

PhD position open at University of Innsbruck, Austria

“The ecological role of bioaerosols on glacial habitats”

Applicants are invited for a PhD fellowship/scholarship at the University of Innsbruck, Institute of Ecology, Austria. The position is available from 1 April 2023 or later.

Research area and project description:

This is an exciting opportunity to be part of an European Doctoral Network (ICEBIO*), consisting of 11 PhD studentships to investigate glacier microbiology and biogeochemistry.

In this particular PhD studentship, you will investigate 1) inoculation sources of microbes for glacial habitats through the collection of bioaerosols via different types of air samplers for culture dependent and culture-independent community analysis. 2) To assess biomass and productivity from airborne input using radionuclide essays to assess bacterial biomass production (3H-leucine incorporation). 3) To define the biodiversity of bioaerosols through metagenomics and amplicon analyses. 4) To assess the source of inorganic depositions such as microplastics being translocated from industrial sources and to evaluate the impact thereof on pristine environments and their living communities using FTIR-spectroscopy (Fourier transform infrared), Raman spectroscopy and bioassays with microplastics on e.g. invertebrate larvae of glacial rivers.

Glaciers and ice sheets were long believed to be sterile environments, but just like other large ecosystems (e.g., tropical forests, tundra), they are now widely recognized as one of the Earth's biomes, teeming with life. Active algae, fungi, bacteria and viruses dominate the glacial environment and they have the ability to change the physical and chemical characteristics of the ice and snow, with global effects. Despite their global influence, many of the microbiological processes within the cryosphere remain poorly quantified. A deeper understanding of such processes are relevant to researchers interested in the possibility of life on icy extraterrestrial bodies, the survival and proliferation of life forms on our early Earth, and the positive and negative feedbacks that the cryosphere may have on global warming.

*The ICEBIO consortium comprises 5 leading research teams across Europe (Denmark, France, Germany, Norway, Austria and Switzerland) and two industrial stakeholders (Germany and France). ICEBIO's mission is to train 11 doctoral researchers in glacier microbiology and biogeochemistry.

The Marie Skłodowska-Curie Doctoral Network Program offers a highly competitive and attractive salary and working conditions. Please see the following [link](#).

Qualifications and specific competences:

Applicants must have a relevant Master's degree (120 ECTS) in one of those areas: Biology, Microbial Ecology, Microbiology, Environmental Sciences.

Recruited researchers can be of any nationality. Because funding is provided by a Marie Skłodowska-Curie Doctoral EU Programme, recruited researchers must comply with the following mobility rule: they must not have resided or carried out their main activity (work, studies, etc.) in the country of the recruiting beneficiary for more than 12 months in the 36

months immediately before their recruitment date. Candidates CANNOT have been awarded a doctoral degree yet in any field.

Place of employment and place of work:

The place of employment is the University of Innsbruck, and the place of work is Institute of Ecology, Technikerstrasse 25, 6020 Innsbruck, Austria.

Contacts:

Applicants seeking further information are invited to contact Dr. Birgit Sattler
Birgit.sattler@uibk.ac.at

How to apply:

Please submit your application to Birgit.sattler@uibk.ac.at.

Application deadline is 30 January 2023 23:59 CET. Preferred starting date is 1 April 2023.

For information about application requirements and mandatory attachments: The application must include a personal letter describing your relevant experience, research interests, and motivation to apply for the position (maximum 2 pages), a CV (including a list of your full publications and the contact information or letters from at least two referees), copies of diplomas. Project description (½-4 pages). This document should describe your ideas and research plans for this specific project. If you wish to, you can indicate an URL where further information can be found.

Please see also <https://euraxess.ec.europa.eu/jobs/838793 - requirements> for additional information.

Please note:

- The programme committee may request further information or invite the applicant to attend an interview.
- Shortlisting will be used, which means that the evaluation committee only will evaluate the most relevant applications.

University of Innsbruck's ambition is to be an attractive and inspiring workplace for all and to foster a culture in which each individual has opportunities to thrive, achieve and develop. We view equality and diversity as assets, and we welcome all applicants. All interested candidates are encouraged to apply, regardless of their personal background. Salary and terms of employment are in accordance with applicable collective agreement.