



This project has received funding from the European High-Performance Computing Joint Undertaking (IU) under grant agreement No 951745. The JU receives support from the European Union's Horizon 2020 research and innovation programme and Germany, Italy, Slovenia, France, Spain.

## CALL FOR CITMAga STAFF RECRUITMENT

### JOB VACANCY

**PROJECT:** "HPC Simulation of Metal Powder Segregation in manufacturing of cored wire - SIMPSEG".

JOB VACANCY REFERENCE: CITMAga-OT-07/2022.

**DESCRIPTION OF JOB POSITION:** 1 full-time contract as **researcher** for a **research project**, in the framework of the *SIMPSEG* project, granted in the cascade funding *FF4EuroHPC Call-2* of the *FF4EUROHPC: HPC innovation for european SMES project*, which is funded by the European Union through the Horizon 2020 framework programme (https://cordis.europa.eu/project/id/951745).

*"FF4EuroHPC project has received funding from the European High-Performance Computing Joint Undertaking (JU) under grant agreement No 951745".* 

**PRINCIPAL INVESTIGATOR:** Dra. Elena B. Martín Ortega, Full Associated Professor in Fluid Mechanics at University of Vigo and affiliated researcher to CITMAga.

**CANDIDATES PROFILE:** PhD related to Mathematics, Engineering, Physics, and Computing.

#### MERITS AND REQUIREMENTS TO BE ASSESED:

- **Training and general experience to be assessed** (40 points, all contributions must be *documented*).
  - Academic transcript of the degree or bachelor's degree, engineering, master's degree.
  - Affinity of the doctoral thesis with the topic of the project.
  - $\circ\,$  Affinity of the qualifications of the candidate with the fields of Industrial Mathematics.
  - Previous experience in mathematical modelling, numerical simulation, optimization and control, and in the implementation and computer validation of algorithms and numerical methods.
  - Previous experience in mathematical modelling and numerical simulation related to the topic of the project.
  - Experience in the execution of numerical models in HPC
  - English proficiency.

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# Knowledge and additional and specific experience to be assessed (30 points, all contributions must be documented).

At the time of assessing the submitted applications, experience in some of the following fields related to the research areas of the Project will also be taken into account, but it is not necessary to have experience in all of them:

- Knowledge of discrete element method (DEM/DPM) to simulate parameterized models of solid granular systems.
- Advanced knowledge and previous experience in the use of programming languages (C++, Matlab, Python, etc.).
- Previous experience in the use of numerical simulation open-source software (LIGGGHTS, MercuryDPM, OpenFoam).
- Experience in the use of software in Linux environments.
- Previous professional experience related to the theme of the project.

#### Personal interview and letters of recommendation (30 points).

Candidates achieving the best assessments according to the above criteria will be called to a personal interview and a test related to the functions of the position. In this third phase, the letters of recommendation that arrive for the candidate will be taken into account; only three letters of recommendation per candidate will be accepted, which must be sent directly by the person issuing the report and not the candidate himself. At least the three best rated candidates will be interviewed and between the two previous sections have reached at least 35 points.

#### **GENERAL REQUIREMENTS FOR CANDIDATES**

To be admitted the applicants, in addition to fulfilling the specific requirements demanded in the activity or project for which they make their request indicated in the previous point, they must have on the day of completion of submission of applications and keep them until the expected date of completion of the contract, the following general requirements:

- Be Spanish or national of any of the other Member States of the European Union or national of any state to which, by virtue of international treaties concluded by the European Union and ratified by Spain, the free movement of workers applies.
- The spouse of Spaniards and nationals of one of the other Member States of the European Union may also participate, whatever their nationality, and when the corresponding treaty so provides, or of nationals of a state to which By virtue of the international treaties concluded by the European Union and ratified by Spain, the free movement of workers applies to them, provided they are not legally separated. Likewise, with the same conditions, their descendants and those of their spouse, under the age of twenty-one or

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older than that who live in their charge, may participate.

- Likewise, nationals of countries that are not members of the European Union or that are not included in the scope of international treaties concluded by the European Union and ratified by Spain in which the free movement of workers is applicable may participate. However, the formalization of the employment contract with these nationals is conditioned to the applicants having granted the exception or work permit and legal residence in Spain.
- Be at least 16 years old.
- Being in possession of the valid degree in Spain that is indicated according to Spanish legislation.
- Not suffer any disease or be affected by physical or mental limitation that is incompatible with the performance of the corresponding functions.
- Not to be separated, by means of a disciplinary file from the service of any of the public administrations, nor to be disabled for the performance of public functions.

