

UNIVERSITY OF PORTO
PUBLIC NOTICE N.1452/2022

Professor José Manuel Pereira Dias de Castro Lopes, Full Professor of the Faculty of Medicine of the University of Porto and Vice-Rector of the University of Porto:

Following my Order issued on September 22th, 2022, by delegated power under the Ordinance no.9493 /2022 published in the Official Gazette, 2nd series, no. 148 of 2 August this call for applications is published for one position of Assistant Professor in the area in Chemical Engineering of the Faculty of Engineering of this University.

The application procedure will remain in force for a period of 30 (thirty) business days as from the date immediately following the publication of this Notice in the Official Gazette.

1. The applicable legal provisions are as follows:

Articles 37 to 51, 61 and 62-A of the University Teaching Career Statute (ECDU – *Estatuto da Carreira Docente Universitária*), published in Decree-Law 205/2009 of 31 August, and amended by Law no. 8/2010 of 13 May, and the Regulations for the Recruitment of Full, Associate and Assistant Professors of the University of Porto – Order no. 12913/2010, published in the Official Gazette, 2nd Series, no. 154 of 10 August, and the Amendment Resolution (excerpt) no. 380/2019, published in the Official Gazette, 2nd Series, no. 64 of 1 April 2019.

2. Eligible candidates:

Under the provisions of Article 41-A of the ECDU, all candidates in this call for applications must hold a PhD degree.

If the doctoral degree was awarded by a foreign higher education institution, it must be recognized by a Portuguese higher education institution, under the terms of the article 4 of the Decree-Law no. 66/2018, published in the Official Gazette, 1st series, no. 157 of 16 August. This formality must be accomplished by the application deadline.

3 – Methods and Criteria for evaluation and ranking of candidates

3.1. Criteria for approval on absolute merit

The admission of candidates is subject to their approval in absolute merit, which will depend on:

- hold a Doctor's degree in Chemical and Biological Engineering, or in another related engineering field, with basic training (degree and/or master's degree) in engineering, with a proven focus on the specific domain of Systems and Project Engineering and Numerical Methods.

- have a minimum of 10 articles indexed in the Clarivate Analytics Web of Science or Scopus;

A candidate who is approved by an absolute majority of the votes of the voting jury members, in a justified nominal vote, where abstentions are not allowed, is considered approved on absolute merit.

3.2. Evaluation and ranking aspects and criteria in relative merit, respective weighting and final valuation system

Once the candidates approved in absolute merit have been definitively identified, they are ranked in relative merit, based on the aspects and ranking criteria, respective weighting and final valuation system, in accordance with the provisions of no. 6 of article 50 of the ECDU and article 16 of the Regulations for the Recruitment of Full, Associate and Auxiliary Professors of the University of Porto.

The selection method to be used is curriculum evaluation, bearing in mind the general functions entrusted to university professors by article 4 of the ECDU.

The evaluation of candidates focuses on the following aspects, and should highlight the curricular aspects in the subject area indicated above, in the specific domain of Systems and Project Engineering and Numerical Methods.

The following are preferential requirements for curricular enhancement: i) have experience of teaching activity at university level in the indicated recruitment area, particularly in the fields of Systems and Project Engineering and Numerical Methods; ii) have experience in research and development activity in research and development activity in the disciplinary area and in the specific domains of this call, and in one of the emerging areas considered by DEQ: data science in the areas of artificial intelligence, data science in the areas of artificial intelligence, data mining and big data.

a) Scientific Merit (VMC) – 40%

b) Teaching and Pedagogic Merit (VEMP) – 15%

c) Tasks of University Outreach and Economic and Social Enhancement of Knowledge (V_{TC}) – 20%

d) Scientific-Pedagogical Project (VPCP) – 25%

3.2.1. Criteria for assessing the Scientific Merit dimension (V_{MC}) – 40%

3.2.1.1. MC1 — Scientific production

Quality and quantity of scientific production in the area and specific domain for which the recruitment process is open (books, articles in journals, articles in conference proceedings, communications at conferences), expressed by the number and type of publications and the recognition they are given provided by the scientific community (translated in the quality of the places of publication and in the references made to them by other authors).

