



**UNIVERSITÉ
DE GENÈVE**

FACULTY OF SCIENCE
Section of Earth and
Environmental Sciences

Postdoc in volcano deformation available

**Exploring ground rupture processes during rifting events and caldera collapses
using InSAR and aerial images correlation**

The Volcano Tectonic Laboratory (University of Geneva) is seeking for a postdoctoral researcher in volcano deformation for a period of two years, starting in July 2022. The candidate will explore ground rupture processes during rifting events, caldera collapses or earthquake sequences. She/he will use InSAR and image correlation technique with satellite amplitude radar and optical imageries (historical air photos and high-resolution drone imagery) focusing on near-field ground deformation analysis. She/he will study rifting episodes and caldera collapses, such as those that occurred in Iceland, Galapagos, Afar and Eritrea, analyzing into details how fractures and faults connect with deeper magma intrusions through modeling. This position will fully complement our research team who is working on structural field measurements in extensional settings also using drone surveys, historical air photo correlation and analogue experiments in the laboratory. Active participation to field work will also be possible.

The postdoc position is fully funded by the Swiss National Science Foundation (part of SNSF projects TEMPO and PRESTO 2018-2024). The candidate will be based within the Department of Earth Sciences of the University of Geneva and will integrate the Volcano-Tectonic Laboratory, led by Prof. Joël Ruch.

The successful candidate must have a PhD in Earth Sciences, geophysics or engineering. Experience with programming, InSAR processing and/or image correlation techniques and numerical modeling is a major advantage and experiences in field work is appreciated.

Candidates are expected to have strong written and spoken English and will also be required to assist with teaching of graduate or undergraduate classes. Geneva is an international city, surrounded by a spectacular natural setting, located at the core of Europe. The University of Geneva is an equal opportunity educator and employer committed to excellence through diversity.

Interested applicants should send a full CV, including previous employment and university training, the date and title of the doctoral thesis, publications, conference presentations, classes taught and any student research co-supervision (if applicable), a short letter of motivation explaining the reasons for applying (max. 1 A4 page) and the names and contact details of two referees to:

Joël Ruch
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<https://www.unige.ch/sciences/terre/en/research/volcano-tectonic-laboratory/>

Applications will be accepted until April 2, 2022. The intended starting date is first of July 2022, or as soon as possible thereafter.