

CQE

Call for 6 (six) PhD Research Fellowships

Centro de Química Estrutural (CQE) is pleased to announce the opening of a call for up to 6 (six) PhD Grants in the research areas of Chemistry, Chemical Engineering, Materials Engineering, Biochemistry, and related areas under the Research Fellowship Holder Statute and the FCT Regulation (RBI) for Research Studentships and Fellowships (EBI).

The grants will be funded by Fundação para a Ciência e Tecnologia (FCT) under the Collaboration Protocol for Funding of the Multiannual Plan for Research Grants for Doctoral Students, signed between FCT and the R&D Unit Centro de Química Estrutural - CQE Ref UIDP/00100/2020.

1. APPLICATION

The call is open from 15/09/2023 until 5:00 pm on 30/09/2023 (Lisbon time).

Applications and supporting documents **must** be submitted on the following link: [applications/candidaturas](#)

Only one proposal per applicant is allowed, under penalty of cancellation of all applications submitted.

Any false statement or plagiarism by the candidates will imply the cancellation of the application, which does not exclude the adoption of other sanctioning procedures.

2. TYPE AND DURATION OF THE SCHOLARSHIPS

The PhD Scholarships aim to fund research activities leading to a doctoral degree at Instituto Superior Técnico or Faculdade de Ciências da Universidade de Lisboa.

The research activities leading to the academic doctoral degree will take place at Centro de Química Estrutural (CQE), which will be the host institution of the scholarship holders, without exclusion of collaboration activities with more than one institution.

The research activities leading to the doctoral degree of the selected candidates must be framed in the activity plan and strategy of CQE and developed within the scope of current Doctoral Programs at Instituto Superior Técnico or Faculdade de Ciências da Universidade de Lisboa that are consistent with the approved work plan.

The work plan may be conducted entirely or partially in a national institution (scholarship in the country or

mixed, respectively). The scholarships' duration is, as a rule, annual, and renewable for up to a maximum of four years (48 months). Scholarships cannot be awarded for less than three consecutive months or more than 48 months.

In the case of a mixed scholarship, the work plan period in a foreign institution cannot exceed 24 months.

3. RECIPIENTS OF THE SCHOLARSHIPS

Eligible applicants will be enrolled, or fulfil the necessary conditions to enrol, in one of the Doctoral Programs mentioned in point 2 of this Call and must intend to develop research activities leading to a doctoral degree at Centro de Química Estrutural or at host institutions associated with it.

4. WHO CAN APPLY

4.1 Eligibility requirements

Applicants must comply with one the following:

- Be Portuguese citizens, or citizens of other European Union member states;
- Be citizens from third-party States;
- Stateless persons;
- Citizens benefiting from political refugee status.

Applicants to PhD Scholarships need to:

- Hold a bachelor or master degree in the areas of Chemistry, Chemical Engineering, Materials Engineering, Biochemistry or related areas;
- Have permanent residence in Portugal, if the work plan will be partially carried out at a foreign institution (mixed scholarships). This requirement applies to both national and foreign citizens;
- Not have benefited from a PhD scholarship or PhD scholarship in industry directly funded by FCT, regardless of its duration;
- Not hold a doctoral degree.

4.2 Application Eligibility Requirements

It is essential, under penalty of not being admitted to the Call, to submit the following documents:

- Details of the identity card/citizen card/passport;
- The applicant's *Curriculum vitae* (mandatory);

- Certificates of the academic degrees held, specifying (mandatory) the final classification and, if possible, the grades obtained in all courses, or, alternatively, the candidate's declaration of honour on how he/she concluded the bachelor's or master's degree by the end of the of application deadline;
- Registration of recognition of academic degrees awarded by foreign higher education institutions and registration of the conversion of the respective final classification to the Portuguese classification scale, or, alternatively, the applicant's declaration of honour on how he/she obtained the recognition of a foreign degree equivalent to bachelor or master until the end of the application period;
- Motivation letter in which the candidate explains the reasons for his/her application, presenting his/her scientific/professional path and describing how it fits into the work plan he/she would like to develop, when applicable;
- The application and all associated documents, including motivation letters, must be written either in Portuguese or English.

