

Call for tender Open Call for PhD Research Fellowship

IST-ID - Associação do Instituto Superior Técnico para a Investigação e Desenvolvimento, main Host/Management Institution of Center for Computational and Stochastic Mathematics (CEMAT), opens a call for the awarding of 1 (one) research fellowship, hereinafter designated by PhD Research Fellowship, in the scientific area of Mathematics – Mathematical Modeling in Biomedicine, under the Research Fellowship Regulation (Regulamento de Bolsas de Investigação da FCT - RBI) and the Research Fellowship Holder Statute (Estatuto do Bolseiro de Investigação - EBI). The fellowship will be financed by Fundação para a Ciência e Tecnologia (FCT) under the Collaboration Protocol for Financing the Multiannual Research Fellowship Plan for Doctoral Students, signed between FCT and the R&D Unit CEMAT, UIDP/04621/2020.

1. APPLICATION SUBMISSION

The call is open from June 30th, 2022, 8h (Lisbon time) to July 15th, 2022, 23h59m (Lisbon time).

The applications, and all the supporting documents described in this Call for tender, must be submitted through the electronic platform available at:

https://fenix.tecnico.ulisboa.pt/publico/genericApplications.do?method=viewApplicationPeriod&applicationPeriodId=851374187216943&request_checksum=3cfb71212a8df203437df3a295fc4ea8d6ed9747#

Each applicant may submit only one application, under penalty of cancellation of all submitted applications. Applicants providing false declarations or committing acts of plagiarism will be excluded from the application process without prejudice of taking other corrective and punitive disciplinary measures.

2. TYPE AND DURATION OF THE FELLOWSHIP

Aiming to support advanced training, PhD Research Fellowship will be granted to an applicant 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 activities leading to the attainment of the PhD degree will take place in CEMAT,

which will be the host institution of the fellowship holder, without prejudice the work can be carried out in collaboration with more than one institution. The research activities leading to the attainment of the PhD degree must be integrated in the activities plan and strategy of CEMAT, and should be developed under the PhD Program in Mathematics offered by the Department of Mathematics at IST. The work plan may be developed entirely or partially in a national institution (fellowship in Portugal or both in Portugal and abroad, respectively).

The duration of the fellowship is, as a rule, annual, renewable up to the maximum of four years (48 months) and cannot be granted for a period less than 3 consecutive months. In the case of a fellowship carried out both in Portugal and abroad, the work plan period in a foreign institution cannot exceed 24 months.

3. RECIPIENTS

The PhD fellowship is aimed to applicants enrolled or that comply with the requirements to enroll in the Doctoral Program indicated in point 2 of this call and who wish to carry out research towards the attainment of the Doctor degree at CEMAT.

4. ADMISSIBILITY

4.1 Applicants' Admissibility Requirements

The following citizens may apply to this call:

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

To apply for the PhD Research Fellowship, it is necessary:

- To hold a Master's degree in the areas of Mathematics;
- To be a citizen permanently and usually living in Portugal, in case the work plan associated to the fellowship proceeds, entirely or partially, in foreign institutions (in case of both in Portugal and abroad fellowships); this requirement is applicable to both national and foreign citizens.
- Not to have benefited from a PhD or a PhD in industry fellowship directly funded by FCT, regardless of its duration.
- Not to hold a PhD degree.

4.2 Application's Admissibility Requirements

It is mandatory, under penalty of non-admissibility to the Call, to enclose the following documents to the application:

- Elements of identity card/citizen card/passport;
- Applicant's Curriculum vitae (CV);

- Certificate of the academic degree held by the applicant, compulsorily specifying the final classification or, in alternative, applicant's declaration of honor, confirming that the master's degree was completed by the end of the application deadline;
- Record of recognition of academic degree awarded by foreign higher education institutions and record of the conversion of the respective final classification to the Portuguese classification scale, or, alternatively, the applicant's declaration of honor that he/she obtained recognition of the foreign degree equivalent to that of graduate or master by the end of the application period;
- Motivation letter explaining the reasons for her/his application, presenting her/his academic/professional career path and how it is related to the Work Plan;
- Work Plan on the following topics: mathematical modeling of blood flow and/or cardiovascular system's pathologies;

Important remark: The applicant must previously contact the supervisor(s) of the chosen PhD research proposal and, together, they should prepare the work plan to be submitted.

- Recommendation letters (two);

Other documents supporting the information given in the motivation letter;

- To submit the application and all related documents, including motivation and recommendation letters, in Portuguese or in English.

