

Postdoc Job Announcement

The University of Fribourg is located in central western Switzerland, at the foothills of the Swiss Alps. The university has about 10'000 students across all scientific disciplines. Being part of the Faculty of Science and Medicine, the Department of Geosciences comprises approximately 90 employees and offers various BSc and MSc programs in Earth sciences, in geosciences and geography.

The Cryosphere group within the Department of Geosciences has a staff of c. 25 and has strong expertise in surface and subsurface processes of glaciers and ice sheets, permafrost and geophysics. The Cryosphere group is looking for a

Postdoc in "efficient firn and glacier modelling at regional scales"

This 2-year postdoc position (potentially to be extended to three years including fieldwork in Central Asia) is part of the deFIRN project and is funded by the Swiss National Science Foundation (SNSF). The project is a collaboration between University of Fribourg (Martina Barandun and Horst Machguth), the WSL Institute for Snow and Avalanche Research SLF (Ruzica Dadic), and ETH Zurich (Evan Miles). The core team consists of the 4 PIs, 4 PhD students, and 4 Postdocs and aims to quantify the impact of disappearing firn on mountain glaciers. The project also features a broad network of partners in Europe and Central Asia.

The aim of this postdoc position is to implement changes to an existing surface mass balance model, openAMUNDSEN. The postdoc will update the model with physical parameterizations of firn and albedo processes and will couple the model to an existing machine-learning algorithm to develop a computationally efficient workflow to scale and transfer relevant processes from the glacier to the regional scale. The position is based at the Department of Geosciences of the University of Fribourg and will be supervised by Martina Barandun.

This may be the perfect position for you if you have a PhD degree in environmental science, geoscience, engineering, physics, or scientific computing, you are interested in the cryosphere, and if you have ample experience in computational data analysis and modelling. Very good verbal and written communication skills in English are required, knowledge in French or German is an asset.

If you are interested, please send your application (*merged into one PDF file*), including (1) motivation letter, (2) CV with complete list of publication, (3) contact details of three references and (4) copy of your PhD diploma directly to Martina Barandun (martina.barandun@unifr.ch). The evaluation of applications will start 11 February and will continue until the position is filled. The optimal starting date for the postdoc candidate is April 2026. Please contact martina.barandun@unifr.ch for further inquiries. University of Fribourg is committed to diversity and inclusion as core values. We actively promote equality and foster an open, inclusive work environment.