

Announcement of the Call for Awarding of a Doctoral Research Fellowship

The ICT - Institute of Earth Sciences, UIDP/04683/2020, through its promoting institution the University of Evora (UE), announces a call for applications for 1 (one) research grant, hereinafter referred to as Doctoral Research Grant, or simply as "Grant", in the area of Mechanical Engineering – Thermofluids and Energy, under the FCT Research Grants Regulation (RBI) and the Research Grant Holder Statute (EBI).

The grant will be financed by the Foundation for Science and Technology (FCT) under the scope of the Collaboration Protocol for the Funding of the Pluriannual Research Grant Plan for Doctoral Students, signed between the FCT and the R&D Unit the Institute of Earth Sciences, UIDP/04683/2020.

1. SUBMISSION OF APPLICATIONS

The call is open between **17 of November 2023 and the 23h59m (Lisbon time) of 30 of November 2023.**

Applications and supporting documents for the application foreseen in this Call for Applications must be submitted by e-mail to the coordinator of the evaluation panel, Professor Mourad Bezzeghoud, Coordinator of the Evora Pole of the Institute of Earth Sciences (mourad@uevora.pt).

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

False statements or plagiarism on the part of the candidates will be grounds for cancellation of the application without prejudice to the adoption of other sanctioning measures.

2. TYPE AND DURATION OF THE GRANT

The present Doctoral Research Grant is intended to finance research activities, carried out by the grant holder, leading to a doctoral degree in Portuguese universities.

The research activities leading to a doctoral degree will take place at the Evora Pole of the Institute of Earth Sciences, which will be the grantee's host institution, although the work may be carried out in collaboration with more than one institution.

The research activities leading to a doctoral degree of the selected grant holder must be included in the activities and strategy plan of the Institute of Earth Sciences and must be developed within the scope of a doctoral programme of the University of Evora, preferably the Doctoral Programme in Mechatronics Engineering and Energy of the University of Evora.

The work plan can take place entirely or partially in a national institution (in-country grant or mixed grant, respectively).

The duration of the grant is, as general rule, one year, renewable up to a maximum of four years (48 months), and cannot be awarded for a period of less than three consecutive months.

In the case of mixed grant, the period of the work plan that takes place in a foreign institution cannot exceed 24 months.

3. RECIPIENTS OF THE GRANT

The Doctoral Research Grant is intended for candidates enrolled in the Doctoral Programme in Mechatronics Engineering and Energy at the University of Evora and who intend to develop research activities leading to the award of a doctoral degree at the Evora Pole of the Institute of Earth Sciences.

4. ADMISSIBILITY

4.1 Candidate Admissibility Requirements

The following are the requirements allowing candidates to be eligible to apply to the present call:

- National citizens or citizens of other member states of the European Union (EU);
- Non-EU citizens;
- Stateless persons;
- Citizens benefiting from the status of political refugee.

To apply to the Doctoral Research Grant, it is necessary:

- Have academic training, in the areas of Mechanical Engineering – Thermofluids and Energy, Renewable Energies Engineering or Solar Energy Engineering, or in areas considered to be related, with one of the following degrees:
 - Five years graduation degree obtained in the pre-Bologna regime;
 - Master in Science obtained in the pre-Bologna regime;
 - Master in Science obtained in the Bologna regime;
- To be permanently and habitually resident in Portugal at the starting date of the work plan period abroad, if the proposed work plan includes a period in foreign institutions (mixed grant), a requirement applicable to both Portuguese and foreign citizens.
- Not have benefited from a PhD or PhD in Enterprise grant directly funded by FCT, regardless of its duration.
- Not hold a PhD degree

4.2 Admissibility Requirements of the Application

It is indispensable, under penalty of not being admitted to the call, to attach the following documents to the application:

- Elements of the identity card/citizen card/passport;
- *Curriculum vitae* of the candidate;
- Certificates of the academic degrees held, specifying the final grade and, if possible, the grades obtained in all courses taken, or, alternatively, a declaration of honor from the candidate that he/she has completed a bachelor's or master's degree by the application deadline;

- Record of recognition of academic degrees awarded by foreign higher education institutions and a record of the conversion of the respective final grade into the Portuguese classification scale, or alternatively, declaration of honor from the candidate that he/she has obtained the recognition of the foreign degree equivalent to a bachelor or master by the application deadline;
- Motivation Letter;
- Letters of Recommendation (two);
- Write the application and all the documents associated with it, including the letters of motivation and recommendation, in Portuguese or English.