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

- In the case of academic degree awarded by foreign higher education institutions, and in order to ensure the application of the principle of equal treatment to applicants holding foreign and national academic degrees, it is mandatory to recognize these degrees and convert the respective final classification to the Portuguese rating scale.
- The recognition of foreign academic degrees and diplomas, as well as the conversion of the final classification to the Portuguese classification scale can be requested at any public higher education institution, or at the Directorate-General for Higher Education (DGES, only in the case of automatic recognition). Regarding this matter, it is suggested to consult the DGES portal at the following address: <http://www.dges.gov.pt>
- Only applicants who have completed the cycle of studies leading to a Master's degree by the end of the application period will be admitted. If they do not yet have a certificate of course completion, a declaration of honor from the applicants that they have completed the necessary qualifications for the purposes of the competition will be accepted by the end of the application deadline. The granting of the fellowship is always dependent on the presentation of proof of the academic qualifications necessary for granting the fellowship.

5. WORK PLANS AND SCIENTIFIC ORIENTATION OF THE FELLOWSHIP

The candidates should be supervised for at least one full member of CEMAT: <https://cemat.tecnico.ulisboa.pt/members.php> and the application shall indicate the supervisors' team and their affiliation, the host institution and the Doctoral Program.

6. EVALUATION CRITERIA AND BONUSES

6.1 Evaluation Criteria

The evaluation considers the applicant's merit and the work plan correlation to the research carried out in CEMAT. Applications considered admissible will be scored on a scale of 0 to 100% on each of the following evaluation criteria:

- Criterion A – Assessment of curriculum vitae, with a weight of 40%;
 - Subcriterion A1 – Scientific activities, with a weight of 50%;
 - Subcriterion A2 – Other academic activities or technical/scientific consulting, with a weight of 10%;
 - Subcriterion A3 – Classification obtained in the Master's degree, with a weight of 30%;
 - Subcriterion A4 – Other advanced training of interest for the work to be developed within the scope of the fellowship, with a weight of 10%
- Criterion B - Motivation letter and Work Plan, with a weight of 40%;
 - Subcritério B1 – Work Plan's suitability to the topics mentioned in the call, as well as to CEMAT's research and its scientific relevancy 70%;
 - Subcritério B2 – Demonstrated aptitude and skills for the execution of the research plan, with a weight of 30%;
- Criterion C - Interview, with a weight of 20%.

For the purpose of decision on granting fellowships, applicants will be ranked according to the weighted average of the classification obtained in each of the 3 criteria, given by:

$$\text{Final classification} = 0.40 \times [(0.5 \times A1) + (0.1 \times A2) + (0.3 \times A3) + (0.1 \times A4)] + (0.4 \times [(0.7 \times B1) + (0.3 \times B2)]) + (0.20 \times C)$$

For tie-breaking purposes, the ranking of applicants will be based on the scores assigned to each of the evaluation criteria in the following order: criterion C, criterion B, criterion A.

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

- Applicants with diplomas issued by foreign higher education institutions can apply and will be evaluated with the same criteria as applicants with diplomas issued by Portuguese institutions, provided that they present, in their application, proof of recognition of academic degrees and conversion of the final classification to the Portuguese classification scale in accordance with the applicable legislation.

- Applicants with foreign diplomas who do not present proof of conversion of the final classification to the Portuguese classification scale will be evaluated with the minimum classification (10%) in the criterion A3.
- In any case, fellowship contracts with applicants with diplomas issued by foreign institutions will only be celebrated upon presentation of proof of recognition of academic degrees and conversion of the final classification, as indicated above.

Applicants whose application is scored with a final classification of less than 60% are not eligible for granting a fellowship.

6.2 Bonus

Not applicable.

7. EVALUATION

The applicants' evaluation panel is composed by the following elements:

- Manuel Scotto, IST - Univ. Lisboa (President of CEMAT)
- Adélia Sequeira, IST- Univ. Lisboa (Research Area Coordinator)
- Telma Guerra, Instituto Politécnico de Setúbal (1º vogal)
- Pedro Lima, IST-Univ. Lisboa (suplente)
- Jorge Tiago. IST - Univ. Lisboa (suplente)

The evaluation panel will assess the applications according to the evaluation criteria indicated in this Call, considering the elements of assessment. All panel members, including the panel coordinator, are committed to respect a set of responsibilities essential to the evaluation process, such as the duties of impartiality, the declaration of any potential conflict of interest situations 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, a final evaluation form will be produced by the panel where the arguments that led to the classifications attributed to each of the evaluation criteria and sub-criteria are presented in a clear, coherent and consistent way. Meeting minutes will be produced from the evaluation panel meetings, under the responsibility of all its members. The minutes and their attachments must include the following information:

- Name and affiliation of all evaluation panel members;
- Identification of all excluded applications and respective reasons;
- Methodology adopted by the panel for cases considered to be particular;
- Final Evaluation Sheets for each applicant;
- Provisional ranking list and seriation of applicants, in descending order of the final ranking, of all applications evaluated by the panel;
- Conflict of interest statements by all panel members;
- Possible delegations of vote and competences due to justified absence.

