

Notice of the Call

Call for AIR Centre PhD Scholarships Programme – 2023

January 2023

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Atlantic International Research Centre (AIR Centre) opens a Call for **5 (five)** PhD grants in the field of Numeric Modelling, Marine Robotics, Biological Modelling and Ocean Sciences complying with the provisions of the [FCT Regulation for Research Studentships and Fellowships](#) (RBI) and [the Research Fellowship Holder Statute](#) (EBI):

1. Numeric Modelling: Coastal morphodynamics.
2. Marine Robotics: Closing the data cycle between numerical modeling forecasts and ocean autonomous observation vehicles
3. Biological Modelling: Towards a modelling approach to forecasting blooms of *Amyloodinium ocellatum* in an Aquaculture environment
4. Ocean Sciences: A framework for real time ocean sound estimation
5. Numeric Modelling: Near Shore HAB Generation Models

The grants will be financed by the Foundation for Science and Technology (FCT) under the Collaboration Protocol signed between the FCT and the AIR Centre.

1. APPLICATION

The call is open from **January 25th to March 25th 2023 (23:59 Lisbon Time)**

Applications, and all the supporting documents described in the RBI and in this Notice of the Call, must be submitted online using the appropriate application form available at <https://www.aircentre.org/Scholarship/> Applications submitted by other means will not be accepted.

All the application procedures, including submission, evaluation, results communication, preliminary hearings, are performed online.

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

Providing false declarations or committing acts of plagiarism by applicants leads to the exclusion of the application without prejudice of taking other corrective and punitive disciplinary measures.

2. TYPE AND DURATION OF STUDENTSHIPS

Aiming to support advanced training, PhD studentships will be granted to applicants that fulfil the requirements to join a study cycle that allows to obtain a PhD degree and that wish to develop research work that allows obtaining that degree.

The research work may be carried out in any environment of production and dissemination of knowledge, national or international, including higher education institutions, R&D units, Associated Laboratories, Collaborative Laboratories, Interface Centers, State Laboratories and other public research institutions, other Public Administration entities or private non-profit institutions developing R&D activities, companies acknowledged for their scientific and technology interest or consortia that includes any of the mentioned institutions.

The work plan must be developed entirely or partially in a national institution (studentship in Portugal or both in Portugal and abroad, respectively)

As a rule, the duration of PhD studentships is annual, renewable up to the maximum number of months requested upon application and cannot be granted for a period less than 3 consecutive months neither more than 48 months.

In case of a studentship carried out both in Portugal and abroad, the work plan period in a foreign institution cannot exceed 24 months.

3. RECIPIENTS

AIR Centre PhD grants are aimed at applicants enrolled or that comply with the requirements to enroll for PhD related studies and who wish to carry out research towards this degree.

4. ADMISSIBILITY

4.1 Applicants' admissibility requirements

The following citizens may apply to this call:

- National citizens or citizens from other member-states of the European Union;
- Third-party states citizens;
- Stateless individuals;
- Citizens holding a political refugee status.

To apply for a PhD studentship, it is necessary:

- To be a citizen permanently and usually living in Portugal, in case the work plan of the requested studentship

proceeds, partially, in foreign institutions (in case of both in Portugal and abroad studentships); this requirement is applicable to both national and foreign citizens;

- Not to have benefited from a PhD or a PhD in industry studentship directly funded by FCT, regardless of its duration.
- Not hold a PhD

4.2 Application's admissibility requirements

It is mandatory to submit the following documents, under penalty of non-admissibility:

- a) Your personal identification (ID card, passport)
- b) An updated version of your *Curriculum Vitae* (CV)
- c) **A detailed description of the research work plan, when applicable** (indication is given within each PhD grant link)
- d) **Academic degree certificates**, indicating the final grade and ECTS and, if possible, the final classification of the disciplines completed.;
- e) **Motivation letter**, explaining the reasons for your application, presenting your academic/professional career path and how it is related to the work plan; in case of also presenting the document or achievement considered the most representative, applicants should also explain this option in the motivation letter;
- f) **Two (2) different recommendation letters**, signed by the respective issuer; these letters should include the academic and/or professional context relationship of the candidate with its referee and should also specify that are related with this call; supervising acceptance letters should not be used as recommendation letters; as an example, recommendation letters may refer to the applicant's maturity and career path adequacy related to the proposed work plan;

5. RESEARCH WORK PLAN AND SCIENTIFIC ORIENTATION OF THE STUDENTSHIP

Work plans should be focused in the specific areas described in the respective PhD grant. The scientific orientation of the candidate's work plan should be consistent with the topic of the call and, more specifically, with the subject addressed in the proposed work plan.

