

Reference: Referência: BII-2/CESAM/SHORESAFETY/2025

## NOTICE FOR THE AWARD OF GRANTS IN THE SCOPE OF R&D PROJECTS AND INSTITUTIONS

A tender is hereby opened for the award of one **Starting Research Grant** (SRG) in the scope of R&D projects SHORESAFETY – Emerging remote sensing technologies in real-time support for beach safety in risk areas (refª 2023.13467.PEX) in the Centre for Environmental and Marine Studies (CESAM) under the following conditions:

**1. Scientific Area:** Electronics engineering and related fields.

**2. Funding Source:** Foundation for Science and Technology, I.P./MCTES, through national funds (PIDDAC).

**3. Admission Requirements:** Students enrolled in a bachelor's degree in Electronics/Electrical Engineering, to obtain initial scientific training integrated into research projects, with experience in using Matlab and/or Python, with prior experience with microprocessors and sensors, video cameras and image processing applications. Proof of enrollment must be made available until the contract is awarded, and the candidate may attach a declaration of honour to confirm that they meet the requirements for enrollment.

If the qualification has been conferred by a foreign higher education institution it must be **recognized by a Portuguese higher education institution**, under the terms of the provisions of article 25 of Decree-Law no. 66/2018, of August 16th, which approves the legal regime of recognition of academic degrees and diplomas of Higher Education, attributed by foreign higher education institutions, and of paragraph e) of no. 2 of article 4 of Decree-Law no. 60/2018, of August 3rd, and any formalities established therein must be fulfilled by the date of the hiring act.

**4. Eligibility:** Applicants are eligible if they comply with paragraph a) of no.1 of article 2, of the Research Fellow Statute as amended by Decree-Law no. 123/2019, of August 28th, as well as nos. 1 and 2 of article 5 of the Research Grant Regulations of the Foundation for Science and Technology. The SRG(s) cannot be awarded to those who have already benefited from research grants directly or indirectly funded by FCT, awarded under the terms of the Research Fellow Statute and of no. 5 of article 5 of the Regulation above.

**5. Work plan:** The scholarship holder will work on the SHORESAFETY project, on the following tasks:

- a) Setting up a monitoring system that includes a video camera and one high-precision laser distance meter, synchronously controlled by a digital processor, captures image frames and distance measurements and sends that data to a central unit where they are processed.
- b) Improving and installing (in the tower located at Praia de Mira) an electromechanical system (already existing) that controls small angular displacements of the laser distance sensor (and associated pointer), so that this sensor targets a grid of surface points.
- c) Develop software to automate data acquisition, storage, and processing, allowing users to explore the resulting data easily.

**6. Applicable legislation and regulations:** Statute of Scientific Research Grant Holder, as amended by Decree-Law no. 123/2019, of August 28th; Regulation no. 950/2019, of November 29th, published in Diário da República, no. 241, Series II, of December 16th (FCT, I.P. Research Grants Regulation); Decree-Law no.

66/2018, of August 16th (Legal regime for recognition of academic degrees and diplomas of higher education awarded by foreign higher education institutions).

**7. Workplace:** The work will be carried out at the Instituto de Telecomunicações, Department of Electronics, Telecommunications and Informatics and the Centre for Environmental and Marine Studies, Department of Geosciences, of the University of Aveiro, under the scientific supervision of Professor Telmo Reis Cunha and Doctor Paulo Renato Enes Baganha Baptista.

**8. Duration of the grant:** The grant will be 11 months, starting 1 September 2025.

**9. Amount of monthly maintenance allowance:** The amount of the grant corresponds to €651.12, according to the table of monthly maintenance allowance amounts set out in Annexe I of Regulation no. 950/2019, subject to any updates that may be applicable, under the terms of no. 2 of article 18 of Regulation no. 950/2019, of November 29th, published in Diário da República, no. 241, Series II, of December 16th (Research Grants Regulation of FCT, I.P.). In case of adherence to this plan, the fellow may also be reimbursed for the amount corresponding to the Voluntary Social Security.

**10. Selection methods:** The selection methods to be used will be the following:

The selection method will be curriculum evaluation, with the option of an evaluation interview if the jury does not consider itself duly qualified to make decisions based on the curriculum evaluation. The curriculum evaluation, with a weighting of 0-20 points, will be carried out according to the following criteria and weightings:

- Curriculum evaluation - 60%
- Knowledge of sensor integration applications with the use of microprocessors - 30%
- Experience in Matlab/Python for image processing - 10%

The interview selection method may be used if the jury is not deemed duly qualified to decide based on the curriculum evaluation. If an interview is conducted, the final evaluation will be carried out with a weighting of 80% for the curriculum evaluation and 20% for the interview.

**11. Composition of the Selection Jury:** President: Professor Amadeu Mortágua Velho da Maia Soares, Director of CESAM; Full members: Professor Telmo Reis Cunha, Associate Professor at the Department of Electronics, Telecommunications and Informatics, and Doctor Paulo Renato Enes Baganha Baptista, Assistant Researcher at the University of Aveiro. Alternate members: Professor Paulo Alves da Silva, Associate Professor at the Department of Physics of the University of Aveiro, and Professor Cristina Maria Almeida Bernardes, Associate Professor at the Department of Geosciences of the University of Aveiro.

**12. Deadline for applications and how to submit applications:** The call is open from 26 June to 13 July, and only applications submitted within the deadline will be admitted.

Applications must be formalised by sending a letter of application accompanied by the following documents: Curriculum Vitae, certificate of qualifications, declaration of honour and other relevant supporting documents.

They shall also indicate the e-mail address to which, by such indication, they accept to be notified for all purposes within this procedure. Applications should be sent by e-mail to [cesam-bolsas@ua.pt](mailto:cesam-bolsas@ua.pt)

**13. Form of publication/notification of results:** The final results of the evaluation will be published through an ordered list alphabetically, by final mark obtained or other posted on the University's website, within 90 working days after the final date of submission of the application, and the successful candidate will be notified by email. For prior hearings of interested parties, a deadline of 10 working days is set, as provided in the Code of Administrative Procedure. After hearing the interested parties and without any response from them, the list of candidates will become final at the end of the period. Candidates may complain about the final decision within 15 working days, or appeal to the maximum executive body of the funding entity within 30 working days after notification of the final decision, by the provisions of article 12 of the Research Grants Regulation of the Foundation for Science and Technology.

**14. Tender duration:** The final ranking list of candidates will be valid until 30 September 2025 to constitute a reserve list for selection.

The grant contract models and the final report to be prepared by the grant holder and the supervisor are available at [Research fellows - sgrh - Universidade de Aveiro \(ua.pt\)](https://ua.pt/research-fellows-sgrh).