Regarding the aforementioned eligibility requirements, the following should be noted:

- In the case of academic degrees awarded by foreign higher education institutions, and to ensure that the principle of equal treatment is applied to candidates who hold foreign and national academic degrees, the recognition of these degrees and the conversion of the final classification to the Portuguese classification scale is compulsory.
- The recognition of foreign academic degrees and diplomas, as well as the conversion of the final classification to the Portuguese classification scale, may be requested in any public higher education institution, or at Direcção-Geral do Ensino Superior (DGES, for automatic recognition only). For more information on this subject please check <http://www.dges.gov.pt>.
- Only applicants who have completed a studies cycle leading to a bachelor's or master's degree until the end of the application period will be admitted. If they do not yet have the degree certificate, a declaration of honour from the candidates will be accepted. **The granting of the scholarship will always depend on subsequent proof of having obtained the required academic qualifications.**

5. EVALUATION CRITERIA AND BONUS

5.1 Evaluation Criteria

The evaluation will consider the candidate's merit.

Applications considered eligible will be scored on a scale of 0 to 5 in each of the following evaluation criteria:

- Criterium 1 – Academic scores, in accordance with FCT reference table,

(<https://myfct.fct.pt/LibDocument/FileDisplay.aspx?EcrypDoctId=Cangi7oxGcorWagAZvjX3A=>), with a weight of 50%);

- Criterium 2 – Score that reflects the scientific, professional, and academic background, when applicable, and the candidate's motivation to pursue this cycle of studies, with a weight of 50%.

The candidates will be ranked on the basis of the weighted average of their scores on both criteria, according to the formula:

$$\text{Final classification} = (0.5 \times \text{criterion 1}) + (0.5 \times \text{criterion 2})$$

Should candidates be tied in their classification, the final ranking will be decided upon the classification on each criterium, with criterium 2 taking precedence over criterium 1.

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

- Candidates with diplomas issued by foreign higher education institutions can apply and will be evaluated using the same criteria as candidates with diplomas issued by Portuguese institutions, as long as they submit, in their application, proof of recognition of academic degrees and conversion of final classification to the Portuguese classification scale in agreement with the relevant legislation.
- Applicants with recognized foreign degrees who do not show proof of conversion of the final classification to the Portuguese classification scale will be evaluated with the minimum classification (1.0 points) in criterium 1.
- In any case, scholarship contracts with candidates holding diplomas issued by foreign institutions will only be established upon presentation of proof of recognition of academic degrees and conversion of the final classification, as mentioned above.

Applicants whose application is evaluated with a final classification below three (3.0) points are not eligible for the scholarship.

5.2 Bonus

Candidates with an extent of disability equal to or greater than 90% will have a 20% bonus.

Applicants with an extent of disability equal to or greater than 60% and lower than 90% will have a 10% bonus.

To demonstrate the extent of disability it is mandatory to include, in the application, the Multipurpose Disability Certificate, issued under the terms of Decree-Law no. 202/96, of October 23, in its current wording

6. EVALUATION

The evaluation jury is composed by the following members (five effective members and two alternate members):

- Coordinator of Centro de Química Estrutural (José Nuno Canongia Lopes) (Jury Coordinator). He will be replaced by a member of the CQE Executive Committee in the event of a situation of conflict of interest.
- Coordinators of the four CQE thematic lines (Luísa Martins, Matilde Marques, Fátima Montemor, Isabel Marrucho) (effective members).
- Fernando Antunes, member of CQE's Executive Committee (alternate member)
- Manuel Minas da Piedade, member of CQE (alternate member)

The evaluation jury will assess applications in accordance with the evaluation criteria of this Call, considering the elements of evaluation.

All panel members, including the 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 assessments produced.

For each application, a final evaluation form will be produced by the panel, in which the arguments that led to the ratings attributed to each of the evaluation criteria will be presented in a clear, coherent and consistent manner.

Minutes binding all jury members will be produced from the meetings of the evaluation panel. Minutes and annexes must include the following information:

- Name and affiliation of all members of the evaluation panel;
- Identification of all excluded applications and respective reasons;
- Methodology adopted by the panel for particular cases;
- Final Evaluation Sheets for each applicant;
- Provisional list of classification and ranking of applicants, in descending order of the final classification,

of all applications evaluated by the panel;

- Conflict of interests statements from all panel members;
- Possible delegations of votes and competences due to justified absence.

7. DISCLOSURE OF RESULTS

The results of the evaluation will be communicated by e-mail to the e-mail address used by the applicant to submit the application/indicated in the application.

