

## CALL FOR AWARDING RESEARCH FELLOWSHIPS WITHIN PROJECT GRANTS AND R&D INSTITUTIONS

### 1 (one) Research Fellowship for R&D Initiation (BII) for BSc Student

1 Research Fellowship(s) for R&D Initiation (BII) is(are) open at the **FCiências.ID – Associação para a Investigação e Desenvolvimento de Ciências**, for the project/R&D institution “Centro de Química Estrutural”, “UIDB/00100/2020”, funded by the Fundação para a Ciência e a Tecnologia, I.P./MCTES through national funds (PIDDAC) under the programme strategic program, aligned with the thematic line “Sustainable chemistry for environment, energy and manufacture”, under the following conditions:

1. **Scientific Area:** Chemistry
2. **Requirements for admission:** High school completed
3. **Additional optional skills and qualifications:** Approval in the UC of Physical Chemistry I. It will be considered positively the intention of developing the UC of project or technological project in the same scientific area.
4. **Contracting requirements:** Presentation of the academic qualifications and/or diplomas. Enrolment in Bachelor's in Chemistry or Technological Chemistry in Faculdade de Ciências da Universidade de Lisboa.
5. **Work plan:** This work aims to explore the intermolecular interactions in binary alkanolamine-water systems (mixtures with potential for CO<sub>2</sub> capture) through the determination, at infinite dilution, of solution enthalpies (partial molar enthalpies of excess) either in the range of high concentration in amine or in the range of high concentration in water. The system to be studied will be 2-(ethyl-2-amino)ethanol (EEA) – water, at 298,15 K. For this purpose, we will prepare rigorously, by mass, the binary mixtures, and will prepare and fill the ampoules containing tiny amounts of water or EEA, depending on the mole fraction to be investigated. Calorimetric measurements will be performed using a semi-adiabatic solution calorimeter. The experimental results obtained will be interpreted using parametric correlations between the excess partial molar enthalpies and solvent polarity parameters previously obtained for this same system in our research group.
6. **Legislation framework:** Research Fellowship Holder Statute, in accordance with Law 40/2004, of 18 August, in its current version and the FCT Regulation for Research Studentships and Fellowships, in its current version (Reg. 950/2019 published in DR on 16<sup>th</sup> December: <https://dre.pt/application/file/a/127230968>, or at the FCT website: <https://www.fct.pt/apoios/bolsas/regulamento.phtml.pt>), and FCiências.ID Fellowship Regulation, as approved on 12<sup>th</sup> May 2020 (available at [Regulamento de Bolsas de Investigação Científica da FCiências.ID](#)).
7. **Place of work:** The work will be developed at the Centro de Química Estrutural, Polo da Faculdade de Ciências, Universidade de Lisboa, under the scientific supervision of Professor Maria Luísa Moita.
8. **Fellowship duration:** This position is initially opened for 6 months due to start in March 2023. The fellowship contract may be potentially renewed for 3 months.
9. **Monthly allowance:** The fellowship amounts to € 541,12, according to [table values](#) of the fellowships awarded directly by the FCT, IP. The fellowship holder will have a personal accident insurance and can ensure the right to social security through adherence to the voluntary social insurance scheme, if not covered by any other social protection scheme, pursuant to *Código dos Regimes Contributivos do Sistema Previdencial de Segurança Social*. The fellowship will be paid monthly by bank transfer.

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10. **Evaluation and selection process:** Candidates will be assessed by:

- a) quality of the CV: 60%;
- b) recommendation letter: 20%;
- c) motivation letter : 20%.

If necessary, an interview will be held with the 3 best candidates. In case of interview, the sum of the evaluations obtained in the evaluation criteria a), b) and c) will correspond to 80% of the final classification and the interview to 20%.

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

11. **Selection Committee:** Prof. Maria Luísa Moita (President), Prof. Filomena Martins (effective member), Prof. Nelson Nunes (effective member), Prof. Ruben Leitão (alternate member) and Prof. Maria da Soledade Santos (alternate member).

12. **Publication/notification of results:** All the candidates will be notified by e-mail, sent by the call holder, with the selection meeting minutes enclosed.

13. **Deadlines:** This call for applications is open from 04/03/2023 to 17/03/2023 .

14. **Application:** Applications should be sent via e-mail to [mlmoita@fc.ul.pt](mailto:mlmoita@fc.ul.pt), by attaching the following documents:

- a. Curriculum vitae, if applicable, with an indication of the curricular year, curricular units completed and respective marks - **CV may be provided in PDF or through the [CIÊNCIAVITAE](#) system**;
- b. Certificate of completion of previous degree;
- c. Recommendation letter;
- d. Motivation letter.

15. **Time limits for the appeal procedure:** In case of negative decision, the candidates have 10 business days, after the date of announcement of the results of the candidates evaluation, to pronounce their disagreement in accordance with the *Código do Procedimento Administrativo*. Appeals against the final decision may be submitted to the Administration Board of FCiências.ID ([fciencias.id@fciencias-id.pt](mailto:fciencias.id@fciencias-id.pt)) within 15 business days after the notification date

**Note 1:** The documents that prove the entitlement of the academic qualifications and diplomas, or the proof of registration in the academic degree or diploma requested on the call, can be dismissed during the application period and replaced by a declaration on their honour from the applicant. Their delivery is mandatory for the fellowship contractualization.

**Note 2:** Please note that - higher education degrees and diplomas awarded by foreign higher education institutions need to be recognized by a Portuguese higher education institution, pursuant to the [Decree-Law nr. 66/2018](#) (August 16) and the [Ministerial Order nr. 33/2019](#) (January 25). The presentation of the recognition certificate is mandatory for contract signature. More information can be obtained at: <https://www.dges.gov.pt/en/pagina/degree-and-diploma-recognition>.