3.2.1.2. MC2 — Coordination and implementation of research projects

Quality and quantity of scientific projects in which the candidate participated in the area and specific domain for which the recruitment process is open, financed on a competitive basis by public funds, through national or international agencies or by companies, and the results obtained in them, giving them relevance to project coordination. When assessing quality, consideration must be given to the amount of funding obtained, the degree of requirement of the funding competition, the evaluations of the projects carried out and the prototypes completed, in particular if they have led to products or services.

3.2.1.3. MC3 — Intervention in the scientific and professional communities

Ability to intervene in the scientific and professional communities, expressed namely by collaboration in journal editing, presentation of invited lectures, participation in academic juries outside the home institution, as well as activities with recognized impact, namely by the achievement of prizes and other distinctions, in the area in which the recruitment process is open.

3.2.2. Criteria for evaluation of the Experience and Pedagogic Merit dimension (V_{EMP}) – 15%

3.2.2.1. EMP1 — Production of teaching material and participation in projects with impact on the teaching/learning process

Quality and quantity of pedagogical material produced by the candidate, publications of pedagogical nature in prestigious international magazines or conferences, as well as participation in projects to improve the teaching/learning process, including the reformulation or development of Curricular Unit programs, in the area for which the recruitment process is open.

3.2.2.2. EMP2 — Teaching activity

Experience, scope and quality of the teaching activity carried out by the candidate in the area for which the recruitment process is open, in the specific domain of Systems and Project Engineering and Numerical Methods. Whenever possible, the assessment of the quality of the teaching activity carried out by the candidate will use the results of objective methods based on opinion gatherings (pedagogical surveys).

3.2.3. Criteria for evaluation of the Tasks of University Extension and Economic and Social Valorization of Knowledge (V_{TC}) – 20%

3.2.3.1. TC1 — Patents, registration and ownership of rights, preparation of technical standards and legislation

Authorship and co-authorship of patents, records of ownership of intellectual property rights on software, mathematical methods and mental activity rules. Participation in the preparation of legislative projects and technical standards.

3.2.3.2. TC2 — Consulting services and study and development contracts

Coordination and participation in consultancy activities involving the business and public sector. The evaluation of this criterion must also take into account the economic value of the research results achieved, measured by the development and technology transfer contracts they gave rise to and the spin-off companies whose creation they have contributed, the area for which it is open the recruitment process, in the specific domain of Systems and Project Engineering and Numerical Methods.

3.2.3.3. TC3 — Dissemination of science and technology

Coordination and participation in scientific and technological dissemination initiatives with the scientific community (for example, organization of congresses and conferences) and for various audiences, and scientific and technological dissemination publications in the area for which the recruitment process is open, in the specific domain of Systems and Project Engineering and Numerical Methods.

3.2.4. Criteria for evaluating the Scientific-Pedagogical Project aspect (V_{PCP}) – 25%

Plan relating to lines of research in the area of Chemical Engineering, in the specific domain of Systems and Project Engineering and Numerical Methods. The candidate should frame the future research he/she intends to carry out, contextualizing the state of the art and the research strategies they propose to adopt. The articulation of this plan with teaching in the area and in one of the domains for which the recruitment process is open should also be explained. A document with a maximum of 10 A4 pages (Arial font, size 11, 1.5 space and 2.5 cm margins) must be submitted, consisting of two parts: (i) proposal of research activities that the candidate intends to develop during the first five years of his/her activity as Assistant Professor; and (ii) pedagogical proposal of a curricular unit under the responsibility of the DEQ of one of the study cycles with a high contribution from the DEQ (L.EQ, M.EQ, L.BIO, M.BIO, L.EA and M.EA).

4. Working methodology of the jury

4.1. Each member of the jury evaluates the candidates by assigning a score to each dimension on a scale of 0 to 100 points, taking into account the approved criteria for each dimension.

4.2. Public Hearing

The Selection Committee will hold public hearings, under equal circumstances for all candidates approved on absolute merit, which are intended to clarify in person specific aspects of the documentation submitted by the candidates.

These hearings will take place between the 30th and the 70th day following the deadline for submission of applications. All candidates will be informed by email, at least ten working days in advance, of the date and place on which these public hearings will take place.

4.3. Final Score

The Final Score (FS) given to each candidate by each member of the jury is calculated using the following formula:

$$FS = 0,40*VMC + 0,15*VEMP + 0,20*VTC + 0,25* VPCP$$

which reflects the weights associated to each dimension, defined in the table presented in Annex I of this Public Notice.

