

Within the newly established research platform “Plastics in the Environment and Society” (PLENTY), funded by the University of Vienna,
Three PhD positions on Plastics in the Environment
are available.



We offer

- Working in an **interdisciplinary, innovative research project**
- The **support from a team of internationally recognized senior researchers** to develop all the skills necessary to complete a PhD project
- A working environment with many opportunities for **career development** (networking, conferences, project meetings, etc.)
- A three year work contract 30h/week with a competitive salary include social security, health care and approx. € 37,000.- gross salary per year

The research platform PLENTY investigates the global plastic pollution aiming to assess the environmental impact of plastics and the societal perception of plastics in daily life, thus effectively linking the environmental and socioecological aspects of the fate of plastics in our environment. In addition to the biotic and abiotic interactions of plastics in aquatic systems, the aim is to investigate how information and altered perception can potentially change the use of plastics in society.

The 3 PhD positions within PLENTY focus respectively on:

- the **plastic-environment interactions** exploring cultural narratives produced by citizens and their habits of dealing with plastic in everyday context at the Dept. of Department of Science and Technology Studies ([supervised by Ulrike Felt](#)).
- the **biogeochemistry and microbial ecology** of plastic particles in the marine, estuary and freshwater systems at the Dept. Limnology & Bio-Oceanography ([supervised by Gerhard J. Herndl](#)).
- plastics as a vector of **contaminants** and the **behavior and fate of plastics in the environment** at the Dept. of Environmental Geology ([supervised by Thilo Hofmann](#)).

More specific descriptions on the individual PhD positions are given below.

PhD position on the biogeochemistry and microbial ecology of plastics in the marine, estuarine and freshwater environment

Within the Microbial Oceanography working group at the Dept. Limnology and Bio-Oceanography at the University of Vienna, a three-year PhD position (University Assistant, prae doc) in marine microbial ecology is offered. The position starts at earliest 2 July, 2018 but should not start later than October 2018, dependent on the successful applicant. The position is financed by the University of Vienna within the research platform PLENTY.

The large amount of plastics in the ocean has been recently recognized as a serious multifaceted environmental problem. Within PLENTY, we will test several hypotheses related to the interaction between photolysis mediated by solar radiation and biodegradation mediated by the microplastics-associated microbial biofilm. The impact of different types of plastics and its additives will be tested by combining controlled laboratory experiments with in situ sampling of plastic material in the northern Adriatic Sea and the Danube River. Also, we will determine whether there is a common microbiome on microplastics by comparing the phylogenetic and functional composition of microbial communities on microplastics. The microbial community on plastic material will be assessed via abundance measurements, metagenomic and metaproteomic approaches with a focus on linking phylogeny with functional gene analyses related to plastic degradation and microbial activity measurements. This combination of approaches will shed light on the capability of the interactive effect of solar radiation and biodegradation to degrade plastics and its additives in the aquatic environment.

Qualifications

Applicants should hold a diploma/ master degree in a discipline of relevance for the research project. The position is open to international applicants. Experience with marine/aquatic microbial ecology and molecular biology as well as good English language skills will be a requirement. The main criterion for selection will be the research potential of the applicant.

Salary and terms of employment

Terms of appointment and salary are in accordance with the general conditions of the Univ. of Vienna.

Further information

For further information on the project contact Gerhard J. Herndl (Email: Gerhard.herndl@univie.ac.at, cell phone: +43 (0)1-60277-76431. See also <http://www.microbial-oceanography.eu/> for information about the research group and its ongoing research.

Information about the research platform Plastics in the Environment and the Society can be found at microplastics.univie.ac.at

Application procedure

We must have your online application by **May 15th, 2018**. Please send your application via the Job Center website of the University of Vienna (https://univis.univie.ac.at/ausschreibungstellensuche/flow/bew_ausschreibung-flow) and attach your application/letter of motivation, CV, a list of publications, transcripts of university examinations (in English), contact details for 2 persons of reference, and possibly other material that you want to be included in the evaluation as a single pdf file. An assessment committee will evaluate the applications.

[Apply online](#)

Applications and enclosures received after the deadline or with insufficient documentation or otherwise not complying with the above requirements may not be considered.

The University of Vienna wishes to reflect the diversity of society and welcomes applications from all qualified candidates regardless of personal background.

PhD position on plastics as a vector of contaminants and the behavior and fate of plastics in the environment

The Department of Environmental Geosciences of the University of Vienna is a highly experienced and internationally visible team carrying out research on **environmental contaminants and nano geoscience**. We currently have an exciting opportunity to complete a PhD on the topic of:

Plastic is one of most widely used material in modern societies with an annual production of 322 million tons. Both the versatility and durability of plastics makes it a commonly used material, on the one hand, but causes growing environmental problems and concerns, on the other hand. Comprehensive interdisciplinary studies are lacking almost entirely. The researchers of the department lead the field of **analysis of particulate contaminants and their behavior and fate in the natural environment**. The advertised position has a strong link to the new research platform PLENTY - Plastics in the Environment and Society, which investigates global plastic pollution using **holistic approaches in an interdisciplinary, innovative research project**.

Requirements

- **Diploma/Master in Chemistry, Environmental Sciences or Environmental Analytics (or related fields)**
- **Lab experience, good knowledge of analytical chemistry and if possible experience in working with micro- or nano-sized particles**
- **Fluent spoken and written English**
- **Good written and oral communication skills, as well as social skills**
- **Motivated, independent and reliable**

Please send a single pdf file including a letter of motivation, a CV with university grades, the contact details of two referees, a research vision (1-2 pages about the research you would like to carry out within the topic you are applying for), and if available, copies of research papers or the Master thesis. Applications should be addressed to environment@univie.ac.at.

For further information, please visit our webpage and contact Thilo Hofmann (thilo.hofmann@univie.ac.at).

The University of Vienna is an equal opportunity employer and intends to increase the number of women on its faculty, particularly in high-level positions, and therefore specifically invites applications by women. Among equally qualified applicants, women will receive preferential consideration.

Further information at <http://umweltgeologie.univie.ac.at/home/>