6. EVALUATION CRITERIA

All admitted applications must be graded from zero (0.00, minimum) to five (5.00, maximum) in each of the three evaluation criteria if:

- Criterion A – Merit of the Applicant;
- Criterion B – Merit of the Work Plan;
- Criterion C – Merit of the Hosting Conditions.

In order to decide the conditional granting of the PhD grant, applicants will be ranked according to the weighted average of the score obtained in the three criteria, following the relative weighting of: **35%** Merit of the Applicant (A); **35%** Merit of the Work Plan (B); **30%** Merit of the Hosting Conditions (C), converted into the following formula:

$$\text{Final grade (FG)} = (0,35 \times A) + (0,35 \times B) + (0,30 \times C)$$

For tiebreaking purposes, the final ranking list will be based on the scores assigned to each of the evaluation criteria in the following order: criterion B (Merit of the Work Plan), criterion A (Merit of the Applicant), and criterion C (Merit of the Hosting Conditions).

Grades in any of the evaluation criteria shall be awarded with two decimal digits. Values resulting from the application of formulas shall be rounded to the two decimal digits using the following rule: when the third decimal digit is equal to or greater than 5 (five) it shall be rounded in excess; if lesser, the value of the third decimal digit shall be upheld.

Individual interviews with best ranked candidates may also be considered, aiming at clarifications and explanations about the curricular elements and other additional information, as well as assessing the candidate's profile and motivation. In this case, the *Final evaluation* of the interviewed candidates will be calculated applying the following formula: $0,75 \times \text{Final grade (FG)} + 0,25 \times \text{Interview}$, that must be graded from 0 (minimum) to 5 (maximum). In the absence of an interview, the *Final evaluation* will be equal to the *Final grade (FG)*.

6.1 Criterion A – Merit of the Applicant

The criterion A, Merit of the Applicant, which has a 35% relative weight to the final score, is evaluated based on two sub-criteria:

- A1. **Personal curriculum** (reflecting the academic, scientific and professional career), with a relative weight of **80%** in the Merit of the Applicant;
- A2. **Motivation**, with a relative weight of **20%** in the Merit of the Applicant.

The score awarded to criterion A is calculated applying the following formula:

$$\text{Criterion A} = (0,8 \times A1) + (0,2 \times A2)$$

6.1.1 Sub-criterion A1 – Personal Curriculum

The assessment of applicants' personal curriculum which has 80% relative weight in the Criterion A should be performed in a holistic way, from a global vision of the merit of their academic, scientific and professional career.

considering various dimensions of the curriculum that can demonstrate the relevance for the PhD thesis

The panel should also evaluate the quality of the document and the way in which the results achieved by the candidate are presented as being the most representative and relevant of his/her professional and scientific career. The candidate may also submit, along with his/her application, up to 3 documents that are most representative of his/her academic, scientific, or professional work, relevant to the objectives of the PhD thesis (e.g., dissertations or theses, scientific articles or other publications may be considered representative documents)

The grade scored to this sub-criterion should therefore translate a global and integrated view of applicant's personal curriculum and should be described in a clear, consisted, and detailed manner.

The following sub-criteria must be considered to obtain the final classification for Sub-criterion A1:

Sub-criterion A1.1 -assesses the training area of the candidate, with a weight of 50% in the evaluation of sub- criterion A1;

- training areas strongly aligned with application area and the work plan, A1.1 up to 5 point:
- training areas partially aligned application area and the work plan, A1.1 up to 3 points
- Applicants with less than 3 points in sub-criterion A1.1 will be excluded.

