

ANNOUNCEMENT FOR THE AWARD OF A POST-DOCTORAL RESEARCH FELLOWSHIP

Title: Post-Doctoral Research Fellowship- CustomNiTi; 1 vacancy

Reference: CustomNiTi _17328_BIPD_03/2025-CMEMS

A call for applications is now open for the attribution of (1) one grant of Post-Doctoral Research Fellowship within the scope of the R&D project “**CustomNiTi - Desenvolvimento de distratores ósseos Avançados**”, operation code **COMPETE2030-FEDER-01180800**, at the Center for MicroElectroMechanical Systems (CMEMS-UMinho), co-financed by European Regional Development Fund (FEDER) through the Innovation and Digital Transition Program | Compete 2030, under the following conditions:

Scientific Area: Mechanical Engineering, Materials Engineering, Biomedical Engineering, Chemistry Engineering, Physics Engineering, Biological Engineering or related areas.

Recipient category: The BIPD are intended for doctorates in the areas of Mechanical Engineering, Materials Engineering, Biomedical Engineering, Chemistry Engineering, Physics Engineering, Biological Engineering or related areas, who cumulatively meet the following requirements:

Admission Requirements:

- Hold a doctoral degree obtained within three years prior to the date of submission of the scholarship application;
- To have carried out the research leading to the award of the doctoral degree in an organization other than the one hosting the scholarship; *
- Research activities do not require post-doctoral experience;
- Not exceed, with the conclusion of the contract in question, including possible renewals, an accumulated period of three years in this type of scholarship, consecutive or interpolated;
- Not to have previously held a post-doctoral scholarship contract with the same I&D Unit. Once the BIPD contract has ended, no new scholarship contract can be signed between the same host organization and the same scholarship holder.

Candidates who do not cumulatively meet the requirements described will be excluded.

* This includes different I&D Units, even if they are based in the same Organic Unit (UOEL) of UMinho (according to nº 4 and 5 of the Article 7º of the FCT I.P. Research Grants Regulations in force).

Other requirements:

Documents proving the ownership of academic degrees and diplomas, or their respective recognition when awarded by foreign higher education institutions, when applicable to the type of scholarship being considered, may be waived during the application phase and replaced by a declaration of honor by the candidate. This declaration must attest to facts that occurred prior to the application. In cases of discrepancy between the information contained in the declaration and the documentation submitted for the purposes of the scholarship contract, only the information contained in the latter will be considered. If it is found that the documents proving the ownership of the academic degree and diploma, or their respective recognition under Decree-Law No. 66/2018 of August 16, do not correspond to the grades

assigned in the academic history evaluation and may, consequently, alter the candidate's ranking, the scholarship contract will not be concluded.

Applicants' eligibility:

Candidates who meet the conditions set out in Article 9 of the Research Grant Regulations, No. 950/2019, of 16-12-2019, of FCT I.P. are eligible.

Nationals or citizens of other European Union member states, third-country nationals, stateless persons, and citizens with political refugee status are eligible to apply for this competition.

Candidate eligibility requirements:

Admissibility requirements:

It is essential, under penalty of not being admitted to the competition, to attach the following documents to the application:

- The candidate's curriculum vitae;
- Certificates of the academic degrees obtained or, if applicable, the candidate's declaration of honor that he/she has completed the degrees required in the notice by the application deadline (not applicable to research initiation grants);
- For degrees obtained abroad, the record of recognition of the academic degrees and record of the conversion of the respective final classification to the Portuguese classification scale must be presented, or, alternatively, the candidate's declaration of honor (not applicable to research initiation grants);
- Motivation letter.

Workplan and objectives to be achieved:

The work plan consists of the following tasks:

1. Design of multi-material bone distractors, including titanium, nitinol, and possibly PEEK, for various medical applications;
2. Design and development of responsive, antibacterial, osteogenic surfaces, using SLM and/or coatings, for specimens and distractors;
3. Characterization of materials and surfaces, including interaction with biological tissues, of the components obtained.

The scholarship holder must produce semiannual reports on the work developed and one scientific article per semester of the contract.

The BIPD are restricted in time in order to stimulate scientific employment and the use of researcher contracts as a rule for hiring them - according to nº 2, article 7º of the FCT I.P. Research Grants Regulation (2019).

Note: The work plan should aim at consolidating the scientific training of the research fellow in the framework of the course conferring a degree or academic diploma.

Applicable legislation and regulations: Research Fellow Statute (EBI), approved by Law nº. 40/2004 of August 18, in its current wording and FCT Research Fellowship Regulation, approved by Regulation nº 950/2019, published in the Diário da República, 2nd series,

of December 16, 2019, in its current wording, and Scientific Research Fellowship Regulation (RBIC) of the University of Minho, approved by order nº 4998/2025, published in the Diário da República, 2nd series, nº 81, of April 28, 2025 Amended and republished through amendment statement no. 634/2025/2, published in the Official Gazette, 2nd series, no. 132, of July 11.