Regarding the admissibility requirements mentioned above, the following should be noted:

- In the case of academic degrees awarded by foreign higher education institutions, and in order to ensure the application of the principle of equal treatment for applicants holding foreign and national academic degrees, the recognition of those degrees and the conversion of the respective final grade into the Portuguese classification scale is mandatory. The recognition of foreign degrees and diplomas as well as the conversion of the final grade into the Portuguese classification scale may be requested at any public higher education institution, or at the Directorate General of Higher Education (DGES, only in the case of automatic recognition). Regarding this matter, it is suggested that applicants consult the DGES portal at the following address: <http://www.dges.gov.pt>.
- Only candidates that have concluded the cycle of studies leading to a bachelor or master degree by the application deadline will be admitted. If candidates, at the time of submitting the application, still do not have the certificate of completion of the course, a declaration of honor from the candidates that they have completed the necessary qualifications for the call by the application deadline will be accepted. The awarding of the scholarship is always dependent on the presentation of proof of the academic qualifications required for the grant to be awarded.

5. WORK PLANS AND SCIENTIFIC SUPERVISION OF THE FELLOWSHIPS

The work plan, framed within the activity plan and strategy of the R&D Unit, focus on the following topic:

- Modelling and optimization of volumetric solar thermal receivers made of porous materials in linear concentration systems

6. EVALUATION CRITERIA AND BONUSES

6.1 Evaluation Criteria

The evaluation takes into account the applicant's merit. Applications deemed admissible will be scored on a scale from 0 to 5 in each of the following evaluation criteria:

- Criterion A – Curriculum evaluation, with the weight of 70%;
 - Sub-criterion A1 - Education, with a weight of 60%, where A1 assumes the values below, based on the grade with which candidates concluded the academic degree specified in “4.1 Candidate Admissibility Requirements” (0 to 5 points):

- 5.0 for a final grade equal to or higher than 17 values;
- 4.0 for a final grade equal to 16 values;
- 3.0 for a final grade equal to 15 values;
- 2.0 for a final grade equal to 14 values;
- 1.0 for a final grade equal to or lower than 13 values.

In the case of candidates that hold academic degrees in the pre-Bologna regime, the following rules apply:

- In case the candidate holds a five-year graduation course and a Master in Science degrees both in the pre-Bologna regime, for the purposes of defining the academic grade to access to the present call, the arithmetic average of the grades obtained in the referred courses will be calculated;
 - In case the candidate holds a Master in Science degree in pre-Bologna regime whose grade is qualitative, for the purposes of defining the academic grade to access to the present call, the grade obtained in the five years graduation course in the pre-Bologna regime will be considered;
 - In case the candidate holds only a five years graduation course in the pre-Bologna regime, for the purposes of academic grade for the access to the present call, the respective final grade will be considered.
- Sub-criterion A2 – Personal Curriculum, with a weight of 40%, in which the academic, scientific, professional and civic career of candidates is considered in accordance with the submitted Curriculum Vitae, including academic results that were not included in the calculation of sub-criterion A1, as well as the letter of motivation and letters of recommendation, and where A2 assumes a value equal to the sum of the values assigned in each of the following criteria, according to $A2 = A2.1 + A2.2 + A2.3 + A2.4$ (0 to 5 points):
- A2.1 – Scientific production and its relevance to the work plan (0 to 2 points):
 - 2.0 for candidates with at least one scientific article published in a journal or chapter in a book, in the area of the call and relevant to the work plan;
 - 1.0 for candidates without articles in a journal or chapters in a book, but with at least one article or communication in an international scientific conference, in the area of the call and relevant to the work plan;
 - 0.0 for candidates without published articles in journals, chapters in books or articles or communications at international conferences, in the area of the call and relevant to the work plan.
 - A2.2 – Participation in research projects and activities and their relevance to the work plan (0 to 1 points):
 - 1.0 for candidates who have developed scientific activity in the last calendar year, in the area of the call and relevant to the work plan;
 - 0.0 for candidates who have not developed scientific activity in the area of the call and relevant to the work plan.
 - A2.3 – Training and professional experience and their relevance to the work plan (0 to 1 points)

- 1.0 for candidates who have additional training to that considered in criterion A1 or professional experience, in the area of the call and relevant to the work plan;
- 0.0 for candidates who do not have additional training to that considered in criterion A1 or professional experience, in the area of the call and relevant to the work plan.
- A.2.4 – Motivation and suitability of the candidate's profile for developing the work plan (0 to 1 values):
 - 1.0 for candidates whose profile is assessed as fully suitable for carrying out the work plan and who clearly demonstrate in the motivation letter the reasons underlying their application, including how the work plan fit within their personal and professional development objectives and interest in the studies to be carried out in the area of the call;
 - 0.0 for candidates whose profile is assessed as not being suitable for carrying out the work plan or who do not clearly demonstrate in the motivation letter the reasons underlying their application, including how the work plan fit within their personal and professional development objectives and interest in studies to be carried out in the area of the call.

