

PhD Position on Polymer Biodegradation by Wastewater Microbiomes



Are you passionate about conducting fundamental research that creates impact to sustainability? Our [group](#) at the University of Vienna is offering an exciting opportunity. Join us to explore the biodegradation of water-soluble polymers by wastewater microbiomes!

Your PhD Project:

Water-soluble polymers (WSPs) are essential for numerous applications, and, after use, they enter wastewater systems. This project addresses the critical need for sustainable end-of-life solutions for WSPs. Specifically, the planned research will focus on elucidating how polymer- and wastewater-related factors govern WSP biodegradation. You will employ respirometry-based laboratory tests to quantify biodegradation rates and extents – complemented with microbiome analyses to characterize key microbial players. This research aims to reveal the interplay between factors and will have significant impact – also through collaboration with leading chemical industry partners.

We Are:

Our research group is part of the Centre for Microbiology and Environmental Systems Science ([CeMESS](#)) at the University of Vienna (Austria). We are dedicated to conducting cutting-edge research at the intersection of chemistry, microbiology, and environmental science and to informing solutions to current environmental challenges.

We Offer:

- A supportive and stimulating working environment and excellent laboratory facilities
- A fully funded position in accordance with the collective bargaining agreement – starting in July/August 2025 or as soon as possible thereafter
- Opportunities for international collaboration and career mentoring
- A chance to live and work in Vienna – renowned for its high quality of life.

Your Profile:

- A master's degree in environmental science, chemistry, microbiology, or a related field.
- Laboratory experience in one or several of the above research fields is an asset.
- Fluent in spoken and written English.
- High motivation, independence, and reliability.

How to Apply:

Send one PDF file containing your CV (including contact details of at least two referees) and a letter of motivation (outlining your interest in the topic and how you fit to the position) to: michael.zumstein@univie.ac.at.

Applications will be considered until the position has been filled.