

JOB VACANCY ANNOUNCEMENT

VAC-2024-52 – Researcher in Geotechnics for an experimental project with NAGRA (Switzerland) and ONDRAF/NIRAS (Belgium)

Number of places: 1

Category: Innovation Trainee 2

Workplace: Barcelona, CIMNE

Salary (gross): 21.698,32 €

Weekly working hours: 37 hours per week

Duration: 1 year

Functions to be developed:

1. Design prototypes/protocols at different scales (from mini cell for micro-CT to model scale/calibration chambers). Evaluation and decision-making to improve the protocols followed and the designed prototypes.
2. Experimental study on the calibration of high-temperature effects on TDRs used in HotBENT experiment with granular bentonite and gas transport in geomaterials.
3. Preparation of dedicated technical reports and scientific journal papers in English related to the results obtained. Presentation of the results in English in international conferences and technical committees.
4. Support for the research and technology transfer tasks at the Geotechnical Laboratory of the UPC.

Required skills:

- Education: Bachelor and Master Degrees in Civil Engineering or similar with a PhD in the knowledge area of Geotechnical Engineering.
- Minimum of 6 years of proven experience in a soil mechanics laboratory at a University or Research Centre.
- Active participation in innovation projects related to gas transport in granular bentonite.
- Previous experience in the design of experimental protocols and multi-phase and multi-scale coupled hydromechanical tests to study gas transport.
- Previous experience in using microstructural techniques (mercury intrusion porosimetry, computed axial microtomography, use of image analysis software).
- Support in the development of research proposals and projects.
- Previous experience in developing products, software or services related to the expectations of the project.

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- Experience in establishing and maintaining relationships with companies and public and government institutions.
- Experience in writing and publishing scientific journal papers on applied research, reports for industry or public or private institutions (including confidential reports), practical guides, technical books, etc.

Other valued skills (not mandatory):

- PhD obtained in the last year.
- Previous experience in the Geotechnical Laboratory of the UPC.
- Experience in characterising unsaturated soils (psychrometer, tensiometer, infrared thermal camera, etc.) will be valued.
- Research experience in areas in the functions to be developed will be valued.

Qualification system:

The requisites and merits will be evaluated with a maximum note of 100 points. Such maximal note will be obtained by summing up the following points:

- **Academic qualifications:** 25%
- **Training and development:** 10%
- **Professional experience:** 40%
- **Knowledge of the Catalan language:** 5%
- **Knowledge of the English language:** 10%
- **Selective tests and interview:** 10%

Candidates must complete the "Application Form" form on our website, indicating the reference of the vacancy and attaching the required documents.

The deadline for registration to the offer ends on October 15th, 2024 at 12 noon.

The preselected candidates may be requested to send the documentation required in the "Requirements" and "Merits" sections, duly scanned, and may be called to go through selection tests (which might be of eliminatory nature) and / or personal interviews.

Commitment to inclusivity:

At CIMNE, we champion workplace equity, diversity, and inclusion. We're committed to fostering a culture where everyone can thrive, leveraging diverse talents and backgrounds. We welcome all applicants regardless of color, religion, gender, origin, abilities, gender identity, sexual orientation, pregnancy or any other characteristic. Join us in building a community that values, celebrates, and respects every individual.

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CIMNE welcomes and supports the principles of European Commission's European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers, embracing a transparent, attractive, and open labour market in research. The centre's Human Resources Strategy for Researchers (HRS4R) includes an action plan with actionable short and long-term actions to support a high-quality working environment for all. Further information can be found [here](#).