

**NOTICE OF OPENING OF AN INTERNATIONAL SELECTION PROCEDURE FOR THE RECRUITMENT OF A
DOCTORATE INITIAL LEVEL RESEARCHER POSITION**

By order of 10/04/2024, the Dean of FEUP, Professor Rui Artur Bártolo Calçada, deliberated to open an international selection procedure for the recruitment of 1 Doctorate Initial level within the scope of Agenda “H2Driven Green Agenda”, nr. C644923817-00000037, investment project nr. 50, of the Incentive System “Agendas for Business Innovation”, funded by the Recovery and Resilience Plan (PRR) and by European Funds NextGeneration EU, in the form of an Uncertain Term Employment Contract, by legal imperative, under the terms of paragraph b) of no. 1 of article 6 of RJEC, ex vi of no. 2 of article 18 of RJEC, and will be maintained only for the period necessary to execute the tasks defined in the project and identified below, whose expected duration is 12 months, never exceeding the maximum limit of six years.

This recruitment aims at the performance of activities corresponding to the category of Doctorate Initial level, as stated in article 8 of Regulation No. 487/2020, of May 22. The Doctorate Initial level, in abstract, is responsible for carrying out the activities foreseen in no. 2 of art. 7 of Regulation no. 487/2020, of May 22nd. Specifically, the Doctorate Initial level will develop R&D activities in the scope of Agenda “H2Driven Green Agenda” in the area of Chemical Engineering, contributing to the optimization of methanol-hydrocarbons mixtures for Internal Combustion Engines (ICEs), in the scope of the Work Package 5 – Operation, logistics and off-taking (Subproject 5.2).

In particular, the researcher will contribute to the following project work:

- i) Contribute to the survey of the scientific, technological and regulatory state-of-the-art related to the usage of methanol-hydrocarbons blends in ICEs;
- ii) Preparation, characterization and optimization of the methanol-hydrocarbons blends for the ICEs;
- iii) Contribute to the simulation of the use of the methanol-hydrocarbons blends in ICEs;
- iv) Support bench tests in ICEs with the most promising blends for the validation of laboratory and simulated results;
- v) Dissemination and communication of the results.

The recruited researcher can, eventually, collaborate in teaching activities and formation activities in the area of research.

1. The scientific area of this selection procedure is Chemical Engineering.

2. Applicable Legislation: Decree-Law no. 487/2020, May 22nd, of Regulation of Research, Science and Technology Staff of the University of Porto and further applicable legislation, namely the Labor Code, approved by the Law no. 7&2009, of February 12th, in its updated version, the Decree-Law no. 57/2017 of July 19th, which approves a regime for contracting doctorates to stimulate scientific employment in all area of knowledge (RJEC); Regulatory Decree no. 11-A/2017, December 29th; and applicable regulatory norms.

3. In the wording of the 16th article of Decree-Law no. 57/2016 of August 29th, this procedure is exempted from the authorisation of the members of the Government responsible for the areas of Finance and Public Administration, namely in paragraph no. 3 of the 7th article of the LTFP; from the prior favourable opinion of the members of the Government responsible for the areas of Finance and Public Administration as mentioned in no. 5 of the 30th article of the LTFP and from the procedure for the recruitment of workers in the requalification situation referred to in 265th article of the LTFP.

4. In accordance with the articles 22nd, no. 3 and 4 of the Regulation, and the 13th of the RJEC, the Recruitment board is composed as follows:

President: Professor Adélio Miguel Magalhães Mendes

Effective Member: Professor Margarida Maria da Silva Monteiro Bastos

Effective Member: Doctor Tânia Sofia Teixeira Lopes

Substitute Member: Doctor Paula Manuela Monteiro Pereira Costa Dias

Substitute Member: Doctor Seyedali Emami

5. The work will be developed at the Department of Chemical Engineering of the Faculty of Engineering of the University of Porto (FEUP).

