

NOTICE NO. 103/2026

COMPETITION FOR THE AWARD OF A GRANT, IN ACCORDANCE WITH THE PROVISIONS OF THE RESEARCH GRANT REGULATIONS OF UALG

Title: 1 Research Fellowship Position – Master's Degree Holder

A competition is open for the award of 1 Research Fellowship Position – Master's Degree Holder within the scope of the R&D project *Adaptações dos sobreiros face às alterações climáticas e como as mesmas promovem a sustentabilidade do ecossistema/ Cork Oak Adaptations to Climate Change and Their Contribution to Ecosystem Sustainability*, from the University of Algarve, ALGARVE-FEDER-03316200 OAKHIMEDES, funded ICDT ALGARVE 2030), under the following conditions:

- 1. Scientific Area:** Electrical, Electronics and Computer Engineering.
- 2. Admission Requirements:** A master's degree in Computer Engineering, Electrical Engineering, Computer Science, or related fields, qualifying the holder for enrollment in a doctoral program. Preferred qualifications include knowledge and experience in: data analysis, processing, and visualization, including applied statistics and exploratory data analysis; scientific programming—ideally in Python—and the use of tools and libraries for data science and artificial intelligence; machine learning, including classification methods, clustering, data mining, multivariate analysis, time-series analysis, and variable selection and interpretation; and the analysis and integration of data from environmental sensors, monitoring systems, the Internet of Things (IoT), or similar applications. Candidates should also demonstrate critical thinking, autonomy in problem-solving, an aptitude for scientific research, and the ability to integrate multidisciplinary information.

Taking into account paragraphs 1 and 2 of Article 6 of the Research Grants Regulations of the Foundation for Science and Technology or paragraphs 1 and 2 of Article 5 of the University of the Algarve's Research Fellowship Regulations:

"1. Research grants, hereinafter referred to as BI, are intended for R&D activities by students enrolled in an integrated master's degree, a master's degree or a doctorate, with a view to consolidating their scientific training through the development of research work leading to the award of the respective academic degree, whether or not integrated into R&D projects.

2. The scholarships referred to in this article may also be intended for the performance of R&D activities by graduates or masters enrolled in non-degree courses integrated into the educational project of a higher education institution, developed in association or cooperation with one or more R&D units."

- 3. Project Objectives:** Monitor weather and soil conditions at two experimental forest sites through the systematic collection of data using sensors, in order to characterize the influence of environmental factors on tree growth, physiological response, and adaptive capacity. Analyse the relationships between climatic variables, soil conditions, radial growth, and physiological parameters, identifying the environmental factors with the greatest influence on tree response, as well as potential indicators of resilience and adaptation to climate change. Develop and apply machine learning models to identify patterns in the collected data and determine which variables possess the greatest explanatory and discriminatory power. Employ exploratory data analysis and visualization methods to identify clusters, interpret their biological and environmental

significance, and determine which variables carry the most weight in differentiating the physiological states of the trees.

- 4. Applicable Legislation and Regulations:** Research Fellow Statute, approved by Law No. 40/2004 of August 18, as amended by Decree-Law No. 65/2024 of October 1, and the University of Algarve Research Grant Regulations (<https://files.dre.pt/2s/2021/10/210000000/0013700149.pdf>).
- 5. Workplace:** The work will be carried out at CIMA (Centro de Investigação Marinha e Ambiental) and the ISE (Instituto Superior de Engenharia) at UAlg, under the scientific guidance of Professors Ana Cristina Hurtado de Matos Coelho, Jorge Filipe Leal Costa Semião, and Pedro Jorge Sequeira Cardoso.
- 6. Duration of grant(s):** The grant will last 12 months, with the start date scheduled in January of 2027. The grant contract may be renewed until the end of the project, taking into account the University of Algarve Research Grant Regulations (<https://files.dre.pt/2s/2021/10/210000000/0013700149.pdf>).
- 7. Monthly maintenance allowance amount:** The monthly maintenance allowance is €1359.64. The maintenance allowance will be paid monthly by bank transfer. <https://www.fct.pt/wp-content/uploads/2026/03/Tabela-de-Valores-SMM-2026.pdf>.
- 8. Candidate evaluation:** In accordance with the provisions of Article 11.2 of the Research Fellowship Regulations of the University of Algarve, candidates will be assessed based on their curriculum vitae evaluation (AC) and, only if deemed necessary by the Selection Committee, an interview (E). The evaluation of applications will be based on a combined assessment of the following criteria:

C1 – Final average grade of academic qualifications: Score corresponding to the average grade of academic qualifications, rounded to the nearest whole number. Weighting: $P1 = 0.2$;

C2 – Professional training, professional experience, and technical and scientific curriculum: Weighting: $P2 = 0.4$;

C3 – Suitability for the research area applied for and research experience in the relevant fields: Weighting: $P3 = 0.4$.

