de
Phone: +49 711 685 69351
Website: https://www.iswa.uni-stuttgart.de/institute/em/