#### **CONDITIONS:**

- Gross monthly salary: 2.315,14 € in 12 payments.
- Planned start date: the day following the resolution of the contract award.<sup>1</sup>
- Duration and estimated date end of planned work: 15 months.<sup>2</sup>
- Full-time position.

#### **EVALUATION COMMITTEE:**

Candidate's applications will be assessed by an Evaluation Committee. This Committee will be made up of the scientific head of the Project, who will chair it, the scientific members of the project research team assigned to CITMAga, a researcher assigned to CITMAga who does not participate in the project and the secretary, who will be appointed by CITMAga. Final Evaluation Committee will be made public once the assessment of candidates is done, in the same document as selected candidates are announced.

**WORKPLACE:** Centro de Investigación y tecnología Matemática de Galicia (CITMAga), Campus Lagoas-Marcosende, Vigo (Pontevedra).

<sup>1</sup> The planned start date could be modified depending on the date of resolution of the contract award. The contract will become in force at the same time that the service enters in effect.

<sup>2</sup> The duration of the contract could be modified depending on the date of resolution of the contract award and the duration of the research activity/project. Contract linked to a project funded by European Funds.

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#### SUBMISSION OF APPLICATIONS:

People interested in this contract must send their applications before <u>March 15th, 2022, 23:59</u> <u>Spanish official time</u>. Application should include (in English, Spanish or Galician) a cover letter summarizing the applicant's career (general training and experience to be assessed, as well as additional merits referred to in the call), a curriculum (with mobile phone and email), and the academic tittle and transcript of degree, master and PhD; the *"work life"* (which proves the professional merits that appear in the curriculum vitae); and the accreditation of all the merits provided in the sections "Merits and requirements to be assessed" (English certificates and others). Letters of recommendation will only be accepted if they are sent directly by the person reporting (and not the candidate). All documentation must be sent to the following email address: <u>itmati@itmati.com</u> indicating the job vacancy reference CITMAga-OT-07/2022. The receipt of requests will be confirmed by email. Candidates who are invited to the interview phase must provide original documentation of the merits provided.

#### **DEADLINES AND RESOLUTION:**

<u>Reception of applications</u>: until March 15th, 2022 at 23:59 p.m, Madrid local time. <u>Evaluation of applications and personal interviews</u>: after March 15th, 2022. <u>Resolution of the call</u>: March 2022.

#### WAITING LIST

After the resolution of this call, candidates who have not been selected but meet the requirements laid down therein will automatically become part of a "waiting list" for this call in order of merit, according to the requirements established in the call. This "waiting list" will be published the same day as the resolution of the call, and it remains in force during the full project lifetime. If it deems appropriate, the Evaluation Committee of this call may make use of the "waiting list" provided that any researcher leaves the Project voluntarily, and for the entire Project duration.

#### **CHARACTERISTICS OF CONTRACTS**

The personal hired through this call will be exclusively dedicated to carrying out the activities of the project that originate the call, so the duration of the contract is directly linked to the life of the specific project / activity, as well as to the existence of concrete financing derived from it. The contracts will have a temporary work character for the realization of a specific project /activity within the framework of the Spanish Statute of Workers. The amounts contemplated may suffer the variations established by the norms applicable to them or by unexpected causes not initially foreseen.

#### NATURE OF CONTRACTS

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The hiring does not imply any commitment regarding the subsequent incorporation to the CITMAga staff.

#### SUBSIDIARY RESPONSABILITIES

People hired must maintain the confidentiality of the activity they carry out, as well as keep secrecy of all issues and issues inherent to it and of which they are aware.

#### INCOMPATIBILITIES

The contracts subject to the call are subject, as far as their incompatibility regime, to the provisions of Law 53/1984, of December 26, on incompatibilities of the Personnel in the Service of Public Administrations.

All information regarding this call, as well as the resolution of this, will be published on the CITMAga website: <u>https://citmaga.gal/procesos-seleccion-personal</u> and ITMATI website: <u>http://www.itmati.com/en</u>

Rosa María Crujeiras Casais Directora Científica en funciones de CITMAga.



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Asinante/Firmante/Signer: ROSA MARIA CRUJEIRAS CASAIS, NIF \*\*\*3178\*\*, 07/03/2022 19:00:41.

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