The LIAG INSTITUTE FOR APPLIED GEOPHYSICS is offering, as soon as possible, a fixed-term position for a duration of 48 months, with a workload of at least 75% up to 100% of regular weekly working hours:

Research Associate (m/f/d)
EG 13 TV-L

Reference: G 02/26 "DrohnenGPR"

The LIAG Institute for Applied Geophysics investigates structures and processes in the uppermost crust using complementary geophysical methods, integrating application-oriented and fundamental research. In the third-party funded project "DrohnenGPR," the ground-penetrating radar (GPR) method will be adapted and optimized for drone-based applications, and the advantages and limitations of the method will be evaluated.

Depending on interest, the position can be filled either for a PhD (75% workload, salary group 13) or as a PostDoc (100% workload, salary group 13).

Your tasks:

- Methodological development of drone-based ground-penetrating radar
- Simulation of interactions between antenna, drone, and subsurface
- Optimization of survey layout and data processing
- Application and evaluation of the method through comparison with ground-based measurements, for example in coastal saltwater/freshwater systems, peatlands, tectonic fault zones, and permafrost soils
- Publication of results in international peer-reviewed journals and presentations at scientific conferences

The scope of duties will be reviewed regularly. A future classification into salary group 14 TV-L is possible upon taking on corresponding responsibilities.

Your skills:

- A completed university degree (Master or equivalent) in geophysics, physics, geosciences with a focus on geophysics, or electrical engineering with a focus on high-frequency technology, or comparable programs
- Knowledge of electromagnetics and simulation of electromagnetic fields
- Knowledge in at least one of the following fields: applied geophysical methods or high-frequency technology
- Programming skills (Python, Matlab)
- English language proficiency (at least equivalent to B2 level according to the Common European Framework of Reference)
- Independent, structured working style and team orientation
- Willingness and ability to conduct fieldwork under challenging conditions (e.g., extreme weather conditions such as heat, cold, rain, uneven terrain, extended field campaigns, and carrying loads up to 25 kg)

Extensive field campaigns are planned, particularly in the second phase of the project, involving both drone-based and ground-based GPR measurements, often in difficult terrain (e.g., peatlands, permafrost sites).

Ideally, you will also fulfil the following requirements:

- Experience in simulating electromagnetic wave propagation (e.g., using the software gprMax)
- Experience in planning, conducting, processing, and interpreting GPR measurements
- Knowledge of antenna functionality
- Experience in post-processing GNSS data
- Basic knowledge of hydrogeology, soil science, or sedimentology
- Experience with drones and a drone pilot license (A1/A3)
- Experience in publishing scientific results in peer-reviewed journals
- Valid driver's license class B

We offer:

LIAG enjoys an excellent reputation, both nationally and internationally. The institute is characterized by excellent infrastructural integration into the GEOZENTRUM Hannover, stateof-the-art and high-performance equipment (IT, laboratory, field), strong networking, and a friendly, professional and collegial working-environment. LIAG promotes further education and training of its staff.

The place of employment is Hanover, Germany. The classification takes place in pay group 13 of the collective agreement for the public service of the German states (TV-L), taking into account § 40 No. 5 TV-L (consideration of professional experience).

We welcome applications from people of all nationalities, regardless of their origin, gender, religion or belief, disability, age or sexual identity. LIAG also pursues the goal of equal professional rights for women and men. Therefore, we particularly welcome applications from women. With flexible working hours, we offer you a responsible and varied job that is also suitable for part-time employees and as a re-entry 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 electronic application (one PDF file, maximum 10 MB) with relevant documents by **12.10.2026**, quoting the reference number G 02/26 "DrohnenGPR", to career-LIAG@liag-institut.de, to Dr. Jan Igel.

Further information about LIAG can be found at www.liag-institut.de. For additional inquiries, please contact Dr. Jan Igel at phone number +49 511/643-2770 or email Jan.Igel@liag-institut.de.