8. RESULTS DISCLOSURE

The evaluation results are communicated via email to the email address used by the applicant to send the application.

9. TERMS AND PROCEDURES FOR PRIOR HEARING, CLAIM AND APPEAL

Once the provisional ranked list of the evaluation results has been communicated, applicants who have an unfavorable 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 the applicants' arguments presented during 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. Applicants who choose to submit a complaint must address their statement to the member of the Board of Directors of the FCT with delegated competence. Applicants who choose to present an appeal must address it to the FCT Board of Directors.

10. FELLOWSHIP GRANTING REQUIREMENTS

Research fellowship contracts are signed 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 civil, fiscal and, when applicable, social security identification document(s)².
- b) Copy of the academic degree certificates.
- c) Presentation of the registration of recognition of foreign academic degrees and conversion of the respective final classifications to the Portuguese classification scale, if applicable.
- d) Document proving the acceptance and registration in the Doctoral Program identified in this call.
- 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 granting of the fellowship is still dependent on:

- The fulfilment of all the requirements listed in this Opening Call;
- the results of scientific evaluation;

² The availability of these documents can be replaced, at the applicant's option, by presentation in person at the funding entity, which will keep the elements contained therein that are relevant to the validity and execution of the contract, including the civil, fiscal and security identification numbers and the validity of the respective documents.

- the absence of unjustified non-compliance with 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 fellowship 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.

11. FUNDING

Fellowship's payment will start after returning the signed contract to FCT, which should happen within the 15 working days after its delivery. The fellowships awarded under this call will be financed by FCT using the State Budget fund and, whenever eligible, using the European Social Fund (ESF), under the PORTUGAL2020 Program, 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), or any other funding schemes that might be approved, according to the respective requirements.

12. FELLOWSHIP COMPONENTS

A monthly maintenance allowance is granted to fellowship holders, in accordance with the table in Annex I of the RBI. The fellowship may also include additional allowances, according to RBI's Article no. 18 and the values indicated in its Annex II. All fellowship holders have a personal accident insurance related to the research activities, supported by the FCT. All fellowship 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 terms and within the limits provided in Article 10 of the EBI.

13. PAYMENT OF THE FELLOWSHIP COMPONENTS

Payments due to the fellowship 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 paid directly by FCT to the national institution where the fellowship holder is enrolled in the PhD program.

14. TERMS AND CONDITIONS of PhD FELLOWSHIP RENEWAL

The renewal of the fellowship always depends on the fellowship holder 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 institutions(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 PhD degree.

15. INFORMATION AND PUBLICITY OF THE GRANTED FUNDING

All the R&D activities carried out by the fellowship holder, directly or indirectly financed by the fellowship, 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 programs: Programa Operacional Regional do Norte (NORTE 2020), Programa Operacional Regional do Centro (Centro 2020) and Programa Operacional Regional do Alentejo (Alentejo 2020), or additional funding schemes that might be approved. 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 program.

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 fellowships, 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. Fellowship holders must therefore collaborate and provide all the required information, including answering to surveys and evaluation studies in this area, even though the fellowship might have already ceased.

16. NON-DISCRIMINATION AND EQUAL ACCESS POLICY

FCT promotes a policy of non-discrimination and equal access, thus no applicant may be privileged, benefited, damaged or deprived of any right or exempt 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.

17. APPLICABLE LEGISLATION AND REGULATIONS

The present Call is governed by this Opening Notice, the FCT Regulation of Research Fellowships, approved by the Regulation no. 950/2019, published in the Series II of the DR, of December 16th, by the Research Fellowship Holder Statute, approved by Law no.

40/2004, of August 18th, in its current version, and by other applicable national and European legislation.

FCT also recommends the careful reading of all the documentation supporting the application, namely, the Application Guide and the Evaluation Guide, available at FCT website at:

<https://www.fct.pt/apoios/bolsas/concursos/individuais2022.phtml.en>