Sub-criterion A1.2 - evaluates the Scientific and Technological, Cultural or Artistic production and applied research activities, or practice-based, as well as extension and knowledge dissemination activities, with a weight of 50% in the evaluation of sub-criterion A1;

- the applicant presents publications in ISI/SCOPUS journals or in conference, participation in extension and dissemination of knowledge activities (conferences, symposia, and scientific cooperation activities), in topics strongly aligned with the application area and the work plan, A1. up to 5 points.
- the applicant presents publications in ISI/SCOPUS journals or conferences, participation in extension and dissemination of knowledge activities (conferences, symposia and scientific cooperation activities), in topics partially aligned with the application area and the work plan, A1.ii up to 3 points.

The final classification of sub-criterion A1 is obtained by the following equation:

$$\text{Sub-criterion A1} = 0.5 \times \text{A1.1} + 0.5 \times \text{A1.2}$$

6.1.2 Sub-criterion A2 – Motivation letter and recommendation letters

The classification of this sub-criterion which as 20% relative weight in the Criterion A should consider the clear identification of applicant's motivation to submit the application and the maturity to develop the proposed scientific work plan. In case the applicant submits her/his most representative document, the panel should

analyze applicant's explanation for her/his choice. Recommendation letters (documents of mandatory submission) should also be considered

The applicant must also demonstrate knowledge of the scholarship program in question, its goal, and the purpose of the subject area being applied for.

The classification in sub-criterion A2 is obtained as follows:

- well-written motivation letter (in English), objective, clear and well framed in the objectives of the application, including the candidate's motivation for the subject under study and identification of its importance for his/her career, clear recommendation letters (written in English) from reputable personalities with a past working relationship with the candidate and in a good position to issue the recommendation, A2 up to 5 points.
- Motivation letter well written but less clear as to the objectives of the application, including the candidate's motivation for the topic under study and identification of its importance for his/her career; less clear recommendation letters, A2 up to 3 points
- Badly written and unclear motivation letter; unclear recommendation letters, A2 up to 1 point.

6.1.4 Disability Bonuses

Applicants that state a degree of disability equal to or above 90% shall have a bonus of 20% on criterion A – Merit of the Applicant. Applicants that state a degree of disability equal to or above 60% and under 90%, shall have a bonus of 10% in this criterion. The degree of disability **should be duly proven** by submitting, in the application form, the document *Atestado de Incapacidade Multiuso*, issued according to the Decree-Law no. 202/96, of 23 of October, in its current version.

6.2 Criterion B – Merit of the Work Plan

The criterion B, Merit of the Work Plan, which has a 35% relative weight to the final score, is evaluated based on three sub-criteria:

B1 – Justified relevance of the object of study;

B2 – Scientific quality of the state of the art and the methodology of the work plan;

B3 – Feasibility of the work plan

For **the evaluation of sub- criterion B1**, which has a relative weight of 40% in the evaluation of Criterion B:

- if the definition of the objectives and research questions is very clear, with a clear focus on the innovation involved and the potential contribution of the work plan to knowledge and the progress of science and technology, being evident the novelty, originality and relevance of the plan presented, **B1 up to 5 points**
- if the research proposal is clear and well-structured, but the degree of novelty, relevance or originality is not

very evident, the score to be awarded may reach 3 values; if the proposal is not clear or not sufficiently framed within the state of the art, **B1 up to 1 value.**

For the **evaluation of sub-criterion B2**, which has a relative weight of 30% in the evaluation of Criterion B:

- if the proposal presents a clear and coherent work plan, well grounded in a current and relevant state of the art, and presenting a logical and consistent research methodology, **B2 up to 5 points**;
- if the work plan presents methodological weaknesses, or inconsistencies in its grounding in the state of the art or in previous activities; **B2 up to 3 points**
- if evident methodological weaknesses or flagrant flaws in the grounding in the state of the art are identified, **B2 up to 1 point.**

For the **evaluation of sub -criterion B3**, which has a relative weight of 30% in the evaluation of Criterion B, the evaluation shall be based on the adequacy of the methodologies to the tasks and objectives proposed in the work plan and the respective foreseen deadlines, as well as the total time foreseen for the conclusion of the project:

- if all the factors mentioned above are achieved; **B3 up to 5 points**
- if the risk assessment analysis is also presented, identifying the critical points and the corresponding contingency measures to be adopted; if the methodologies presented are reasonably adequate for the proposed objectives, and the risk analysis presented is somehow incomplete, **B3 up to 3 points.**
- if the methodology presented is not accompanied by an adequacy or risk analysis; **B3 up to 1 point.**

The presentation of a timeline should also be considered, as well as additional and optional information related to the work plan such as schemes, formulas, or figures. Applicants may also optionally submit a letter of support showing the cooperation between all the participants to better analyze the work plan feasibility.

