VAC-2019-16 – Research Engineering for AMADEUS Project

Number of positions: 1

Category: Research Engineering - RENG5

Work centre: BARCELONA

Annual Gross Salary: 19.507,39 €

Working hours: 37,5 h/week

Type of contract: Temporary

Duration: Until the end of the project

Incorporation (approximately): September-October 2019

Functions:

This position is to work on the project "AMADEUS: Advanced Multi-scAle moDEling of coupled mass transport for improving water management in fUel cellS", with reference PGC2018-101655-B-I00 funded by the Spanish Ministry of Science, Innovation and Universities.
More information about the project:
https://www.cimne.com/webcimne/sigpro/Ficha.aspx?id=847

The position is compatible with the development of a PhD thesis, and the main tasks will be:

1. Development of innovative numerical methods for analysis of multiphase flows in fuel cells (in scientific C++ based code KRATOS)
2. Development and implementation of machine-learning algorithms on the basis of predictive simulations
3. Writing scientific reports and papers

Requirements:

Essential

1. Knowledge of scientific programming (preferably, C++ or other object-oriented languages)
2. Knowledge of numerical methods (preferably, FEM)

Centre Internacional de Mètodes Numèrics a l'Enginyeria (CIMNE)
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En col·laboració amb: UNESCO

3. Fluency in English

Desirable

4. Basic knowledge of machine learning algorithms
5. Basic knowledge of fuel cell technology

Merits:

- Official academic degrees
- Non official academic degrees
- Experience
- Knowledge of languages

Evaluation

The assessment of candidate's merits will be based on the scale from 0 to 10, with 0 being the minimum grade and 10 being the maximum. The relative weight of the employed criteria will be as follows:

1. Academic degree (30%)
2. Training and improvement (20%)
3. Professional experience (5%)
4. Spanish knowledge (5%)
5. Selective test (20%)
6. Interview (20%)

Candidates must complete the "Application Form" form on our website: http://www.cimne.com/job-applications, indicating the reference of the vacancy and attaching the required documents.

The deadline for registration to the offer ends on June 30, 2019 at 12 noon.

The preselected candidates must send seleccio@cimne.upc.edu all the documentation required in the section "Requirements" and "Merits" duly scanned and may be called for the performance of selective tests (which may be of eliminatory nature) and / or personal interviews.

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