

Applied Research Scientist – Passive Seismic

Innovation and Product Development

Nantes (France) • Full-time

About us

Geolinks is a growing deeptech company based in Nantes with international operations. We design and deploy innovative geophysical characterization and monitoring solutions that support more sustainable management of water resources, soils and geo-industrial infrastructure.

As part of the growth of its innovation activities, Geolinks is hiring an applied research scientist with a passion for geophysics and a strong interest in environmental and climate challenges.

You will join a multidisciplinary team committed to both scientific rigor and the practical value of its work for clients.

Main missions

- Lead the development of innovations in passive seismic methods (ambient noise interferometry, surface wave analysis, time-lapse monitoring of seismic velocity changes dv/v) and support their integration into the FlowTerra™ solution.
- Advance the quantitative interpretation of passive seismic measurements in terms of hydrogeological parameters (pore pressure, saturation, groundwater level, etc.) and/or geotechnical parameters (stress state, mechanical properties, stability indicators).
- The position reports to the Chief Technology Officer (CTO) of Geolinks and involves close collaboration with the Geolinks Product and R&D teams, as well as with our clients and partners. Some missions or projects will require short trips within France and abroad.

Responsibilities

- Develop and validate physical models linking passive seismic observables (dv/v , surface wave velocities and dispersion, attenuation) to hydrogeological and geotechnical parameters.
- Design qualitative and quantitative interpretation and conversion methods, benchmarking results against field data (piezometers, rainfall, inclinometers, in situ tests).
- Prototype new features and support their industrialization with the Technology and Product teams.
- Gather client needs and translate them into research directions, take part in project meetings and present results to clients and partners.
- Monitor the scientific literature, promote the work (publications, conferences, intellectual property) and contribute to collaborative projects with academic and industrial partners.

Profile

- Rigorous, autonomous and proactive.
- PhD in geophysics, hydrogeology, geomechanics, rock physics or a related field. Recent PhD graduate or early-career professional (postdoc or industry) with up to 5 years of experience.
- Experience in seismic interferometry / passive seismic is a plus.
- Knowledge of hydrogeology and/or geotechnics; familiarity with reservoir engineering is an advantage.
- Strong interest in applied research addressing geo-industrial and geo-resource management challenges, and in product development.
- Ability to work in a multidisciplinary team and to present technical results to clients and partners.
- Independent programming skills, mainly in Python.
- Fluent English (reading, writing, speaking).

What we offer

- Join an expert, multidisciplinary team.
- Contribute to innovative projects in France and internationally.
- Remote work up to 2 days per week.

Start date: as soon as possible.

Contract type: permanent (CDI).

To apply: send your application to contact@geolinks-services.com.