Following the individual assessment, each member will provide each candidate's final individual score, building an ordered list for the vote leading to the final ranking list in accordance with point 3.2.

4.4. Jury deliberations

4.4.1. Any deliberation results of no. 12 of Article 17 of the Regulation on Competition for the Recruitment of Full, Associate and Assistant Professors of the University of Porto – Order no. 12913/2010, published in the Official Gazette, no. 154, of 10 August 2010, applicable under Article 83-A of the ECDU, which determined the adoption of that Order to implement the provisions of that statute, including the procedural conduct of competitions, namely the system of evaluation and final ranking.

Thus, under no.12 of Article 17 of that Regulation, the Jury will decide, by nominal voting based on the adopted and disclosed selection criteria, on the approval and ranking of the candidates. An absolute majority is required for any resolution, i.e., a number of votes at least equal to half plus one of the votes of the present members, and abstentions are not allowed.

4.4.2. The ranking methodology is as follows:

In the different votes, each member of the Selection Committee must respect his/her ranking list, observing the following in each vote:

- a) the first voting round is intended to determine the candidate placed in 1st place by counting the number of votes each candidate received for that place;
- b) if a candidate obtains an absolute majority of votes for the first place, he/she is placed in the respective position and removed from the vote. The procedure will start to choose the candidate who will be positioned in the second place of the voting round;
- c) if no candidate obtains an absolute majority of votes for the first place, a new voting round will be held, which will only include candidates who have achieved votes for the first place, upon removing the least voted candidate in the previous vote for that place;

- d) if there is a tie between two or more candidates in the least voted position, a tiebreak vote between them will be held, counting the number of relative first positions for each, with the least voted being removed;
- e) if a tie still remains between two or more candidates in the least voted position, but the number of those candidates has been reduced in relation to the previous vote, a further tiebreak vote shall be held only between candidates tied for the least voted position, counting the number of relative first positions for each, with the candidate least voted being removed;
- f) if the tie still remains between two or more candidates in the least voted position, without reducing the number of candidates tied in the least voted position in relation to the previous voting round, the decision will be made by the quality vote of the President of the Selection Committee has or by a casting vote, according to the situation. The candidate voted by the President of the Selection Committee will be chosen to integrate the following voting round for the same place;
- g) if there is a tie when only two or more candidates remain for the first place, the tiebreaker is made through the casting vote of the President of the of the Selection Committee or by the exercise of the tiebreaker vote, according to the situation;
- h) the candidate chosen for the first place will leave the votes and then begins the selection procedure for the candidate to place in second place, repeating the process mentioned in the previous paragraphs for the subsequent places until there is a single ordered list of candidates.

5. Submission of applications

5.1. Delivery of applications

The application must be submitted exclusively on the FEUP website, at the following address: <http://www.fe.up.pt/concursos> , the established deadline.

5.2. Required application procedures and documents

The application must include all the following documents:

- a) Mandatory application form (personal data and statements), fully filled in and dully dated and signed, which is available at: https://sigarra.up.pt/up/pt/conteudos_geral.ver?pct_pag_id=1004282&pct_parametros=p_gina=1004282&pct_grupo=2461#2461 ;
- b) Copy of the candidate's doctoral certificate or diploma, except in cases in which the doctoral degree was awarded by the University of Porto;
- c) Proof of recognition of the PhD awarded by a foreign higher education institution by a Portuguese higher education institution (if applicable);

- d) Curriculum Vitae with all relevant information to evaluate the candidate's application, as well as to show compliance with the criteria set out in point 2 of this public notice, in accordance and in the order of the selection criteria described in point 3. of this public notice, i.e., selection dimensions, namely information regarding scientific publications from Clarivate Analytics databases Web of Science/or SCOPUS, including journal quartiles, journal impact factors and citation indicators, excluding self-citations; the candidate must structure the curriculum in order to facilitate the rapid and complete identification of your contribution, in the disciplinary area in which the tender is opened, in each of the subparagraphs of point 3;
- e) Works mentioned in the Curriculum Vitae submitted. Candidates must highlight up to ten of the works they consider most representative of the activity they have developed;
- f) Scientific/pedagogical programme

5.3 — Failure to comply with the provisions of paragraph 5.1., and/or failure to submit or late submission of the documents referred to in sections a) to f) of paragraph 5.2., determine the non-admission of the Application.

