NOTICE NO. 001/2026

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

Title: Postdoctoral Fellowship (1 placement)

A competition is open for the award of 1 Grant(s) Postdoctoral within the scope of the R&D project DTCoastGrid - Management of Microgrids - Digital Twins to support the challenges faced by Coastal Communities, 2024.14012.PEX, funded by the Portuguese Foundation for Science and Technology, Exploratory Research Projects in All Scientific Domains 2024, under the following conditions:

1. Scientific Area: Computer Sciences.

2. Admission Requirements: The call is open to candidates holding a PhD degree in Computer Engineering, Data Science, Computer Science, Electrical Engineering with a strong computational background, or related scientific areas. Proven research experience is required, particularly in the development of digital solutions, data processing and integration, computational modelling, or optimization algorithms. Preference will be given to candidates with strong programming skills, experience in software architectures, distributed systems, and data analysis, as well as prior involvement in projects related to energy systems, sustainability, smart grids, or cyber-physical systems. The ability to work independently, collaborate in multidisciplinary teams, and contribute to scientific dissemination activities will be considered an advantage.

3. Project Objectives: The DTCoastGRID project, with 18-month duration, aims to design and develop the architecture of a Digital Twin for the management of microgrids in coastal communities, using Culatra Island as a case study. The recruited PhD researcher will contribute to three main objectives: (i) collecting, integrating, and structuring data from sensors, monitoring networks, and energy systems; (ii) developing advanced optimization models to support microgrid management, including forecasting, load scheduling, and demand response strategies; and (iii) designing and implementing a digital platform that enables system visualization, decision support, and active user participation. The project seeks to deliver a solution that is replicable and adaptable to other territorial contexts.

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 Foundation for Science and Technology Research Grant Regulations (https://files.diariodarepublica.pt/2s/2019/12/241000000/0009100105.pdf).

5. Workplace: The work will be carried out at CIMA – Center for Marine and Environmental Research of University of Algarve, under the scientific supervision of André Pacheco, Auxiliary Researcher.

6. Duration of grant(s): The grant will last 6 months, with the start date scheduled on February 2026. The grant contract may be renewed until the end of the project, taking into account the Research Grant Regulations of the Foundation for Science and Technology (https://files.diariodarepublica.pt/2s/2019/12/241000000/0009100105.pdf).

7. Monthly maintenance allowance amount: The monthly maintenance allowance is €1,851.00. The maintenance allowance will be paid monthly by bank transfer. (https://www.fct.pt/wp-content/uploads/2025/02/Tabela_valores_SMM_2025.pdf).

8. Candidate evaluation: In accordance with the provisions of the Foundation for Science and Technology Research Grant Regulations, the evaluation of candidates will be based on the following criteria: merit of the candidate (curricular path, required research experience), letter of intent, and interview with the respective weighting of 50,30,20, respectively.

9. The evaluation process may include an interview with the candidates or a portion of them, to be selected by the Evaluation Panel, which will have a maximum weighting of 20%.

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

- (President) Professor Dr. Jânio Monteiro (Assistant Professor, Higher Institute of Engineering)

- (Full Member) Professor Cristiano Cabrita (Assistant Professor, Higher Institute of Engineering)

- (Full Member) Dr. André Pacheco (Assistant Researcher, Center for Marine and Environmental Research)

- (Alternate Member) Professor Dr. Cláudia Sequeira (Assistant Professor, Higher Institute of Engineering)

11. 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.

12. Application Deadline and Submission Method: The competition is open from **19/01/2026 t0 30/01/2026**.

13. 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, it can be sent by post to the address: André Pacheco, CIMA/University of Algarve, Campus of Gambelas, Edificio 78005-139 Faro, Ref. 2024.14012.PEX or by email to ampacheco@ualg.pt . In the aforementioned application, **you must expressly consent to all notifications related to the bidding process being sent to the indicated email address**.

14. 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.

15. **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.

16. Scholarship Contract:

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

17. 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) Execution of the work plan

Assessment of the implementation of the activities foreseen, including data collection, data centralization, and development of the Digital Twin platform, in accordance with the approved objectives and schedule.

b) Achievement of milestones and deliverables

Evaluation of compliance with the planned milestones and the timely delivery of expected outputs, in particular the development of the Digital Twin platform and the associated technical documentation.

c) Quality of scientific and technical outputs

Assessment of the scientific soundness, technical quality, and robustness of the developed solutions, as well as their relevance for supporting energy system monitoring, analysis, and decision-making.

d) Autonomy, initiative, and problem-solving capacity

Evaluation of the fellow's ability to work autonomously, address technical challenges, and propose effective solutions within the scope of the project.

e) Integration in the project team and collaboration

Assessment of the fellow's contribution to team activities, interaction with project partners, and alignment with related developments within the Culatra2030 initiative.

f) Documentation, dissemination, and good scientific practices

Evaluation of the quality of technical documentation and contributions to dissemination activities, as well as compliance with good scientific and ethical practices.

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.

University of Algarve, 12th of January of 2026

The Principal Investigator

André Pacheco (CIMA Assistant Researcher, DTCoastGRID PI)