Host/Contracting institution and scientific supervision: The workplan will be carried out in the Laboratório de Micro Manufacturing and Systems Integration Laboratory of CMEMS- Center of MicroElectroMechanical Systems of School of Engineering of University of Minho (CMEMS-UMinho), based on Campus de Azurém, Guimarães, and on Vale S. Cosme, Famalicão, where the physical activities will be carried out, in partnership with company Customize, Lda, under the scientific supervision of the Professor Filipe Samuel Correia Pereira Silva.

Fellowship duration: The grant will take place for a period of 12 months, with a provisional starting date on November 2025. The fellowship grant may eventually be renewed up to the maximum duration allowed in the project and/or by the legislation and regulations in force for the type of scholarship granted.

Amount of the research grant: The amount of the grant corresponds to 1851,00€/month, according to the table of FCT grants in the country (<http://www.fct.pt/apoios/bolsas/valores>) and the table of values of the Scientific Research Scholarships of the University of Minho, updated annually by decision of the Management Board.

Payment is made on the 23rd of each month, through bank transfer to the Bank Identification Number of the fellow identified in the contractualization process.

Other components of the research grant: Define other components of the grants, as provided for in Article 18º of the FCT Research Grant Regulations (RBI).

Other benefits: Reimbursement of Voluntary Social Insurance, if the candidate chooses to receive it, corresponding to the 1st step of the contribution base (for scholarships of 6 months or more) and Personal Accident Insurance.

Exclusivity regime: The grantee will perform the activities under exclusivity, as foreseen in article 5º of the Research Fellow Statutes and applicable regulations.

Selection panel: (identify the selection panel President and the effective and substitute members)

The selection panel is constituted by the following members:

- a) President of the selection panel: Professor Filipe Samuel Correia Pereira Silva, Full Professor, Department of Mechanical Engineering, University of Minho;
- b) Effective member: Doctor Margarida Maria Macedo Francesko Fernandes, Assistant Researcher, Center for Electromechanical Microsystems (CMEMS-UMinho), University of Minho;
- c) Effective member: Doctor Sara Cristina Soares Madeira, Junior Researcher, Center for Electromechanical Microsystems (CMEMS-UMinho), University of Minho;
- d) Substitute member: Doctor Óscar Samuel Novais de Carvalho, Associate Professor, Department of Mechanical Engineering, University of Minho;
- e) Substitute member: Doctor Nuno Miguel Magalhães Dourado, Associate Professor, Department of Mechanical Engineering, University of Minho;

The first effective member will substitute the President of the selection panel in case of impediment, being nominate the first substitute member in the place of the first effective member.

Criteria and procedures for applications assessment and selection: The applications assessment will focus on the candidate's Merit, following evaluation criteria, valued on a scale of 0 to 5 values (or another scale)¹:

Applicant Merit - AM (100%):

- a) Academic path (considering the classifications of academic degrees), with a weighting of 45%;
- b) Personal curriculum (considering professional and scientific background), with a weighting of 45%;
- c) Motivation letter, with a weighting of 10%.

Note: Other assessment criteria may be applied as deemed relevant.

The final classification of the applicant's merit with the achieved through the following formula:

$$MC=(a*0,45) +(b*0,45) +(c*0,1)$$

A positive evaluation is required for the granting of the scholarship.

Note: Candidates with degrees obtained abroad must present proof of recognition of the qualifications in Portugal and conversion of the final classification obtained in them to the Portuguese classification scale or a declaration in the terms indicated in the previous point. Candidates who do not comply with one of these provisions will be given a mark of "0" for their degree. Candidates will be evaluated on the remaining parameters.

Application deadline and submission: The call for applications is open for a period of 10 working days from the date of publication on the Euraxess portal.

Applications must be submitted by email to fsamuel@dem.uminho.pt, indicating the reference number of the competition in the subject line. Only applications submitted within the established deadline and accompanied by the following documents will be accepted:

- a) Candidate's updated curriculum vitae;
- b) Certificates of the academic degrees obtained or, if applicable, the candidate's declaration of honor that he/she has completed the degrees required in the notice by the application deadline (not applicable to research initiation grants).

For degrees obtained abroad, the record of recognition of the academic degrees and record of the conversion of the respective final classification to the Portuguese classification scale must be presented, or, alternatively, a declaration of honor from the candidate.

