

## **ANNOUNCEMENT FOR THE AWARD OF A RESEARCH FELLOWSHIP**

### **Research Fellowship for Bachelor degree holder - BrainStimMAP; 1 vacancy**

**Reference: PTDC/EME-EME/1681/2021\_BI\_01/2025-CMEMS**

A call for applications is now open for the attribution of one (1) Research Fellowship for Bachelor degree holder within the scope of the R&D project **“BrainStimMap - Mapping and modeling the transmission profile of optical and mechanical stimuli in the brain to optimize transcranial stimulation to combat neurological and psychiatric diseases”**, reference **PTDC/EME-EME/1681/2021**, at the Center for Electromechanical Microsystems (CMEMS - UMinho), financed by national funds through the Foundation for Science and Technology, I.P. (FCT), in the Scientific Research and Technological Development Projects in all Scientific Domains program – IC&DT2020, under the following conditions:

**Scientific Area:** Mechanical Engineering, Materials Engineering, Biomedical Engineering or Physical Engineering.

**Recipients:** Students enrolled in a Master's degree in Mechanical Engineering, Materials Engineering, Biomedical Engineering or Physical Engineering, or Masters enrolled in a non-degree course integrated into the educational project of a higher education institution, developed in association or cooperation with one or more R&D units.

#### **Requirement for granting the scholarship:**

- Candidates may apply without prior registration for the course for which the scholarship is open. The requirement for enrollment in a degree-granting or non-degree-granting course will be verified on the date of the scholarship award.
- Only those scholarships will be awarded for which selected candidates present valid proof of enrollment in a degree-granting or non-degree-granting course, according to the type of scholarship in the competition, issued by the academic services of the Higher Education Institution, indicating the current academic year or its duration (start and end), respectively.

#### **Profile:**

The following may apply for this competition:

- National citizens or citizens of other Member States of the European Union;
- Citizens of third States;
- Stateless persons;
- Citizens who are beneficiaries of political refugee status.

#### **Applicant eligibility requirements:**

- a) Candidates must have, on the date of application, a Bachelor's degree in Mechanical Engineering, Materials Engineering, Engineering Biomedical or Physical Engineering. Proof of academic qualifications completed by the application deadline, including those resulting from academic degree recognition processes, is required during the contracting phase;

- b)** Candidates enrolled in a course that does not confer a degree: Candidates who have worked for more than two years in this type of scholarship, consecutive or interspersed, at the time of signing the scholarship contract in question, including renewals provided for in the notice, will not be eligible for the scholarship;
- c)** Candidates must present, during the contracting phase, proof of academic qualifications completed by the application deadline, including those resulting from academic degree recognition processes;
- d)** Preferential factors: proven experience or prior knowledge in the following areas:
- Development and characterization of materials for biomedical phantoms, with emphasis on mimicking the acoustic properties of brain tissues;
  - Development and characterization of materials with controlled optical properties, oriented towards the simulation of translucent or scattering biological tissues;

### **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;

**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).

### **Workplan and objectives to be achieved:**

The work plan consists of the development and characterization of materials for biomedical phantoms, with emphasis on mimicking the acoustic properties of brain tissues; the development and characterization of materials with controlled optical properties,

**Applicable legislation and regulations:** Research Fellowship Holder Statutes, approved by Law nº 40/2004 of August 18, in its current version published by Decree-Law nº 123/2019 of August 28; 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 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 in the Laboratório de Micro Fabricação e Integração de Sistemas do CMEMS- Centro de Microssistemas Eletromecânicos da Universidade do Minho (CMEMS-UMinho), based on Campus de Azurém, Guimarães, under the scientific supervision of the Professor Óscar Samuel Novais Carvalho.

**Fellowship duration:** The grant will take place for a period of 5 months, with a provisional starting date on the August 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 value stipend (Monthly Maintenance Allowance) is 1 040,98 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 Oscar Samuel Novais Carvalho, Associate Professor, Department of Mechanical Engineering, University of Minho;
- b) Effective member: Doctor Pedro Filipe Lima Marques, Assistant Professor of the Department of Mechanical Engineering, University of Minho;
- c) Effective member: Doctor Diana Margarida Domingues Pinho, PhD Researcher, Center for Electromechanical Microsystems (CMEMS-UMinho), University of Minho;
- d) Alternate member: Doctor Margarida Maria Macedo Francesko Fernandes, Assistant Researcher, Center for Electromechanical Microsystems (CMEMS-UMinho), University of Minho;
- e) Alternate member: Doctor Sara Cristina Soares Madeira, PhD Researcher, Center for Electromechanical Microsystems (CMEMS-UMinho), 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 (or another scale)<sup>1</sup>:

Applicant Merit - AM (100%):

- a) Academic path (considering the classifications of academic degrees), with a weighting of 50%;
- b) Personal curriculum (considering professional and scientific background), with a weighting of 40%
- c) Motivation letter, with a weighting of 10%.

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

$$MC = (a*0,5) + (b*0,4) + (c*0,1)$$

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

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.

**Notes:** Applicants with degrees obtained abroad must present proof of recognition of qualifications in Portugal and conversion of the final classification obtained in them to the Portuguese classification scale or declaration under the terms indicated in the previous point. Candidates who do not comply with one of these provisions, the selection panel will assign "0" in the grade of the graduation and/or master course. Candidates will be evaluated on the remaining parameters.

**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 nº 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

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<sup>1</sup> If a second evaluation method is fixed – Interview, it may not have a weighting higher than 40%, according to nº 1 of article 12º of UMinho regulation;  
The jury shall define whether all candidates are interviewed or identify the criterion to be applied to a set of candidates to be interview and its valuation (*for instance, selection of candidates ranked between the 1s and 4<sup>th</sup> position in the evaluation list of APCC*).

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 delegated competences 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 30/09/2025.

**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; motivation letter; statement proving that meets the conditions for the grant typology, according to the application requirements; other documents important to the evaluation process.

Applications must be sent by email to [oscar.carvalho@dem.uminho.pt](mailto:oscar.carvalho@dem.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, nº 119, through dispatch nº 6524/2020 of 22-06-2020, ratified by ratification declaration nº 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 the academic degrees or diplomas and enrolment in degree courses or non-conferring courses, depending on the type of scholarship].

Once all the documentation has been received, the contracting entity has a period of 60 working days to conclude the scholarship contract (in the case of scholarship contracts under UMinho's RBIC, the deadline is 15 working days, under the terms of nº2 of Article 15º). 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)

Notes:

1. The statement may only attest to facts that occurred prior to the application.
2. The statement may only attest to facts that occurred prior to the application.
3. In cases of discrepancy between the information contained in the statement and the documentation submitted for the purposes of contracting a scholarship, only the information contained in the latter will be considered.

### **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)