**International Centre for
Numerical Methods in Engineering**

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CIMNE - Edifici C1 Campus Nord UPC
C/ Gran Capità, S/N
08034 Barcelona, Spain

Centre Internacional de Mètodes Numèrics a l'Enginyeria ® Q5850006G

ANNOUNCEMENT FOR PROVISION OF THE WORKPLACE

VAC-2022-76 – Research Engineer expert in numerical analysis with a strong background in the Discrete Element Method and experience in Pollution Transport problems

Number of places: 1

Category: Research Engineer – RENG3

Workplace: Barcelona

Salary (gross): 32.202,88€

Weekly working hours: 40

Functions to be developed:

1. Development of discrete element method codes for the simulation of granular matter and its interaction with deformable structures.
2. Adaptation of existing CFD codes to study pollution transport problems by applying the necessary coupling algorithms and required physical models.
3. Supervision of junior CIMNE researchers working on particles and finite element methods.

Required skills:

- Wide experience in the numerical analysis of multi-physics problems.
- Mastery of the discrete element method.
- Expertise in the finite element method.
- Advanced C++ and Python programming skills.

Other valued skills (not mandatory):

- Master on Civil Engineering or equivalent.

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- Master on Computer Science or equivalent.
- Advanced English level.
- Experience in software development and other numerical methods, such as machine learning techniques.

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:

- Publication and career track: 20%
- Previous research and academic experience in the field of the position: 30%
- Programming skills: 30%
- Language skills: 10%
- Communication/Teaching skills: 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 November 8, 2022 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.