

## DRAFT ANNOUNCEMENT FOR THE AWARD OF A POST-DOCTORAL RESEARCH FELLOWSHIP

**Title:** *Post-Doctoral Research Fellowship- MSenOoc; 1 vacancy*

**Reference:** PTDC/EEI-EEE/2846/2021\_BIPD\_01\_2025\_CMEMS

A call for applications is now open for the attribution of (1) grant(s) of Post-Doctoral Research Fellowship within the scope of the R&D project *MSenOoc -Matriz de micro(bio)ssensores integrados num dispositivo orgão num chip para NANOterapia de cancro*”, reference PTDC/EEI-EEE/2846/2021, financed by national funds (OE) through the Foundation for Science and Technology, I.P. (FCT), under the following conditions:

**Scientific Area:** Electronics Engineering

**Recipient category:** The BIPD are intended for doctorates in the areas of Electronics Engineering, who cumulatively meet the following requirements:

- Holders of a PhD degree obtained in the three years prior to the date of submission of the fellowship application\*;
- Have carried out the research work that led to the attribution of a PhD degree in an entity other than the host unit MEtRICs Center\*\*;
- The research activities do not require post-doctoral experience;
- Do not exceed, with the conclusion of the contract in question, including possible renewals, a cumulative period of three years in this type of fellowship, consecutive or interpolated;
- 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.

Other requirements:

- Candidates must hold a doctoral degree in Electronics Engineering at the time of application. Proof of academic qualifications completed by the closing date for applications, including those resulting from academic degree recognition processes, is required during the contractualisation phase.
- Preferred requirements: Experience in electronic circuits for data acquisition from various types of sensors, including characterization and manufacturing; experience in developing microsensors and microelectronics; experience in microelectronics circuit simulation tools and numerical simulation. Proficiency in Portuguese and English. Good teamwork skills.

\*Documents proving the ownership of academic degrees and diplomas, or their respective recognition when they have been awarded by foreign higher education institutions, when applicable for the type of scholarship in the call for applications, may be waived at the application stage, being replaced by declaration of honor of the candidate, with the verification of this condition occurring only in the phase of contracting the scholarship. This statement must attest facts that occurred on a date prior to the application. In situations of divergence between the information contained in the declaration and the documentation submitted for the purpose of contracting the grant, only the information contained in the latter will be considered. If it is verified that the documents proving the ownership of the academic degree and diploma, or the respective recognition under the terms of Decree-Law No. 66/2018, of

August 16, do not correspond to the classifications awarded in the evaluation of the academic path and may, consequently, change the candidate's ranking, the fellowship contracting will not be done.

\*\* Different R&D Units are included, even if located in the same Organic Unit (UOEI) of UMinho (n° 4 and 5 of article 7 of the FCT I.P Research Grant Regulation, in force)

**Applicants eligibility:** Applicants must comply with the eligibility conditions laid down in article 9 of the Research Grants Regulation of the Portuguese Foundation for Science and Technology (2019).

**Profile:**

The following are eligible to apply for this competition:

- Nationals or citizens of other member states of the European Union;
- Citizens of third countries;
- Stateless persons;
- Citizens with political refugee status

**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 involves the development, fabrication and experimental characterization of electronic/microelectronic circuits for the data acquisition from sensors and biosensors developed in the MSenOoC project, as well as the optimization of these sensors using simulation tools to validate and optimize the experimental results with the simulated ones.

**Applicable legislation and regulations:** Research Fellowship Holder Statutes, approved by Law n° 40/2004 of August 18, in its current version published by Decree-Law n° 123/2019 of August 28; Regulation of Scientific Research Fellowships of the University of Minho (RBIC), published in “Diário da República”, 2nd serie, n° 119, through dispatch n° 6524/2020 of 22-06-2020, ratified by ratification declaration n° 447/2021 of 22-06-2021 and Regulation of Research Studentships and Fellowships (RBI) of the Foundation for Science and Technology, I.P. - in force.

**Host/Contracting institution and scientific supervision:** The workplan will be carried out for the Mechanical Engineering and Resource Sustainability Center (MEtRICs) of University of Minho, located

in the Gualtar Campus, Braga, and Azurém Campus, Guimarães, under the scientific supervision of the Professor Rui Alberto Madeira Macedo Lima.

