

## Researcher in geophysics

### Company description

GeoLinks is a **deep-tech start-up in Geosciences** dedicated to deliver innovative and industrial solutions in the field of geophysical monitoring.

GeoLinks was cofounded in 2020 by 3 experienced geophysicists from the industry having one strong conviction: **Delivering cost effective underground geophysical monitoring solutions for industrial operators is key for a safe and sustainable use of the underground.** GeoLinks solutions will accompany the large-scale deployment of the CO<sub>2</sub> geological sequestration technology, thus contributing to lower carbon foot print and sustainable energy transition.

GeoLinks is laureate in 2022 of the highly selective iLab National Deep-tech contest. GeoLinks is supported by the French Ministry of Higher Education and Research, by the French sovereign Innovation public fund of Bpi-France, by the Réseau Entreprendre Essonne, by the Ile-de-France Paris region, by the French pole of competitiveness in Geosciences Avenia and by the Open innovation platform from Evolen.

### *Our value & culture*

At GeoLinks we believe in People, we believe in Geosciences, and in Collaborative R&D to build a better and sustainable world for all.

### Context of the job offer

Since 2020, in partnership with the French National Research Centre (CNRS) and our industrial partners, GeoLinks develops an innovative geophysical underground monitoring solution based on a patent from the CNRS, which describes how passive seismic interferometry can be used to monitor fluid movements within the subsurface.

This technology has potential application in numerous domains, such as CO<sub>2</sub> geological storage, geothermal fields, H<sub>2</sub> exploration, hydrogeology. After two successful demonstrator projects in 2021 (gas storage) and 2022 (H<sub>2</sub> exploration) we wish to expand our R&D team to better constrain the sensitivity of the seismic monitoring tools we develop with the aim to deliver our first commercial monitoring services in 2024.

We are hence looking for an experienced researcher in seismic modelling and/or passive seismic interferometry to undertake seismic simulation work as well as participate to future developments within our R&D team.

### Job requirements and first missions:

The job requires both autonomy and appetite for collaboration with other researchers from the GeoLinks R&D team and external partners. The main scientific objectives of the first missions are:

1. Modelling the effect of seismic attenuation variations induced by subsurface fluid movements using seismic simulation tools coupled with a petrophysical description of the involved phenomena.
2. Analysing the modelling results hand in hand with the other members of the R&D team to improve the analysis processes, better extract information from seismic interferometric data and produce demonstrative cases in various contexts (CO<sub>2</sub> geological storage, Hydrogen storage, water resources).

## Profile

- Organized and self-reliant
- PhD in a field of geophysics or signal processing or acoustics or applied mathematics.
- Area of expertise: numerical simulation of seismic wavefield.
- Experience in petrophysics and/or seismic interferometry are an advantage.
- Appetence for research applied to industrial issues
- Autonomous programming, mostly Python, Fortran, Matlab also useful
- Experience with simulation codes is compulsory
- Fluent English (read, written, spoken)

## Required Additional information:

- Office location : Nantes, Pays de la Loire.
- Teleworking is possible
- Start: December 2022
- Contract type: CDI
- Salary: 36-40k€ annual

To apply, please send your CV and application letter to:

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[contact@geolinks-services.com](mailto:contact@geolinks-services.com)

or through the PhD Talent website: [https://app.phdtalent.fr/job\\_offers/researcher-in-geophysics-1\\_1297/details](https://app.phdtalent.fr/job_offers/researcher-in-geophysics-1_1297/details)