

Announcement of an international call for Researcher holding a PhD

Reference: 2026_052_IJ_REMORA

A competition is open for the attribution of one employment contract for a PhD holder as part of the project REMORA Swarm Robotics for the Improvement and Observation of Aquatic Resources, with reference COMPETE2030-FEDER-01429400, financed by the EU and Portugal 2030 through the program COMPETE under the following terms and conditions:

1. Scientific Area: Computer engineering, physics engineering, robotics, applied mathematics or related field.

2. Admission requirements:

- PhD in a relevant scientific area.
- Experience in mathematical modelling and in the computational implementation of physical models in a simulation environment.
- Experience in simulation programming.
- Knowledge of applied physics and simulation of phenomena like fluid-body interaction and external disturbances, and representation of environmental variables.

3. Admission preferential criteria:

- Experience in Unity, C# or other physical simulation environments that allow a rapid adaptation to Unity.
- Experience in the simulation of aquatic environments.
- Experience in modelling of environmental variables.
- Experience in Digital Twins.

4. Work plan:

The REMORA project – Swarm Robotics for Aquatic Resource Enhancement and Observation – aims to transform the monitoring and management of aquatic ecosystems through a cyber-physical architecture that integrates swarm robotics, digital twins (DTs), and human-swarm interaction into a single operational cycle. This innovative solution will be demonstrated in two aquatic systems: a marina and a fish farm. The contracted researcher will develop the DTs (which are partly similar) for two aquatic systems. The DTs will be developed, based on an existing robotic simulator in Unity, for aquatic monitoring scenarios, with greater emphasis on environmental and visual sensors relevant to applications in marinas and aquaculture. The DTs must be able to ingest and process multi-sensory

observations, represent the macroscopic state of the system, and support predictive analysis and scenario exploration.

5. Legislation and official rules:

Decree-Law no. 57/2016 of 29th August, which approved the doctorate hiring regime destined to stimulate scientific and technological employment for all knowledge areas (RJEC), updated by the Law no. 57/2017 of 19th July and Labour Code approved Law no. 7/2009 of 12th February, under its current reading and Regulatory Decree No. 11-A / 2017, of 29th December.

6. Work place:

The selected candidate will be integrated into the LOAI research group and work at CIIMAR - Interdisciplinary Centre of Marine and Environmental Research, at Terminal de Cruzeiros do Porto de Leixões, Avenida Norton de Matos, s/n, 4450-208 Matosinhos, Portugal.

7. Duration of the contract:

An uncertain term work contract will be signed starting on September, under the regime of exclusivity, according to legal terms (articles n.o 140o, no 1 and no 2, h; and article n.o 148o, no 4 – Labour Code and article 6o, no 1 b) e no 3 from Decree-Law n.o 57/2016, de 29 -8).

8. Monthly Salary:

The gross monthly salary is 2 408,11 €, with Holidays and Christmas, as well as food allowance paid additionally.

9. Selection methods:

The most important criterion is adequate experience. Candidates will be evaluated and ranked based on their CV and motivation, using the following criteria:

A - Assessment of mandatory and preferential requirements for admission and experience in the desired area;

B - Evaluation of the candidate's motivation to carry out the workplan based on the motivation letter.

With evaluation = $0.8 \times A + 0.20 \times B$

If considered necessary, an interview will be carried out with the best-scoring 2- 3 candidates, which will have a maximum weight of 10% in the final evaluation:

0.9 x CV and Motivation (A+B) + 0.1 x Interview

10. Composition of the jury:

President of the jury:	Dr. Ana Bio (CIIMAR)
Vogal:	Dr. Isabel Iglesias (CIIMAR)
Vogal:	Dr. Rodrigo Ozório (CIIMAR)
Alternative Vogal:	Dr. Francisco Arenas (CIIMAR)
Alternative Vogal:	Dr. Micael Couceiro (Ingeniarius)

11. Form of advertising/notification of the results:

The results of the first step of the evaluation (pre-selection) will be sent to the candidates by e-mail. The candidates have a 10-working day term in which to contest the decision, if they so wish, as provided for in the Administrative Procedure Code, in a preliminary hearing setting. After the eventual collection of reference letters and interviews, the final results will be communicated by e-mail to the candidates. The jury reserves the right not to assign the work contract if none of the candidates meet all the requirements and match the desired profile.

12. Deadline for application and how to apply:

Candidates interested in this position should send their application from 20 until 31 July 2026, to rh@ciimar.up.pt. Applications cannot exceed 20 MB and the subject of the e-mail must contain the competition 2026_052_IJ_REMORA.

The applications must be formalized by sending the following documents:

- application letter (include: application reference, contact e-mail address and phone number);
- motivation letter;
- detailed Curriculum vitae;
- copy of the eligibility certificates;
- any other documents considered relevant.

13. Non-discrimination and equal access policy:

CIIMAR actively promotes a non-discrimination and equal access policy, wherefore no candidate can be privileged, benefited, impaired or deprived of any rights whatsoever, or be exempt of any duties based on their ancestry, age, sex, sexual preference, marital status, family and economic conditions, instruction, origin or social conditions, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, origin territory, language, religion, political or ideological convictions and union membership.

Pursuant to Decree-Law no. 29/2001 of 3 February, disabled candidates shall be preferred in a situation of equal classification, and said preference supersedes any legal preferences. Candidates must declare, on their honour, their respective disability degree, type of disability and communication/expression means to be used during selection period on their application form, under the regulations above.

The selection process creates no obligation and may conclude without any candidates being selected if none are suitable for the position.