

JOB VACANCY ANNOUNCEMENT

VAC-2025-20 – Innovation Developer Position in Industrial Manufacturing Processes Group

Number of places: 1

Category: Innovation Developer

Workplace: Barcelona

Salary (gross): 35.186,46 €

Weekly working hours: Full time (40 hrs)

Contract type: ID 2

Duration: From April 1, 2025, to June 1, 2026, with the possibility of extension

Functions to be developed:

The functions assigned to the candidate will be:

- Collaborate with various research groups within CIMNE and worldwide.
- To publish a minimum of two papers in JCR journals during the contract period.

The details of the job are as follows:

- Development of a Digital Twin for high-performance component production through advanced manufacturing processes
- Implementation of Reduced Order Modeling in thermomechanical simulation.
- Integration of Artificial Neural Networks for advanced classification and regression in process parameter optimization

Required skills:

- Having obtained a PhD degree in Computational Mechanics at the moment of the signature of the contract.
- Good publication record (a minimum of 6 papers published in indexed journals).
- Good knowledge of English, both written and spoken (minimum B2).
- Advanced knowledge of Continuum and Computational Mechanics (PhD level).
- Familiar with Machine Learning Techniques and Algorithms

Other valued skills (not mandatory):

- Previous research and/or academic experience in the field of the position.
- Programming skills Fortran 2008 Object Oriented, Python.
- Language skills Spanish.

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- Good communication/Teaching skills.
- Previous experience in Parallel Computing (HPC).
- Windows and Linux OS.

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:** 30%
- **Training and development:** 20%
- **Professional experience:** 25%
- **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 February 15, 2025 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.

Projecte finançat amb el suport del Departament de Recerca i Universitats de la Generalitat de Catalunya amb l'ajut d'Indústria del Coneixement (Llabor i Producte) per a l'any 2024 de referència 2024 PROD 00034 en el marc del programa Ajuts de suport a la recerca.

**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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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](#).