6. The monthly remuneration to be paid is 2.294,95 €, corresponding to level 33 of the Single Salary Table, approved by Order no. 1553-C/2008 of December 31st, updated in the terms of the Decree-Law no. 10-B/2020, and level 5, position 1 from Regulation no. 487/2020.

7. Admission Requirements:

7.1 General Admission Requirements:

This competition is open to national candidates, foreigners and stateless persons holding a doctoral degree in Chemical and Biologic Engineering, or related areas, for 5 years or less, and with a scientific and professional curriculum that shows an appropriate profile for the activity to be developed.

Any doctorate awarded by a foreign higher education institution must be recognised by a Portuguese higher education institution in accordance with the 25th article of the Decree-Law no. 66/2018, of August 16th, which approves the legal regime for the recognition of academic degrees and diplomas of

Higher Education, awarded by foreign higher education institutions and paragraph e) of no. 2 of the 4th article of Decree-Law no. 60/2018, of August 3rd, and any formalities established therein must be complied with by the date of the hiring act.

7.2 Specific Admission Requirements:

The following specific criteria must be fulfilled to determine the appropriate profile for the activity to be developed:

- i) Competences and previous experience in the area of organic chemistry;
- ii) Competences and previous experience in various characterization techniques, namely, FTIR, RMN, GC-MS, SEM e HPLC.

8. Recruitment method:

In accordance with articles 26th of the Regulation and 5th of the RJEC, the selection methods are:

- a) Evaluation of the curricular path and scientific career of the applicants (APCC) - (90%);
- b) Interview (ENT) - (10%)

9. Evaluation of the curricular path and scientific career (APCC) (90%)

9.1. Evaluation of the curricular path and scientific career, considering a profile that is suited to the requirements of the duties corresponding to the category covered by this competition and focusing on the relevance, quality, and currentness of the following aspects:

- a) Scientific performance in the areas and subareas for which the competition is open.
- b) Knowledge transfer.
- c) Science and technology management and communication.

9.2. In evaluating the aspects indicated in points a), b) and c) of the preceding paragraph, the activity developed in the last 5 (five) years must be considered.

9.3. The five years mentioned in 9.2 may be extended by the Board, at any applicant's request, when based on the suspension of scientific activity for socially protected reasons, namely for reasons of parental leave, prolonged serious illness, and other situations of unavailability for work that are legally protected.

9.4. In the evaluation of the dimensions of the aspects described in 9.1, the following parameters are considered, and the following weighting factors are attributed:

A1) Criteria for evaluating Scientific Performance (DC) (90%)

A1.1) Participation in international research projects as well as scientific production, specifically, having international publications as the first author in high-ranked peer-reviewed journals. The list of

publications must be included in the curriculum with a clear indication of the statistical analyses used, along with the candidate's role in implementing them.

A1.2) Development of collaborations with international researchers and study periods abroad.

A1.3) Duly certified teaching activates both in undergraduate, graduate and post-graduate courses, as well as in continuing education courses.

A2) Criteria for Knowledge Transfer and Science and Technology Management and Communication (10%):

A2.1) Ad-hoc reviewer;

A2.2) The organisation of scientific events;

A2.3) Participation in national and international scientific meetings with peer review as well as by invitation;

A2.4) Supervising experience at different levels (internships, master dissertations, doctoral theses);

A2.5) Participation in evaluation committees.

9.5 The final classification of the (APCC) is obtained by the following formula: $APCC = (0,90 \times A1) + (0,10 \times A2)$.

10. Evaluation of the Interview (ENT) (10%):

For the interview to be held, the three best-ranked applicants in the evaluation of their curricular path and scientific career will be admitted, and the board will evaluate aspects related to the research conducted by the applicants. The interview will be conducted in Portuguese and English.

11. Final classification:

The Final Classification (CF) of the Evaluation of the applicants' Curricular Path and Scientific Career (APCC) and interview (ENT), will be obtained by applying the following formula: $CF = (APCC \times 0.9) + (ENT \times 0.1)$.