This declaration must attest to facts that occurred prior to the application. In the event of a discrepancy between the information contained in the declaration and the documentation submitted for the purposes of contracting the scholarship, only the information contained in the latter will be considered. If it is found that the documents proving the academic degree and diploma, or their recognition under the terms of Decree-Law n. ° 66/2018, of August 16, do not

¹ If a second assessment method - Interview - is set, the jury must decide whether all candidates will be interviewed or, alternatively, identify the criteria to be applied to the group of candidates to be interviewed and how they will be valued (for example, selecting the first 4 candidates on the MC (candidate merit)). The jury may adjust the weightings (the assessment must be substantiated in as much detail as possible, in a clear and consistent manner).

correspond to the classifications awarded in the assessment of the academic career and may consequently alter the candidate's ranking, the scholarship will not be contracted;

- c) Letter of motivation;
- d) Other documents that the candidate considers relevant to the evaluation process.

Form of publication/notification of results: The results of the evaluation are published in a single list in alphabetical order or by final score obtained, posted in a visible and public place in the host unit, as well as by email to all candidates, attaching, for this purpose, the minutes of the jury's deliberations, within a maximum period of 90 working days from the deadline for submission of applications.

Candidates are informed, at a preliminary hearing, in accordance with Articles 121 and 122 of the Administrative Procedure Code, of the likely outcome of the final decision, and may comment within 10 working days of this notification.

(The waiver of the hearing for interested parties must be justified in accordance with Article 124 of the CPA)

An appeal may be lodged against the final decision within 15 working days, or an appeal may be lodged with the highest executive body of the funding entity within 30 days, both after the respective notification (Article 12(nº6) of the FCT Research Grant Regulations).

Within 10 working days of notification of the grant award, the applicant must declare their acceptance in writing. In case of non-acceptance, the next highest ranked applicant will be notified immediately.

Fellowship contractualization: The scholarship is awarded through the signing of a contract between the University of Minho and the scholarship recipient, in accordance with point 2.4 of the Rules for the Award and Management of Scholarships https://www.fct.pt/wpcontent/uploads/2022/03/Normas_de_Atribuicao_de_Bolsas_2021.pdf and the draft contract in Annex II of the University of Minho's Scientific Research Scholarship Regulations.

The contract can only be signed after receipt of all the documentation required for the type of scholarship, which must occur within a maximum period of 6 months, including proof of academic degrees or diplomas, as well as enrollment in non-degree study cycles or courses, as applicable.

Once all the documentation has been received, the contracting entity has 60 working days to sign the scholarship contract. Once received by the scholarship holder, the contract must be returned, duly signed, within 15 working days.

Term and cancellation of fellowship contracts: Without prejudice to the other grounds laid down in the University of Minho's Regulations for Scientific Research Scholarships and in the Research Fellow Statute, the scholarship will cease on completion of the contracted work plan, as well as on expiry of the period for which it was granted or renewed.

The **final report** must be submitted to the scientific advisor, in accordance with the defined objectives and evaluation criteria, no later than 60 working days after the end of the scholarship and must be drawn up in accordance with Annex I of the Regulations of the University of Minho.

Non-discrimination and equal access policy: Universidade do Minho actively promotes a policy of non-discrimination and equal access, so that no candidate may be privileged, benefited, harmed or deprived of any right or exempt from any duty due, namely, to ancestry, age, sex, sexual orientation, marital status, family status, economic situation, education, social origin or condition, genetic heritage,

reduced working capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological convictions and trade union membership.

Declaration of Honor

Academic qualifications

I, (full name), candidate for the vacancy for the award of a (type of scholarship), within the scope of the project (name or reference of the project), published on the Euraxess portal, with the reference (ref. notice), declare on my honor that I have completed the academic degree of (academic degree), qualifying for the type of scholarship in the competition, namely the course (designation), by the (University conferring the degree), on the date XX/XX/XXXX, with a final average of XXXXX values on the YY scale.

As it is not possible for me to present proof of qualifications until the end of the competition, I declare that I undertake to present the aforementioned certificate at the conclusion of the scholarship contract, in the event that I am selected for the vacancy in the competition.

As this is true, I hereby date and sign this declaration.

(Place), (date).

(full name)

NOTE: The declaration may only attest to facts that occurred prior to the application.

In the event of a discrepancy between the information contained in the declaration and the documentation submitted for the purpose of contracting the scholarship, only the information contained in the latter will be taken into account.

Declaration of Honor

I, (full name), bearer of identification document number (XXXX), candidate for a research grant (type of grant), within the scope of the project (name or reference of the project), published on the Euraxess portal, with the reference (ref. call for proposals), declare on my honor that (I have not received any research grants to date / I have received the following research grants) under the Research Grant Holder Statute.

University	Funding Entity	Project	Type of Grant	Duration	Start	Term

As this is true, I hereby date and sign this declaration.

(Place), (date).

(full name)