

CALL FOR 1 (ONE) RESEARCH GRANT WITHIN THE SCOPE OF THE INTERNAL PROJECT OF THE RESEARCH CENTER IN SMART CITIES - Ci2 (UIDB/05567/2020)

Application open from **August 5th to August 16th, 2024**
FLEXEMG Project – **Scholarship – Profile 1**
Research Grant (BI), 1 place

A call is open for 1 (one) Research Grant (BI), at the Polytechnic Institute of Tomar, within the scope of the Project “*FlexEMG: Exploring Flexible Printed Circuits for Wearable Muscle*” funded by FCT through the Smart Cities Research Center (Ci2), ref. UIDB/05567/2020, under the following conditions:

Scientific Area : Electrical and Computer Engineering

Admission requirements :

National, foreign and stateless candidates who hold a Bachelor's degree in Electrical Engineering or related areas may oppose the competition. At the date of signing the contract, the chosen candidate must be enrolled in a master's degree in electrical engineering or a related field. If the degree was awarded by a foreign higher education institution, it must be recognized under the terms and under the provisions of Decree-Law no. 341/2007, of October 12th or Decree-Law no. 66/2018, of August 16, until the date of contract signing.

The candidate must have a knowledge of electronics, electronic circuit design software and microcontroller programming. Preference is given to candidates who intend to carry out the Master's Project/Dissertation on the Scholarship topic.

Work plan :

The scholarship holder's work plan will be framed within the activities of the Project “ *FlexEMG : Exploring Flexible Printed Circuits for Wearable muscle Sensors* ”, focused on developing flexible and stretchable printable electronics. The activities will consist of assembling the experimental *setup*, design and development of electromyography electrodes and experimental validation. The activities will be carried out as a team, with researchers from the areas of electrical engineering and chemical engineering. The scholarship holder is expected to continue the work of the scholarship in their individual Master's Project/Dissertation

Applicable legislation and regulations: Notice of this competition; Law No. 40/2004, of August 18th (Scientific Research Fellow Statute), as amended by Decree-Law No. 123/2019, of August 28th; FCT Research Grant Regulations, available at <https://files.diariodarepublica.pt/1s/2019/08/16400/0005500059.pdf> ; other applicable national and community legislation.

Workplace : The work will be carried out in the Laboratories of the Polytechnic Institute of Tomar and the activities will be hosted at the Smart Cities Research Center (Ci2), under the scientific guidance of Professor Doctor Gabriel Pires, Professor Doctor Jorge Guilherme and Professor Doctor Carlos Ferreira.

Duration of the scholarship(s): The scholarship will last for 4 months, expected to start on September 2, 2024. The scholarship contract may be extended depending on the availability of funding.

Value of the monthly maintenance subsidy : The amount of the scholarship corresponds to € 990.98 according to the table of scholarship values awarded directly by FCT, IP in the country (<https://www.fct.pt/financiamento/programas-de-financiacao/scholarships/>). The scholarship payment frequency is monthly, via bank transfer to an account to be defined with the scholarship holder.

Selection methods and process : The selection methods to be used will be the following: A - curriculum evaluation (40%), B - affinity and experience in the topics to be developed (30%) and C - interview (30%). The interview will

assess levels of motivation, autonomy and verbal expression. Each of the items will be evaluated on a scale of 0 (zero) to 20 (twenty) values.

The selection jury will evaluate the applications in accordance with the evaluation criteria set out in this Call, weighing the assessment elements. The final classification will be obtained using the following formula:

Final Classification = 0.4 x A + 0.3 x B + 0.3 x C

If no candidates with the profile that meets the necessary requirements for the performance of the tasks outlined in the Work Plan apply for the call, the scholarship will not be granted. Candidates who do not obtain a minimum rating of 10 values on a scale of 0 (zero) to 20 (twenty) values, in any of the selection methods, are considered excluded from the selection process.

The interview may be carried out in person or remotely via electronic means of videoconferencing.

All members of the jury, including the president, commit to respecting a set of responsibilities essential to the evaluation process, such as the duties of impartiality, declaring any potential situations of conflict of interest and confidentiality. At all times during the assessment process, confidentiality is fully protected and ensured in order to guarantee the independence of all opinions produced.