**Fellowship duration:** The grant will take place for a period of 7 months, with a provisional starting date on the June 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, provided that the candidate obtains approval from the supervisor.

**Amount of the research grant:** The value stipend (Monthly Maintenance Allowance) is 1851 euros, per month, in accordance with the stipends values published by the Foundation for Science and Technology (FCT I.P.) in the country (Annex I – Monthly Stipends Values for the maintenance allowances of the [FCT Regulation for Research Studentships and Fellowships](#)) and Annex II of the Regulation of Scientific Research Fellowships of the University of Minho (RBIC), published in “Diário da República”, 2nd serie, nº 119, through dispatch nº 6524/2020 of 22-06-2020, ratified by ratification declaration nº 447/2021 of 22-06-2021, according to the applicable regulation.

Payment is made on the 23st 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 the other components of the research grants, in accordance with the nº 5 of the article 18º of the FCT Regulation for Research Studentships and Fellowships, nº 950/2019 of 16-12-2019 or article 21º of the Regulation of Research Fellowships of the University of Minho (RBIC), accordingly with the regulations applicable).

**Other benefits:** Reimbursement of Voluntary Social Security (Social Security contributions), corresponding to the 1st level of discounts (*for research grants with a total duration 6 months or higher*) 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:** The selection panel is constituted by the following members:

- a) President of the Jury: Doctor Rui Alberto Madeira Macedo Lima (Associate Professor of Department of Mechanics Engineering of the University of Minho);
- b) Members: Doctor Alexandre Ferreira da Silva (Assistant Professor of Department of Industrial Electronics of the University of Minho) and Doctor Cristina Manuela Peixoto dos Santos (Assistant Professor with Habilitation of Department of Industrial Electronics of the University of Minho);
- c) Alternate members: Doctor Paulo Jorge Teixeira de Sousa (Junior Research of MicroElectroMechanical Systems, CMEMS-UMinho, from Engineering School of University of Minho) and Doctor Raquel Oliveira Rodrigues (Assistant Research of Associate Laboratory in Biotechnology and Bioengineering and Microelectromechanical Systems, LABELS, from Engineering School, 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 1 to 5 values:

Candidate Merit - CM (100%):

- a) Academic career (reflecting degree classifications and scientific suitability for the scholarship), weighted at 30%;
- b) Personal CV (reflecting scientific and professional career and experience), weighted at 30%;
- c) Scientific publications, weighted at 30%: number of articles (Scopus) published in the areas indicated as preferential requirements (20%); number of articles (Scopus) (10%).
- d) Motivation letter, weighing 10%.

The candidate's final merit classification will be obtained by applying the following formula:

$$MC=(a*0,3)+(b*0,3)+(c*0,30)+ (d*0,1)$$

Candidates who score less than 4,5 in any of the selection methods will be excluded from the procedure.

If the selection panel does not feel able to decide using the method under MC, it may choose to conduct an Interview. In that case, the candidates classified in the first 2 positions, who obtain a minimum classification of 2 in the MC, will be admitted to the Interview phase, in which the Jury will evaluate the following sub-criteria:

Interview - ENT:

- E1- Interpersonal skills-20%.
- E2- Demonstrated knowledge in the area of the competition-30%.
- E3- Motivation -20%
- E4- Language skills (Portuguese and English)-30%.

The final classification of the Interview with the achieved through the following formula:

$$ENT=(E1*0,2) + (E2*0,3) + (E3*0,2) + (E4*0,3)$$

The final classification (CF) of the Candidate Merit (MC) and Interview (ENT) will be obtained by applying the following formula:

$$CF = (MC*0,5) + (ENT*0,5)$$

If none of the candidates demonstrate to have a suitable profile for the execution of the work plan, the Jury is entitled to close this call without selecting a candidate.