12. Evaluation of the selection methods:

12.1. Each member of the Board evaluates the applicants' curricular path and scientific career on a scale from 0 to 100 points, with a weighting up to the hundredths, and the classification is obtained through the weighting defined in the criteria to be evaluated.

12.2. The interview evaluation is expressed on a scale of 0 to 100 points, with a weighting to the hundredths.

13. Evaluation methodology:

13.1. After the admission of the applicants, and before starting the voting for their final ranking in the evaluation of their scientific and curricular background, each member of the Board presents a written

document, to be attached to the meeting minutes, with the list of the applicants in descending order of merit, duly substantiated, considering the criteria and parameters of this competition notice.

13.2. The Board deliberates employing reasoned roll-call voting following the selection criteria adopted and disclosed. Abstentions are not allowed.

13.3. The seriation methodology is that which is indicated in the 29th article of the Regulation.

13.4. If an absolute majority of votes is not reached after the voting explained in the previous number, or in case of a tie, the Chair's vote will be used for the final ranking.

13.5. Each member of the Board must respect, in the various voting rounds, the order he or she presented in the document referred to in paragraph 13.1.

13.6. The interview has a maximum duration of one hour and is exclusively aimed at clarifying aspects related to the research carried out by the applicants.

13.7. The Board's discussions will be briefed in minutes taken during its meetings, containing a summary of what occurred, the votes cast by each member and respective reasoning.

13.8. After concluding the selection criteria application, the jury proceeds to produce an ordered list of the approved applicants with the respective classification.

13.9. The Board's final decision is approved by the head of the institution responsible for opening the tender notice. The final hiring decision is the responsibility of the top manager of the hiring entity.

14. Formalisation of applications:

14.1. Applications must be formalised at <http://www.fe.up.pt/concursos>, reference online no. 1146, until de 23h59m (local time) of 24/05/2024.

The application must include: full name, number and date of identity card or citizen card, or civil identification number, tax identification number, date of birth, residence, and contact address, including e-mail and telephone contact.

14.2 The application must be accompanied by documentary evidence of the conditions described in points 4 and 5 of this notice, namely:

- a) Copy of doctorate certificate or diploma;
- b) Detailed curriculum vitae, containing all information relevant for the evaluation of the application, as well as for demonstrating compliance with the criteria set out in point 7 of this announcement, organised in accordance with the seriation criteria set out in no. 9;
- c) Motivation letter;
- d) Copies of up to 10 publications considered most relevant by the candidate, associated with the position;

e) Other supporting documents considered relevant to the eligibility of the application and documents that the applicant considers relevant to the assessment of his/her merit.

14.3. Failure to submit the documents mentioned in 14.2 will lead to the exclusion of the application. For purposes of hearing the interested parties, the exclusion decision is notified to the applicants by e-mail.

14.4. The Board may, whenever it deems necessary, ask the applicants to provide complementary documents for the facts described in the submitted curriculum, setting a deadline for that purpose.

15. False statements made by applicants will be punished according to the law.

16. Notices of the results:

The minute(s) of the Board meeting(s) for evaluating the applications will be sent via e-mail with a delivery receipt.

17. Parties hearing and the deadline for final decision:

In accordance with the 121st article of the Administrative Procedure Code, after being notified, the applicants have 10 working days to comment. Within 90 days, counting from the deadline for submitting applications, the Board's final decisions are made.

18. The present competition is exclusively aimed at filling the indicated vacancy and may be terminated until the final ranking list of applicants is ratified, expiring with the respective occupation of the job position on offer. If none of the applicants has the appropriate profile for the performance of the functions described above within this project's scope, the Board reserves the right not to award the position in the competition.

19. Non-discrimination and equal access policy: FEUP actively promotes a policy of non-discrimination and equal access, so that no candidate can be privileged, beneficiary, disadvantaged or private of any right or exemption from any duty owing, in particular, to ancestry, age, sex, sexual orientation, marital status, family status, economic situation, education, social origin or condition, genetic heritage, reduced working capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological beliefs and trade union membership.