

Hannover, 26th May 2021

The Leibniz Institute for Applied Geophysics (LIAG) invites applications for a fixed term of 3 years with 75 % of the working time for the position of a

## **Research Scientist (m/f/d)**

### **Reference Number G 03/21 – “Crosshole Seismic“**

In the context of the project ‘Drilling Overdeepened Alpine Valleys’ (DOVE), the seismic research group at LIAG seeks a PhD candidate for crosshole experiments at the geophysical research site in the Tannwald Basin (Baden-Württemberg, Germany). The scientist will perform seismic experiments between the boreholes and from surface to borehole, develop analysis strategies, and derive information about sedimentation processes from seismic anisotropy. Partners are the German Universities of Kiel and Freiburg as well as the Swiss University of Bern and the ETH Zürich.

#### **Tasks:**

- performing seismic crosshole and seismic borehole experiments
- developing and applying analysis strategies using (anisotropic) travelttime tomography (TT) and full waveform inversion (FWI)
- derivation of sedimentation processes from seismic anisotropy
- anisotropic seismic processing of surface reflection seismic and VSP data
- interdisciplinary interpretation with other DOVE working groups
- presentation of research results at national and international conferences
- publication of research results in international scientific journals

#### **Required qualifications and experience**

- MSc or equivalent in Geophysics, Geosciences, Physics or comparable subjects.
- knowledge and experience of seismic methods
- knowledge of at least one higher programming language (e.g. C/C++, Python)
- basic knowledge of geology
- ability to carry out seismic fieldwork
- good spoken and written English ability (level B2)
- independent and structured way of working
- working on interdisciplinary research projects and teams

#### **The following fields of experience are of advantage**

- willingness to do a doctorate
- experience in (seismic) crosshole experiments
- knowledge of seismic TT and/or FWI
- knowledge of reflection seismic methods
- knowledge of sedimentology
- knowledge of German or the willingness to learn the German language

LIAG enjoys an excellent reputation, both nationally and internationally. The institute is characterized by excellent infrastructural integration in the GEOZENTRUM Hannover, state-of-the-art and high-performance equipment (IT, laboratory, field), strong networking and a professional and friendly working-environment. LIAG supports further qualification of its employees.

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Place of employment is Hannover. The salary for the position will be according to salary group E13 TV-L (Collective Agreement for public service of the German states), taking into account § 40 No. 5 TV-L (consideration of professional experience).

Applications from people of all nationalities, regardless of their origin, gender, religion or world-view, disability, age or sexual identity, are welcome. LIAG also pursues the goal of equal professional rights for women and men. We therefore particularly welcome applications from women. As part of flexible working hours, we offer you a responsible and varied job that is also suitable for part-time employees and the chance to return to work after parental leave.

The LIAG endeavours to increase the proportion of severely-disabled people, which is why they will be given preference if they are equally qualified.

Please submit your full application electronically (max. 10 MB), without a photo, and stating the job advertisement number **G 03/21** and the keyword “**crosshole seismic**” to [career@leibniz-liag.de](mailto:career@leibniz-liag.de) by 16th June 2021.

Further information is available from our website [www.leibniz-liag.de](http://www.leibniz-liag.de) and from **Dr. Thomas Burschil**, under the email [Thomas.Burschil@leibniz-liag.de](mailto:Thomas.Burschil@leibniz-liag.de).