

JOB VACANCY ANNOUNCEMENT

VAC-2024-69 – Researcher on Computational Geomechanics for CO₂ injection

Number of places: 1

Category: Innovation Trainee 3

Workplace: Barcelona

Salary (gross): 18.398,15 €

Weekly working hours: 40

Duration: 12 months

Functions to be developed:

- Develop and debug finite element codes for the simulation of geomechanical problems including:
 - multi-fracture mechanics
 - porous media multiphase flows
 - hydro-thermo-mechanical coupling
- Write scientific papers on the findings made during the resolution of problems stemming from the fault reactivation analysis in CO₂ injection operations.

Required skills:

- Good programming in C++ and Python languages.
- Solid knowledge of geomechanics.
- Solid understanding of the finite element methods (FEMs).
- Experience with programming and using numerical methods.

Other valued skills (not mandatory):

- Good written english.
- Strong analytical skills.
- Solid knowledge of solid mechanics and suspension physics.
- Familiarity with the Kratos Multiphysics framework.

Qualification system:

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

- **Academic qualifications:** 20 %
- **Training and development:** 10 %
- **Professional experience:** 20 %
- **Knowledge of the Catalan language:** 5 %

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- Knowledge of the English language: 10 %
- Selective tests and interview: 35 %

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 November 20th , 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.

HR Excellence in Research:

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](#).

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