The score awarded to criterion B is calculated applying the following formula:

$$\textit{Criterion B} = (0,4 \times B1) + (0,3, \times B2) + (0,3, \times B3)$$

Applicants with less than 4 points in Criterion B will be excluded.

6.3 Criterion C – Merit of the Hosting Conditions

The merit of the hosting conditions, which has relative weight of 30%, is evaluated taking into consideration:

- The scientific merit and experience of the supervisor(s) in the scientific field of the application, and the respective adequacy to supervise the PhD candidate;
- Applicant's demonstration of their motives to choose the supervising team, including both supervisor(s) and host institution(s).

The evaluation of this aspects should be integrated, considering the supervisor(s) associated curriculum and the means available at the host institution(s) mentioned along the application form and applicant's demonstration, in the respective field of the form, on the adequacy of supervising conditions should also be considered in order to guarantee the accomplishment of the proposed work plan.

Applications that present more than one host institution should clearly indicate the tasks performed in each institution. Similarly, in case of applications proposing one or two co-supervisors, the role of each one should be explained to analyze the relevance of their participation in the development and feasibility of the work plan.

When applying to a Studentship **both in Portugal and abroad** (whose work plan is partially carried out in a foreign institution), it is mandatory to identify the foreign affiliation institution(s), and to associate the respective foreign supervisor/co-supervisor, affiliated to that/those institution(s). If no foreign host institution(s) and supervisor/co-supervisor in this/these institution(s) is/are indicated, **the application will be automatically converted into an application to a PhD studentship in the country**, being evaluated and financed accordingly.

Applications must be graded from zero (0.00, minimum) to five (5.00, maximum) in the Criterion C.

7. EVALUATION

The evaluation panel is composed by the following members

Evaluation Panel Coordinator: Manuel Heitor , IN+

Members of the jury:

1. Numeric Modeling: Coastal morphodynamics.
 - Lígia Pinto , MARETEC | IST
 - Adélio Silva, HIDROMOD
 - Nuno Lourenço, Colab+ Atlântico (alternate)
 - Manuela Juliano, Universidade do Açores (alternate)
2. Closing the data cycle between numerical modeling forecasts and ocean autonomous observation vehicles
 - António Pascoal, IST
 - Carlos Barrera, PLOCAN
 - Adélio Silva, HIDROMOD (alternate)
 - Lígia Pinto, MARETEC | IST (alternate)
3. Biological Modelling: Towards a modelling approach to forecasting blooms of *Amyloodinium ocellatum* in an Aquaculture environment F
 - Flávio Martins, Universidade do Algarve

- Cátia Marques, S2AQUAcoLAB
 - Joana Rosa, S2AQUAcoLAB (alternate)
 - Sofia Saraiva, SMHI (alternate)
4. A framework for real time ocean sound estimation
- Eric Delory, PLOCAN
 - Jerome Mars Univ. Grenoble
 - Joaquin Del Rio, UPC (alternate)
 - Miguel Gaspar, IPMA (alternate)
5. Numeric Modelling: Near Shore HAB Generation Models
- Miguel Gaspar, IPMA
 - Ligia Pinto, MARETEC | IST
 - Nuno Lourenço, Colab+ Atlantic alternate)
 - Manuela Juliano, Universidade dos Açores (alternate)

The jury will analyze applications considering the above evaluation criteria. Individual interviews with best ranked candidates may also be considered, aiming at clarifications and explanations about the curricular elements and other additional information, as well as assessing the candidate's profile and motivation. In this case, the *Final evaluation* of the interviewed candidates will be calculated applying the following formula: $0,75 \times \text{Final grade (FG)} + 0,25 \times \text{Interview}$, that must be graded from 0 (minimum) to 5 (maximum). In the absence of an interview, the *Final evaluation* will be equal to the *Final grade (FG)*.