6. Notification of the results and requests of a prior hearing:

6.1. The Human Resources Service of the Common Resources and Services Centre of the University of Porto will notify the candidates of the administrative ranking of admission or non-admission to the call, which will be based on fulfilling or non-fulfilling with the requirements in the current legislation and in paragraph 2 of this Notice, and the conditions established regarding the instruction of application referred to in numbers 5.1. and 5.2.

6.2. The candidates who have not been administratively admitted, or have not been approved on absolute merit, as well as the candidates who appear on the ranked list of candidates in places that will not allow them to fill in the post announced, may request a prior hearing under the terms of Articles 121 and 122 of the Code of Administrative Procedures. All candidates are notified of the final resolution approved by the Rector.

6.3. The notifications will be sent by email, pursuant to articles 112 (1) (c) and 113 (5), of the Code of Administrative Procedures (CPA).

The deadline for candidates to comment in writing is ten working days.

7. Composition of the Selection Committee:

CHAIR - Doutor João Bernardo de Sena Esteves Falcão e Cunha, Director and Full Professor at the Faculty of Engineering of the University of Porto, in the use of delegated competence by order published in the Official Gazette.

Members:

- Doutor Marco Paulo Seabra dos Reis, Professor Associado com Agregação da Faculdade de Ciências e Tecnologia da Universidade de Coimbra;
- Doutora Maria Filipa Gomes Ribeiro, Professora Catedrática do Departamento de Engenharia Química do Instituto Superior Técnico da Universidade de Lisboa;
- Doutor José Paulo Barbosa Mota, Professor Catedrático da Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa;
- Doutor Carlos Manuel Santos da Silva, Professor Associado do Departamento de Química da Universidade de Aveiro;
- Doutor Adélio Miguel Magalhães Mendes, Professor Catedrático do Departamento de Engenharia Química da Faculdade de Engenharia da Universidade do Porto;
- Doutora Maria Arminda Costa Alves, Professora Catedrática do Departamento de Engenharia Química da Faculdade de Engenharia da Universidade do Porto;
- Doutor Manuel Fernando Ribeiro Pereira, Professor Catedrático do Departamento de Engenharia Química da Faculdade de Engenharia da Universidade do Porto.

8. Other provisions The Joint Order n. 373/2000, of 31 March, issued by the Minister for Reform of Government and Public Administration and the Minister for Equality, determines that the following mention must be included in entry and access calls for applications: «In compliance with paragraph h) of article 9 of the Portuguese Constitution, the Public Administration, as an employer, actively promotes a policy of equal opportunities among men and women to access employment and in their professional progress, taking strict measures to avoid any type of discrimination.» In this sense, the terms “candidate(s)”, “teacher(s)” and similar terms are not used in this public notice to refer to the gender of people. Likewise, no candidate may be privileged, benefited, harmed or deprived of any right, or exempted from any duty on any grounds, in particular of lineage, age, sexual orientation, marital status, family situation, economic situation, education, origin or social status, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic or racial origin, territory of origin, language, religion, political or ideological beliefs and trade union membership.

22 th september 2022. — O Vice -Reitor, *Prof. Doutor José Manuel Pereira Dias de Castro Lopes*.

Annex I

Table 1. Weights of each dimension and corresponding criteria for the curricular evaluation (CE)

Scientific Merit [VMC] (40 %):

- Scientific production [MC1] (60 %);
- Coordination and implementation of research projects [MC2] (30 %);
- Intervention in the scientific and professional communities [MC3] (10 %).

Teaching and Pedagogic Merit [VEMP] (15 %):

- Production of teaching material and participation in projects with impact on the teaching/learning process [EMP1] (35 %);
- Teaching activity [EMP2] (65 %);

Tasks of University Outreach and Economic and Social Enhancement of Knowledge [VTC] (20 %):

- Patents, registration and ownership of rights, preparation of technical standards and legislation [TC1] (50 %);
- Consulting services and study and development contracts [TC2] (30 %);
- Dissemination of science and technology [TC3] (20 %);

Scientific-Pedagogical Project [VPCP] (25%)