The curriculum vitae evaluation (AC) will be scored on a scale of 0 to 20 points, according to the following formula:

$$AC = C1 \times P1 + C2 \times P2 + C3 \times P3$$

If deemed necessary by the Selection Committee, individual interviews (E) will be conducted with the three highest-ranked candidates. In this case, the final score will be calculated according to the following formula:

$$\text{Final Score} = AC \times 0.8 + E \times 0.2$$

- 9. Composition of the Application Evaluation Board:** The Application Evaluation Board is composed of three full members and one alternate (all PhDs):

Ana Cristina Hurtado de Matos Coelho (Presidente) (Professora coordenadora; Escola Superior de Educação e Comunicação);

Jorge Filipe Leal Costa Semião (1º Vogal efetivo) (Professor coordenador; Instituto Superior de Engenharia);

Pedro Jorge Sequeira Cardoso (2º Vogal efetivo) (Professor coordenador; Instituto Superior de Engenharia);

Paulo Gustavo Martins da Silva (1º Vogal suplente) (Professor adjunto; Instituto Superior de Engenharia);

10. Publication/Notification of Results: The final evaluation results will be published on the UALg website, in a list ordered by the final grade obtained, and the successful candidate will be notified via email.

11. Application Deadline and Submission Method: The competition is open from **26/10/2026 to 06/11/2026.**

12. Applications must be accompanied by the following documents:

- a) Official identification document (simple copy or legal equivalent). Applicants of non-Portuguese nationality must present a residence permit, permanent residence certificate, or long-term resident status, valid on the scholarship start date. Any of these may be replaced, in its absence, by a declaration of honor by the candidate. However, this must be submitted during the scholarship contracting phase, under penalty of forfeiture of the scholarship award;
- b) Curriculum Vitae;
- c) Copy of the qualification certificates for the academic degrees held, specifying the final grade and, if possible, the grades obtained in all courses taken;
- d) Other documents deemed relevant due to the type and modality of the scholarship.
- e) The Application for Application to the Competition, dated and signed, must be addressed to the President of the Competition Evaluation Panel, <https://www.ualg.pt/sites/default/files/documentos/2022-12/anexo-iii-requerimento-para-candidatura-bolsa-pt.pdf>, by email to acoelho@ualg.pt, and cc'd to jsemiao@ualg.pt, Ref.^a EDITAL N.º 103/2026. In the aforementioned application, **you must expressly consent to all notifications related to the bidding process being sent to the indicated email address.**

13. Documents to be submitted for the scholarship agreement:

- a. Individual Taxpayer Registry (INV) information, if the applicant is a nationality other than Portuguese, must be submitted during the scholarship agreement process, under penalty of forfeiture of the scholarship award;
- b. Documents proving that the applicant meets the requirements for the respective type of scholarship, namely, proof of enrollment and registration and the study cycle or course that does not confer an academic degree;
- c. Declaration of the advisor(s) assuming responsibility for supervising the work plan, in accordance with Article 5-A of the Research Scholarship Statute, as well as guaranteeing the necessary conditions for the successful development of the work and compliance with the duties set forth in Article 13 of the Research Scholarship Statute;
- d. Declaration of Commitment to the Exclusive Dedication Regime.

14. Deadlines and Procedures for Complaints and Appeals:

Candidates may, if they so wish, comment on the draft decision to award the requested scholarship, at a hearing for interested parties within 10 business days, under the terms and for the purposes set forth in Article 121 of the Code of Administrative Procedure.

Candidates have the right to complain to the evaluation panel within 10 business days regarding the commission or omission of any act.

An appeal may be filed against the final decision of the application evaluation panel to the Rector within 10 business days of notification.

15. Scholarship Contract:

After receiving all required documentation, a scholarship contract will be signed with the selected candidate(s) in accordance with the attached template.

16. Evaluation of Fellow(s):

At the end of each fellowship contract period, the advisor will evaluate the fellow(s)' work by applying the following criteria, in accordance with the attached template:

a) Achievement of objectives (80%) – Assessment of the extent to which the objectives and tasks outlined in the work plan have been achieved, taking into account the scientific and technical quality of the activities carried out, the rigour in the execution of procedures, and the results obtained.

b) Behavioural competencies (10%) – Assessment of the competencies demonstrated during the period under review, particularly organisational skills, autonomy, responsibility, scientific rigour, and the ability to integrate into and collaborate with the research team.

c) Personal attitude (10%) – Assessment of the commitment, interest, motivation, and availability demonstrated in carrying out research activities, as well as initiative and receptiveness to the guidance and recommendations provided by the supervisory team.

The University of Algarve reserves the right to cancel the fellowship award process, within the scope of the Project in question, whenever funding is not awarded or the scholarship duration exceeds the project completion date.

University of Algarve, 22 of October of 2026

The Principal Investigator

Professor (Ana Cristina Hurtado de Matos Coelho)