The classification in Criterion A is determined through the following formula:

$$\text{Criterion A} = 0,6 \times A1 + 0,4 \times A2$$

The maximum value of Criterion A is 5.0.

- Criterion B – Interview, with a weight of 30%;

Only candidates who have obtained a classification equal to or higher than 1.25 points in Criterion A will be admitted to the second phase of the evaluation process, an interview, the objective of which is to assess the candidates' ability to carry out the work plan. The interview may take place in person or via video conference. The interview is classified on a scale of 0 to 5, according to the following values:

- 5.0 for candidates unanimously approved by the Jury;
- 3.0 for candidates approved by the majority of Jury members;
- 1.0 for candidates approved only by a minority of the Jury members;
- 0.0 for candidates unanimously rejected by the Jury.

For the purposes of the grant decision, applicants will be ranked according to the weighted average of the classification obtained in each of the two criteria, translated by the following formula:

$$\text{Final classification} = (0,7 \times A) + (0,3 \times B)$$

In case of a tie in the final classification, candidates will be ranked on the basis of the marks awarded for each of the evaluation criteria in the following order of precedence: criterion A, criterion B.

Important notice for applicants with diplomas issued by foreign higher education institutions:

- Applicants with diplomas issued by foreign higher education institutions may apply and will be evaluated with the same criteria as applicants with diplomas issued by Portuguese institutions, provided that they present, in the application, proof of the recognition of the academic degrees and the conversion of the final grade to the Portuguese classification scale according to the applicable legislation.
- Applicants with foreign degrees who do not submit proof of the conversion of the final classification into the Portuguese classification scale will be assessed with the minimum classification of 0 (zero) points in criterion A1.
- In any case, the grant contracts with applicants with degrees issued by foreign institutions will only be signed upon presentation of proof of degree recognition and conversion of the final score, as indicated above.

6.2 Bonus

Not applicable.

7. EVALUATION

The evaluation panel of the candidates is composed of the following elements:

- Doctor Mourad Bezzeghoud, University of Evora (Panel Coordinator)
- Doctor Rui Salgado, University of Evora
- Doctor Isabel Malico, University of Evora
- Doctor Mouhaydine Tlemçani, University of Evora
- Doctor Gonçalo Silva, University of Evora
- 1º Substitute – Doutor Miguel Potes, University of Evora
- 2º Substitute – Doctor Oumaima Mesbahi, University of Evora

The evaluation panel will assess the applications according to the evaluation criteria in this Call for Applications, weighting the evaluation elements.

All panel members, including the coordinator, are committed to a set of responsibilities essential to the evaluation process, such as the duties of impartiality, declaration of any potential conflict of interest, and confidentiality. At all times during the evaluation process, confidentiality is fully protected and ensured in order to guarantee the independence of all opinions produced.

For each application, the panel will produce a final evaluation report where the arguments that led to the scores assigned to each of the evaluation criteria and sub-criteria are presented in a clear, coherent, and consistent manner, as well as any eventual bonuses awarded.

Minutes of the evaluation panel meetings shall be produced under the responsibility of all its members.

The minutes and their appendixes must obligatorily include the following information:

- Name and affiliation of all members of the evaluation panel;
- Identification of all excluded applications and respective justification, if applicable;

- Methodology adopted by the panel for cases considered particular, if applicable;
- Final evaluation reports for each candidate;
- Provisional ranking and seriation list of candidates, in descending order of final ranking, of all applications evaluated by the panel;
- CDI statements from all panel members;
- Possible delegations of vote and competencies due to justified absence, if applicable.

8. RESULTS

The results of the evaluation are communicated via e-mail to the e-mail address used by the candidate to submit the application or the e-mail address indicated in the application.

9. DEADLINES AND PROCEDURES FOR PRIOR HEARING, COMPLAINT, AND APPEAL

After notification of the provisional list of evaluation results, the candidates have a period of 10 (ten) working days to, if they wish, make their comments during a prior hearing of interested parties, under the terms of articles 121 and following of the Administrative Procedure Code.

The final decision will be issued after the analysis of the statements presented during the prior hearing of interested parties. A complaint may be lodged against the final decision within 15 (fifteen) working days, or alternatively an appeal may be lodged within 30 (thirty) working days, both counting from the respective notification. Candidates who choose to submit a complaint must address their appeal to the member of the FCT Board of Directors with delegated authority. Candidates who choose to submit an appeal must address their appeal to the FCT Board of Directors.

10. REQUIREMENTS FOR AWARDING GRANTS

The research grant contract is entered into directly with FCT.