Composition of the Selection Jury: The Jury will be composed of Doctors Gabriel Pires (President of the Jury), Jorge Guilherme (full member), Henrique Pinho (full member), Carlos Ferreira (substitute member) and Valentim Nunes (alternative member).

Method of publicizing/notifying results/complaint: The final results of the evaluation will be publicized, through a list ordered by final grade obtained, posted in a visible and public place at the Instituto Politécnico de Tomar, with the approved candidate being notified through email.

The final results of the evaluation will be published within 30 (thirty) working days from the deadline for submitting applications and the list will be sorted in order of ranking of candidates, with the approved candidate being notified through email, as well as the remaining candidates. If the selected scholarship holder withdraws, the second candidate from the ordered ranking list of candidates will automatically be selected, and so on sequentially until the candidates presented are exhausted. After the results are announced via e-mail, candidates must immediately consider themselves notified so that, if they wish, they can make a statement at a prior hearing within a maximum period of 10 (ten) working days after that date, in accordance with the articles 121 and following of the Administrative Procedure Code. At the end of the period set for the hearing of interested parties and, in the absence of any response from them, the ranking list of candidates will become definitive. A complaint may be filed against the final decision within 15 (fifteen) working days, or, alternatively, an appeal may be filed within 30 (thirty) working days, both counting from the respective notification. If there is a single candidate and this candidate is selected, there will be no need to comply with the deadlines mentioned above for the prior hearing.

Application deadline and form of submission of applications: The call is open from **August 5th to August 16th, 2024**.

Applications must be formalized through an application letter accompanied by the sending of: a) Detailed Curriculum Vitae, including a breakdown of the grades obtained in the subjects of the respective course and final grade; b) Copy of qualifications certificate; c) Elements relating to the identification document – citizen card/identity card/passport. Applications must be formalized via email to (include in the “Subject” field): FLEXEMG Project - BOLSA- **Profile 1** , addressed to: Gabriel Pires (e-mail: gppires@ipt.pt), Jorge Guilherme (e-mail : jorge.guilherme@ipt.pt), Henrique Pinho (hpinho@ipt.pt) and Smart Cities Research Center (e-mail: ci2@ipt.pt).

Each candidate may submit only one application, under penalty of cancellation of all applications submitted.

Providing false statements or carrying out acts of plagiarism by candidates is grounds for canceling the candidacy without prejudice to the adoption of other sanctioning measures.

Financing: Payment of scholarships will begin after the candidates return the duly signed scholarship contract, which must occur within a maximum period of 15 working days from the date of receipt.

The scholarships awarded under this competition will be financed by FCT through the Base Financing of the Smart Cities Research Center (Ci2) (ref. UIDB/05567/2020).

Scholarship components: Scholarship holders are awarded a monthly maintenance allowance in accordance with the table in Annex I of the RBI. The scholarship may also include other components, under the terms set out in article 18 of the RBI and for the values set out in its Annex II.

All scholarship holders benefit from personal accident insurance for research activities, supported by FCT.

All scholarship holders who are not covered by any social protection regime can ensure the exercise of their right to social security by adhering to the voluntary social insurance regime, in accordance with the Code of Contributory Regimes of the Social Security Pension System, FCT ensuring the costs resulting from contributions under the terms and with the limits set out in article 10 of the EBI.

Payments for scholarship components: Payments due to the scholarship holder are made by the IPT via bank transfer to the account identified by the scholarship holder.

Scholarship renewal terms and conditions: Scholarship renewal always depends on a request submitted by the scholarship holder, within 60 working days prior to the renewal start date, accompanied by the following documents: opinions issued by the supervisor(s) /a(s /s) and by the host entity(ies) on monitoring the scholarship holder's work and evaluating their activities; updated document proving compliance with the exclusive dedication regime.

Non-discrimination and equal access policy: This competition follows FCT guidelines that promote a non-discrimination and equal access policy, meaning that no candidate can be privileged, benefited, harmed/ or deprived of any right or exempt from any duty due to, in particular, ancestry, age, sex, sexual orientation, marital status, family situation, economic situation, education, origin or social condition, genetic heritage, ability to work disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological beliefs and trade union membership.