8. DEADLINES AND PROCEDURES FOR PRIOR HEARING, CLAIM AND APPEAL

After the communication of the provisional list of results, applicants have a period of 10 working days to, if they so wish, make a statement at the prior hearing of interested parties, under the terms of articles 121 and subsequent ones of the Code of Administrative Procedure. The final decision will be communicated after the analysis of the statements presented at the prior hearing of interested parties. The applicants may complain about the final decision within 15 working days, or, alternatively, an appeal may be filed within 30 working days, both counted from the respective notification. Applicants who choose to submit a complaint must address their arguments to the member of the FCT Board of Directors with delegated competence. Applicants who choose to submit an appeal must address it to the FCT Board of Directors.

9. GRANT REQUIREMENTS

Scholarship contracts will be signed directly with FCT.

For the purpose of contracting, the following documents must be sent, if and when the grant is awarded:

- a) Copy of the identification document, tax document and, when applicable, social security identification document (s);¹
- b) Document certifying permanent and usual residence in Portugal, if applicable, valid on the start date of the fellowship. Whenever the scholarship takes place in whole or in part in foreign institutions, all candidates, regardless of their nationality, will have to present proof that they reside permanently and usually in Portugal;

¹ If the candidate so wishes, these documents may be presented in person at the headquarters of the funding entity, where the elements deemed essential to the establishment and validity of the contract will be stored. These include the civil identification, tax and social security numbers and their expiry dates.

- c) Copy of certificates of the academic degrees held;
- d) Presentation of the recognition record of foreign academic degrees and conversion of the final classifications to the Portuguese classification scale, if applicable;
- e) Document proving registration and enrolment in one of the Doctoral Programs identified in this Call;
- f) Work plan;
- g) Statement by the supervisor (s) taking responsibility for supervising the work plan, according to Article 5-A of the Research Fellow Statute (template to be made available by FCT);
- h) Document proving the candidate's acceptance by the institution where the research activities will take place, guaranteeing the conditions necessary for its good development, as well as the fulfilment of the duties mentioned in Article 13 of the Research Fellow Statute (template to be made available by FCT);
- i) Updated document demonstrating compliance with the exclusive dedication regimen (template to be made available by FCT).

The granting of the scholarship is additionally dependent on:

- compliance with the requirements of this Call;
- the result of the scientific evaluation;
- the absence of unjustified non-compliance with the candidate's duties under a previous scholarship contract funded, directly or indirectly, by FCT;
- FCT's budget availability.

Failure to deliver any of the documents necessary to complete the scholarship contracting process, within 6 months from the date of communication of the conditional grant award decision, implies the cessation of the referred grant and the closure of the process

10. FUNDING

The payment of the scholarships will start after the return, by the candidate, of the duly signed scholarship contract, which should occur within a maximum period of 15 working days from the date of receipt.

The scholarships awarded under this call will be funded by FCT with funds from *Orçamento de Estado* and, when eligible, with funds from the European Social Fund, to be made available under *Programa Demografia, Qualificações, e Inclusão* (PDQI), in accordance with the regulatory provisions established for that purpose.

11. COMPONENTS OF THE SCHOLARSHIP

The scholarship holders receive a monthly stipend in accordance with the table of Annex I of the FCT Regulation for Research Studentships and Fellowship (RBI). The stipend may include other components, under the terms of

Article 18 of the RBI and in the amounts provided in Annex II.

All scholarship holders benefit from personal accident insurance for research activities, supported by FCT. All scholarship holders who are not covered by any social protection regime can secure the right to social security by enrolling in the voluntary social insurance regimen, under the terms of the Contributory Schemes of the Social Security System, as FCT guarantees the charges resulting from contributions under the terms and within the limits set in Article 10 of the Research Fellowship Holder Statute.

12. PAYMENT OF SCHOLARSHIP COMPONENTS

Payments due to the scholarship holder are made by bank transfer, to the account identified in the scholarship holder's file. The monthly allowance is paid on the first business day of each month.

Payments of registration, enrolment or tuition fee components are made by FCT directly to the national institution where the scholarship holder is enrolled for the PhD degree.

13. RENEWAL TERMS AND CONDITIONS

The renewal of the scholarship will depend on an application submitted by the holder, within 60 working days prior to the renewal starting date, with the following documents:

- a) statements issued by the supervisor/s and the host entity/ies reporting the monitoring of the holder's work and the evaluation of his/her activities;
- b) updated document proving compliance with the exclusive dedication regimen;
- c) document proving the renewal of enrolment in the cycle of studies leading to the doctoral degree.