The following documents must be submitted, when the grant is awarded, for contracting purposes:

- a) Copy of the civil, fiscal and, when applicable, social security identification document(s);
- b) Copy of the certificates of the academic degrees held;
- c) Presentation of the record of recognition of the foreign academic degree recognition and conversion of the respective final grade into to the Portuguese classification system, if applicable;
- d) Work plan;
- e) Proof of enrolment and registration in one of the Doctoral Programmes identified in this call;
- f) Statement from the advisor(s) assuming responsibility for the supervision of the work plan, in accordance with article 5-A of the Research Grant Holder Statute (draft of the statement to be made available by FCT);
- g) Document proving acceptance of the applicant by the institution where the research activities will take place, guaranteeing the necessary conditions for its proper development, as well as the fulfillment of the duties established in article 13 of the Research Grant Holder Statute (draft statement to be made available by FCT);
- h) Up-to-date document proving compliance with the regime of exclusive dedication (draft declaration to be made available by FCT).

The award of the grant is also subject to:

- the fulfillment of the requirements set out in this Announcement of the Call;
- the result of the scientific evaluation
- the absence of unjustified non-compliance with the duties of the grant recipient under a previous grant contract funded directly or indirectly by FCT;
- FCT budget availability.

Failure to submit any of the documents needed to complete the grant contracting process within 6 months of the date of communication of the decision to award the grant conditionally will result in the expiration of the grant and the termination of the process.

11. FINANCING

Payment of the scholarship will begin after the candidate return the duly signed scholarship contract, which should occur within a maximum of 15 (fifteen) working days from the date of receipt.

The grant awarded under this call will be financed by FCT with funds from the State Budget and, when eligible, with funds from the European Social Fund, through the Demography, Qualifications and Inclusion Program (PDQI), according to the regulations established for this purpose.

12. SCHOLARSHIP COMPONENTS

The grant holder will receive a monthly maintenance allowance under the terms of the table in Annex I of the RBI.

The scholarship may also include other components, under the terms of article 18 of the RBI and at the values established in its Appendix II.

The grant holder benefits from personal accident insurance regarding the research activities, supported by FCT.

If the grant holder is not covered by any social protection scheme may ensure his/her right to social security by joining the voluntary social insurance scheme, under the terms of the Social Security Contributions Code, with FCT paying the costs resulting from the contributions under the terms and within the limits set forth in article 10 of the EBI.

13. PAYMENTS OF THE GRANT COMPONENTS

Payments due to the grant recipient will be made by bank transfer to the account identified by the holder of the grant. The payment of the monthly maintenance allowance will be made on the first working day of each month.

Payments of the registration, enrollment and tuition components shall be made by FCT directly to the national institution where the grant recipient is enrolled or enrolled in the doctoral programme.

14. TERMS AND CONDITIONS FOR RENEWAL OF SCHOLARSHIPS

The renewal of the scholarship is always subject to a request submitted by the grant holder within 60 working days prior to the renewal date, accompanied by the following documents

a) statement(s) issued by the supervisor(s) and the host entity(ies) on the monitoring of the grant holder's work and the evaluation of his/her activities;

- b) up-to-date document proving compliance with the regime of exclusive dedication;
- c) document proving renewal of enrollment in the cycle of studies leading to a doctoral degree.

15. INFORMATION AND PUBLICITY OF THE FUNDING GRANTED

In all R&D activities directly or indirectly funded by the grant, namely in all communications, publications and scientific creations, as well as theses, carried out with the support provided by the grant, mention should be made of financial support from the FCT and the European Social Fund, namely through the Demography, Qualifications and Inclusion Program (PDQI). To this end, the insignia of the FCT, the MCTES, the ESF and the EU shall be inscribed on the documents referring to these actions, in accordance with the graphic standards of the community support program.

Dissemination of results of research funded under the RBI shall comply with the rules for open access of data, publications and other research results in force at the FCT.

In all grants, and particularly in the case of actions supported by EU funding, namely from the ESF, monitoring and control actions may be carried out by national and EU bodies, in accordance with the applicable legislation in this area. The grant recipients are required to cooperate and provide the requested information, which includes surveys and evaluation studies in this area, even if the grant has already ended.

16. POLICY OF NON-DISCRIMINATION AND EQUAL ACCESS

FCT promotes a policy of non-discrimination and equal access, whereby no applicant shall be privileged, benefited, prejudiced, or deprived of any right or exempt from any duty on the basis of ancestry, age, gender, sexual orientation, marital status, family situation, economic situation, education, origin or social condition, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological convictions, or union membership.

17. APPLICABLE LEGISLATION AND REGULATIONS

The Call is governed by this Opening Notice, by the FCT Research Grant Regulations, approved by Regulation No. 950/2019, published in the II Series of the DR of 16 December 2019, by the Research Grant Holder Statute approved by Law No. 40/2004, of 18 August, as amended, and by all other applicable national and EU legislation.