All members of the jury, including the chair, are committed to several responsibilities essential to the evaluation process, such as the duties of impartiality, the declaration of any potential conflict of interest (COI) and confidentiality. At all times during the evaluation process, confidentiality is fully protected and ensured to guarantee the independence of all opinions produced.

Members of the jury, including the chair, may not be supervisors or co-supervisors to candidates with applications submitted to the call.

For each application, a final evaluation sheet will be produced by the jury, where there are clearly, coherently, and consistently presented the arguments that led to the classifications attributed to each of the evaluation criteria and sub criteria, explaining also, if appropriate, any bonuses awarded.

The evaluation meetings will be virtual, and the reports produced shall be of the responsibility of all the jury members.

The reports and their annexes must include the following information:

- Name and affiliation of all members of the jury;
- Identification of all excluded applications and respective justification, if applicable;
- Methodology adopted for cases considered particular, if applicable;
- Final Evaluation Sheets for each candidate;
- Provisional ranking list and ranking in descending order of all applications evaluated by the panel;

- COI statements from all members of the jury;
- Any delegation of vote and powers by reason of justified absence, if applicable.

8. RESULTS DISCLOSURE

Evaluation results will be communicated to the email address provided by de candidates in the application form, in AIR Centre website.

9. DEADLINES AND PROCEDURES FOR PRELIMINARY HEARING, CLAIMS AND APPEALS

Once the provisional ranked list of the evaluation results has been communicated, applicants who have an unfavourable provisional decision may use their right to dispute it during the preliminary hearing phase, which takes place within 10 working days, according to Articles no. 121 and the following of the [Administrative Procedure Code \(CPA\)](#).

The final decision will be disclosed after the analysis of applicants' arguments presented in the preliminary hearing. Final decision can be claimed within 15 working days or, alternatively, appealed within 30 working days, after the communication of the final results, respectively. The AIR Centre team shall receive the applicants' complaints and appeals and remit them to the Fundação para a Ciência e Tecnologia I.P., accompanied by its assessment. The complaints and appeals must be addressed to FCT's Administration board.

10. STARTING DATE OF THE PHD STUDENTSHIP

The studentships will start at the 1st day of the month indicated by the applicant during the granting procedure, that must occur within six months of the date of notification of the approval decision.

11. REQUIREMENTS FOR STUDENTSHIP GRANTING

The research scholarships contracts will be dealt directly with the FCT.

The following documents are of mandatory submission, upon conditional granting of the studentship for purposes of contracting thereof:

- a) Copy of the documents of personal identification, tax number and, if applicable, social security¹;
- b) Copy of the academic degree certificates.
- c) Work Plan
- d) Document proving the acceptance and registration in the 3rd study cycle from the educational offer in the higher education institution that will grant the academic degree;

- e) Supervisor(s) statement declaring to coordinate the work plan, as established in Article no. 5-A of the Statute for Research Fellowships (template will be made available by FCT);
- f) Institutional document supporting the applicant, issued by the institution(s) where the work plan will be carried out, guaranteeing the necessary conditions to its successful development, as well as the fulfilment of the duties established in Article no. 13 of the Research Fellowship Holder Statute (template will be made available by FCT);
- g) Updated document proving the exclusivity dedication regime (template will be made available by FCT).

The studentship granting is still dependent on:

- The fulfilment of all the requirements listed in this Notice of the Call;
- The results of scientific evaluation;
- The absence of unjustified non-compliance of the fellowship holder during previous directly or indirectly FCT funded fellowships;
- FCT available budget.

The lack of any of the necessary documents to complete the contracting procedure implies the expiration of the studentship granting and conclusion of the process; applicants have up to 6 months after the disclosure of the provisional granting to present all of the listed documents.

¹ The presentation of these documents may optionally be substituted by the in-person presentation in the funding agency, which will keep all the elements needed for the validation and execution of the contract, including the numbers of personal identification, taxation and social security, as well as the respective dates of expiry.