14. INFORMATION AND PUBLICITY OF THE GRANTED FUNDING

In all R&D activities directly or indirectly funded by the scholarship, namely, in all communications, publications and scientific creations, as well as theses, carried out with the support provided for in the scholarship, the mention of financial support from FCT and European Social Fund (ESF) must be expressed, namely through the *Programa Demografia, Qualificações e Inclusão* (PDQI). For this purpose, FCT, MCTES, ESF and EU insignia must be inscribed in the documents referring to these actions, according to the graphic rules of each operational program.

The dissemination of results of research funded under the FCT Regulation for Research Studentships and Fellowships must comply with the rules for open access to data, publications and other research results effective at the FCT.

In all scholarships, and in particular in the case of actions supported by European Community (EC) funding,

namely from the ESF, monitoring and control actions may be carried out by national and EC bodies in accordance with the applicable legislation in this matter. The scholarship holders have the obligation to collaborate and provide the requested information, which includes surveys and evaluation studies in this area, even if the scholarship has already ceased.

15. NON-DISCRIMINATION AND EQUAL ACCESS POLICY

FCT promotes a policy of non-discrimination and equal access, so that no candidate can be privileged, benefited, harmed or deprived of any right or exempt from any duty, namely due to ancestry, age, sex, sexual orientation, marital status, family status, economic status, education, origin or social status, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic or race origin, territory of origin, language, religion, political or ideological beliefs and union affiliation.

16. APPLICABLE LEGISLATION AND REGULATION

The Call is ruled by this notice, by the FCT Research Scholarship Regulation, approved by Regulation No. 950/2019, published in the II Series of the DR of December 16, 2019, by the Research Scholarship Statute approved by Law 40/2004, of August 18, in its current wording, and by other applicable national and EC legislation.

Lisboa, 14th September, 2023

ANNEX

Thematic lines and Research Groups - Centro de Química Estrutural

Thematic lines:

Synthesis, Catalysis and Reactivity (SYNCat)

Materials, Soft Matter and NanoChemistry (MATSoft)

Sustainable Chemistry for the Environment, Energy and Manufacturing (SUSChem)

Medicinal and Biological Chemistry for Health (MEDLife)

Strategic objectives

Strategic fields in which CQE foresees to continue (or to establish) as an international reference along the forthcoming years include the following ones:

- Alkanes and Other Hydrocarbons: sustainable functionalization, catalytic conversion and use;
- Carbon Dioxide as Raw Material: catalytic production of fuels and chemicals;
- Non-Covalent Interactions: applications in synthesis, materials, pharmacological and bio-inspired supramolecular systems;
- Target-oriented drugs: design and development;
- Molecular toxicology: endogenous and xenobiotic agents;
- Materials for energy applications: storage, conversion and solid-state illumination;
- Nano Science and Technology: graphene, plasmonics, surface functionalization, sol-gel materials and processing;
- Nano Fluid Engineering: supercritical phenomena, phase equilibria, interfaces and permeation, thermophysical and structural properties, heat transfer processes;
- Ionic Liquids and Molten Salts: structure, thermophysical properties, high temperature chemistry and applications to energy and material production.

Research Groups

G1-Coordination Chemistry and Catalysis (CCC) (IST)

G2: Inorganic and Organometallic Architectures, Reactivity and Catalysis (IOARC) (IST)

- G3: Heterogeneous Catalysis and Catalytic Processes (CATHPRO) (IST)
- G4: Bioinorganic Chemistry and Drug Development (BIOIN) (IST / FCUL)
- G5: Design, synthesis, and toxicology of bioactive molecules (BioMol) (IST / FCUL)
- G6: Chemistry for the Environment (Chem4Env) (IST / FCUL)
- G7: Corrosion Science and Surface Engineering (CSSE) (IST)
- G8: Photoactive Molecules, Photonics and Functional Materials (MPPM) (IST / FCUL)
- G9: Molecular and Engineering Thermodynamics (MET) (IST / FCUL)
- G10: Molecular Thermophysics and Fluid Technology (MTFT) (FCUL)
- G11: Carbohydrate Chemistry (HC) (FCUL)

More information on the doctoral themes offered to candidates selected in this call can be found at: [Doctoral Themes 2023 • CQE. Centro de Química Estrutural . IST & FCUL \(ulisboa.pt\)](#)