The academic degrees and diplomas documents, or their respective recognition when awarded by foreign higher education institutions are not mandatory in the application phase, being replaced by a declaration of honor of the candidate with the contents of academic results. The documents of academic qualification or respective recognition will be required in the contracting phase and must attest facts that occurred on a date prior to the application. In situations of divergence between the information contained in the declaration and the documentation submitted for contracting the grant, only the information contained in the latter will be consider. If the documents proving the ownership of the academic degree and diploma, or the respective recognition under the terms of Decree-Law No. 66/2018, of August 16, do not correspond to the classifications awarded in the evaluation of the academic path, which can change the candidate's ranking, the fellowship won't be contracted.

**Disclosure of results:** The evaluation results project, based in the selection panel minutes, will be send to the applicants by email, in accordance with article 12 of the FCT's RBI (FCT funding) | article 13 of UMinho's RBIC (other funding subject to UMinho regulations).

If case of unfavourable results, the candidates have a period of 10 working days to comment, if desired, in a prior hearing to interested parties, pursuant to articles 121 and 122 of the Code of Administrative Procedure (DL n° 4 / 2015 of January 7th).

**Complaint and appeal procedures:** The final results of the evaluation will be published through an ordered list (*alphabetically, by final grade obtained*), posted in a visible and public place of the host unit, as well as by email to all applicants, enclosing for that purpose, the minutes of the jury deliberations.

The selected candidate must inform its willingness to accept the grant, in writing. In case of rejection, the fellowship will be awarded to the next candidate in the ordered list of applicants.

The final decision can be contested within 15 working days, by sending to the President of the jury the corresponding claim. Interested parties may also submit an optional hierarchical appeal, addressed to the Pro-Rector with delegation of powers in this area.

**Constitution of a selection reserve list:** The applicants ranked in the next positions on the ordered list will be included in a selection reserve list, which can be used until 30 September 2025.

**Application deadline and submission:** Applications will be accepted for a minimum period of 10 working days after the publication of the notice on the European Scientific Mobility Portal Euraxess.

Applications must be formalized by sending an application letter with the following documents: curriculum vitae; qualifications certificate or declaration of the applicant (*if applicable*); motivation letter; letter of recommendation (one); other documents important to the evaluation process.

Applications must be sent by email to [secretaria@cmems.uminho.pt](mailto:secretaria@cmems.uminho.pt), indicating the reference of the call for applications in Subject. Applications submitted by other means will not be accepted.

**Fellowship contractualization:** The fellowship will be attributed by signing a fellowship contract between the University of Minho and the fellow, accordingly with the contract minute (annex IV of the Regulation of Research Fellowships of the University of Minho (RBIC), published in *Diário da República, 2nd Série, n° 119*, through dispatch n° 6524/2020 of 22-06-2020, ratified by ratification declaration n° 447/2021 of 22-06-2021, as indicated in 2.4 of the FCT document: “[Rules for Granting and Management of Grants within the scope of R&D projects, including infrastructure projects, the multi-annual financing program for R&D units and other FCT financing instruments \(Version 2021\)](#)”.

The contract may only be concluded after all the documentation required is collected, which must take place within a maximum period of 6 months [including evidences of doctoral degree or its recognition in Portugal, under Decree-law n° 66/2018 of august 16th].

Once all the documentation has been received, the contracting entity has a period of 60 working days to conclude the scholarship contract. Once received, the fellow must return the contract duly signed within 15 working days.

The activities under the fellowship contract can only began after proper authorization by the contracting entity.

**Term and cancellation of fellowship contracts:** Without prejudice to the other causes provided the fellowship regulations (FCT and UMinho) and in the Statute of the Research Fellow, the fellowship ends with the completion of the work plan, as well as with the expiration date for which it was granted or renewed.

At the end of the fellowship, the grantee is obliged to present a Final Report of the work carried out, in accordance with the objectives and evaluation criteria defined with the scientific advisor, within 30 days after the end of the scholarship.

The **final report** must be prepared in accordance with Annex I of the Scientific Research Fellowships Regulation of the University of Minho (RBIC), published in *Diário da República*, 2nd Série, nº 119, through dispatch nº 6524/2020 of 22-06-2020, ratified by ratification declaration nº 447/2021 of 22-06-2021.

## 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).

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(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.

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

(Place), (date).

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(full name)