

**NOTICE OF OPENING OF AN INTERNATIONAL SELECTION PROCEDURE FOR THE RECRUITMENT OF
AN ASSISTANT RESEARCHER POSITION**

By order of 03-09-2024, the Dean of Faculty of Engineering of the University of Porto (FEUP), Professor Rui Artur Bártolo Calçada, deliberated to open an international selection procedure for the recruitment of 1 Assistant researcher within the scope of the development of mini passive direct methanol fuel cells, funded by FEUP own funds in the form of an Individual Certain Term Employment Contract, and will be maintained only for the period necessary to execute the tasks defined and identified below, whose duration is 6 months, not renewable.

The purpose of this contract is the performance of activities corresponding to the category of Research Assistant, as stated in Article 8 of the Regulations for Research, Science and Technology Staff of the University of Porto.

The Assistant Researcher executes, develops and participates in research and development projects, under the guidance of a researcher or higher education professor of FEUP, executing and developing the following activities of investigations, during the 6 months of the contract:

1. Development of catalysts for the anode side of mini passive direct methanol fuel cells in order to reduce the costs of these systems.
2. Optimisation of the mini passive direct methanol fuel cells with the catalysts developed in order to obtain the efficiencies required for their application in small portable electronic devices.

The selected researcher may also provide possible collaboration in teaching and training activities in the area of research, if applicable.

1. The scientific area of this selection procedure is Chemical Engineering.
2. Applicable Legislation: Regulation nº 487/2020, of 22 May - Regulation of Research, Science and Technology Staff of the University of Porto in its current wording and by the other applicable legislation, namely the Labour Code, Law on 7/2009, of 12 February, in its current wording and applicable regulations.
3. In accordance with articles 22.º, n.º 3 and 4 of the Regulation n.º 487/2020, of 22 May, the Recruitment board is composed as follows:

President: Professor Alexandra Maria Pinheiro da Silva Ferreira Rodrigues Pinto

Member: Doctor Vânia Sofia Brochado de Oliveira

Member: Doctor Daniela Sofia de Castro Falcão

Substitute Member: Doctor Rui Carlos Barata Ferreira

Substitute Member: Professor Francisco Galindo Rosales

4. The work will be developed at CEFT, in the Department of Chemical Engineering of the Faculty of Engineering of the University of Porto (FEUP).

5. The monthly remuneration to be paid corresponds to level 3, position 1 predicted in the Annex I and Annex II of the Regulation of Research, Science and Technology Staff of the University of Porto, being € 1.861,25, full time.

6. General Admission Requirements:

This competition is open to national candidates, foreigners and stateless persons holding a master degree in Chemical Engineering.

Any master awarded by a foreign higher education institution must be recognized by a Portuguese higher education institution in accordance with article 25 of the Decree-Law no. 66/2018, of August 16, 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 article 4 of Decree-Law no. 60/2018, of August 3, and any formalities established therein must be complied with by the date of the hiring act.

6.2 Specific Admission requirements:

The following specific criteria must be fulfilled to determine the appropriate profile for the activity to be developed: skills and previous experience in optimization of mini passive direct methanol fuel cells, using the Electrochemical Impedance Spectroscopy technique.

7. Recruitment method:

In accordance with articles 26 of the Regulation of Research, Science and Technology Staff of the University of Porto, the selection methods are:

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

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

8.1. 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 timeliness of the following aspects:

8.1.1 Scientific performance in the areas and subareas for which the competition is open: optimization of mini passive direct methanol fuel cells, using the Electrochemical Impedance Spectroscopy technique.

8.1.2 Knowledge transfer.

8.1.3 Science and technology management and communication.

8.2 In the evaluation of the dimensions of the aspects described in 8.1, the following parameters are considered, and the following weighting factors are attributed:

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

A1.1.) Scientific production, especially with the publication of scientific articles in high-quality international peer-reviewed journals as first or second author, in the area of passive direct methanol fuel cells, using the Electrochemical Impedance Spectroscopy technique. The list of publications must be included in the curriculum vitae;

A1.2.) Participation in R&D projects in the area of methanol fuel cells as an alternative to lithium batteries for portable applications.

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

A2.1.) Organization of scientific events;

A2.2.) Participation in national and international scientific meetings with peer review.

9. 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, the two applicants with score equal or higher than 80 points, of all members of the Jury, 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.

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 article 29 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 or presentation or a public demonstration session, 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, as well as the votes cast by each member and respective reasoning.

13.8. After concluding the application of the selection criteria, 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 decision on hiring is the responsibility of the top manager of the hiring entity.

14. Formalization of applications:

14.1. Applications must be formalized at <http://www.fe.up.pt/concursos> , reference on-line nº 1197, until de 23h59m (local time) of 09-10-2024.

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 point 6 of this notice, namely:

a) Copy of master 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 6 of this announcement, organized in accordance with the seriation criteria set out in no. 8.

c) Letter of motivation.

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 15.2 will lead to the exclusion of the application. For purposes of hearing of 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 deadline for final decision:

In accordance with article 121 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.