12. FUNDING

Studentships payment will start after the signed contract is returned to FCT, which should happen within the 15 working days after its delivery.

The studentships granted in this call will be financed by FCT using the State Budget fund and, whenever eligible, using the European Social Fund (ESF), under the PORTUGAL2020 programme, in particular, under *Programa Operacional Regional do Norte (NORTE 2020)*, *Programa Operacional Regional do Centro (Centro 2020)* and *Programa Operacional Regional do Alentejo (Alentejo 2020)*, according to the respective requirements.

13. STUDENTSHIP ALLOWANCE

A monthly maintenance allowance is granted according to the table in Annex I of the FCT Regulation for Research Studentships and Fellowships, available here: <https://dre.pt/application/conteudo/127238533>

The studentship may also include additional allowances, according to Annex II the FCT Regulation for Research Studentships and Fellowships, available here: <https://dre.pt/application/conteudo/127238533>

All the studentship holders have a personal accident insurance related to the research activities, which FCT will support.

All studentship holders who are not beneficiaries of any social protection regime can use the right to social security through the voluntary social insurance regime, under the terms of the Contributory Scheme of the Social Security System. FCT will ensure the charges resulting from contributions under the legal terms.

14. PAYMENT OF STUDENTSHIP ALLOWANCE

Payments due to the studentship holder are made by bank transfer to the respective indicated account. The monthly maintenance allowance is paid on the first working day of each month.

Registration, enrolment or tuition fees components are payed as follows:

- In case the studentship holder has enrolled in a national institution, FCT will directly pay to that institution;
- In case the studentship holder has enrolled in a foreign institution, the grantee is the responsible for its payment to that institution.

15. TERMS AND CONDITIONS OF PHD STUDENTSHIP RENEWAL

The renewal of the studentship always depends on applicant's submission, within 60 working days prior to the renewal start date, of the following documents:

- a) Declaration issued by the supervisor(s) and by the host institution(s) attesting the work plan development and the evaluation of the respective activities;
- b) Updated document proving compliance with the exclusive dedication regime;
- c) Declaration demonstrating the enrolment renewal in the study cycle leading to the doctoral degree.

16. INFORMATION AND PUBLICITY OF THE GRANTED FUNDING

All the R&D activities carried out by the grantee, directly or indirectly financed by the studentship, namely, communications, publications and scientific creations, as well as thesis, must include the reference to FCT and European Social Fund (ESF) financing. In particular, these references should mention the following operational programmes *Programa Operacional Regional do Norte (NORTE 2020)*, *Programa Operacional Regional do Centro (Centro 2020)* and *Programa Operacional Regional do Alentejo (Alentejo 2020)*. Insignia of FCT, MCTES, ESF and EU must therefore be included in the documents referring to these actions, according to the graphic rules of each operational programme.

The disclosure of research results funded according to the RBI provisions must comply with the open access guidelines, publications and other research results in accordance with FCT rules.

For all the studentships, in particular in case of European funded actions, namely the ESF, may be performed monitoring and controlling actions by national or European entities according to the applicable legislation. Grantees must therefore collaborate and provide all the required information, including answering to surveys and evaluation studies in this area, even though the studentship might have already ceased.

17. NON-DISCRIMINATION AND EQUAL ACCESS POLICY

FCT and AIR Centre promote a policy of non-discrimination and equal access, thus no applicant may be privileged, benefited, damaged or deprived of any right or exempted from any duty. This includes ancestry, age, sex, sexual orientation, marital status, family situation, economic situation, education, origin or social condition, genetic heritage, reduced work capacity, disability, chronic disease, nationality, ethnicity or race, land of origin, language, religion, political or ideological beliefs or trade union affiliation.

18. APPLICABLE LEGISLATION AND REGULATION

The present call is governed by this Notice of the Call, the FCT Regulation of Research Fellowships, approved by the Regulation no. 950/2019, published in the Series II of the DR, of 16th December, by the Research Fellowship Holder Statute, approved by the Law no. 40/2004, of 18th of August, in its current version, and by other applicable national and European legislation.