

**UNIVERSITY OF PORTO**

**PUBLIC NOTICE N. 1265/2024**

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

Following my Order issued on 11 June 2024, by delegated power under Ordinance no. 9493/2022 published in the Official Gazette (*Diário da República*), 2<sup>nd</sup> series, no. 148 of 02 August, this call for applications is published for one position of Full Professor to the disciplinary area of Mechanical Engineering at the Faculty of Engineering of the University of Porto. The application procedure will remain in force for a period of thirty business days as from the date immediately following the publication of this Notice in the Official Gazette.

**1. Applicable legal provisions**

Articles 37 to 51, 61 and 62-A of the University Teaching Career Statute (ECDU – *Estatuto da Carreira Docente Universitária*), republished 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 (abbreviated to Regulations), approved by Order no. 12913/2010, published in the Official Gazette, 2<sup>nd</sup> Series, no. 154 of 10 August, and the Amendment Resolution (excerpt) no. 380/2019, published in the Official Gazette, 2<sup>nd</sup> Series, no. 64 of 1 April 2019.

**2. Eligible candidates**

**2.1.** Under the provisions of Article 40 of the ECDU, all candidates in this call for applications must hold a PhD degree for more than five years, counted by the previous day of the deadline for submission of applications, who are likewise holders of an aggregate title.

*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 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.*

**2.2** - Proficiency in spoken and written Portuguese. Candidates of foreign nationality, except those from Portuguese-speaking countries, must have a command of spoken and written Portuguese at common reference level B1 or above. This requirement is officially recognized through a Portuguese communicative competence certificate or diploma from the Council of Europe's Common European Framework of

Reference for Languages.

### **3. Approval based on absolute merit**

**3.1.** If there are no reasons to reject the applications, the Selection Committee will deliberate on their approval or non-approval based on absolute merit, by justified nominal vote, from which the Selection Committee members are not allowed to abstain.

**3.2.** A candidate who is approved by an absolute majority of the voting Selection Committee members is considered approved on absolute merit.

**3.3.** The approval of candidates based on absolute merit will depend on whether they have a curriculum vitae that the Selection Committee generally considers as having shown scientific and pedagogical merit, research capacity and developed activity, compatible with the disciplinary area for which this call is open and appropriate to the respective teaching category, as documented in the respective information submitted in the call.

**3.4.** For the purposes of the evaluation process stated in the previous point, the approval of the candidates based on absolute merit will depend on the cumulative fulfilment of the following requirements:

- (i) a doctoral degree and the aggregate title in the subject area of the competition, namely Mechanical Engineering or a related area;
- (ii) have a curriculum whose merit the Jury considers to be of a scientific and pedagogical standard, research capacity, and activity compatible with the subject area of Mechanical Engineering and the category for which the competition is open.

### **4. Evaluation and ranking based on relative merit**

Once successful candidates have been admitted based on absolute merit, the Selection Committee will proceed to their ranking by relative merit, based on the established selection dimensions and criteria, respective weighting and final valuation system, established in accordance with the provisions of no. 6 of Article 50 of the ECDU and Article 14 of the Regulations.

#### **4.1. Evaluation methodology**

Candidates approved on absolute merit are subject to a curricular evaluation, bearing in mind the general functions attributed to university lecturers under Article 4 of the ECDU, focusing on the dimensions and respective criteria identified below.

## 4.2. Evaluation Dimensions

The assessment of candidates will focus on the following aspects and program, with emphasis on curricular elements in the subject area of Mechanical Engineering and in the specific field of Applied Mechanics, and subfields of Aeronautics and Aerospace.

Work carried out over the last five years will be particularly valued:

- a) Scientific Merit - scientific research or technological development activities - 40%;
- b) Pedagogical experience and merit - teaching activity and student supervision and guidance - 20%;
- c) Extension, economic, and social valorization of knowledge tasks - university extension activities, scientific dissemination, and economic and social valorization of knowledge, as well as professional work experience as an engineer, as a consultant, or on a full-time basis - 10%;
- d) University management - management of university institutions and other tasks assigned by the competent management bodies and which fall within the scope of the university lecturer's activity - 10%;
- e) Scientific and Pedagogical Program - research, teaching, and university extension activities that the candidate proposes to carry out as a Full Professor within the subject area of Mechanical Engineering and in the specific field of Applied Mechanics and subfields of Aeronautics and Aerospace - 20%.

### 4.3 - Assessment criteria:

The criteria to be taken into consideration in the assessment of each of the assessment aspects and program identified in the previous point and the weighting to be given to each of them in the final classification are as follows:

#### 4.3.1 Criteria for evaluating the Scientific Merit ( $V_{MC}$ ) - 40%

##### CI1 - Scientific production

Quality and quantity of scientific production (books, articles in journals, publications in conference proceedings, ...) expressed by the number and type of publications and the recognition given to them by the scientific community (reflected in the quality of the publication venues and the references made to them by other authors, ...), with publications related to Aeronautical and Aerospace Engineering being particularly relevant.

##### CI2 - Coordination and carrying out of scientific projects

Quality and quantity of scientific projects funded on a competitive basis by public funds, through national or international agencies or by companies where the candidate has participated, and the results obtained in them, emphasizing project coordination, including the responsibility for Portuguese participation in international projects. Projects related to Aeronautical and Aerospace Engineering will be particularly

important.

When assessing the quality, the funding obtained, the degree to which the competition was demanding, the projects' evaluations, and the prototypes and patents generated, mainly if they resulted in new or improved products or services, will be considered.

#### **CI3 - Setting up scientific teams**

Ability to generate, organize, and lead scientific teams, as well as supervise researchers in doctoral and post-doctoral projects. Equivalent capacity that may have occurred in professional work in companies is also relevant.

#### **CI4 - Intervention in the scientific and professional communities**

Ability to intervene in the scientific and professional communities, expressed by collaborating in the publication of journals, presenting guest lectures, and taking part in academic juries outside the institution itself. Interventions related to Aeronautical and Aerospace Engineering will be of particular relevance.

#### **4.3.2 Criteria for assessing Pedagogical Experience and Merit ( $V_{EMP}$ ) - 20%.**

##### **CE1 - Coordination of teaching projects**

Coordination and promotion of new teaching projects (e.g., development of new curricular unit programs, creation and coordination of new courses or study programs, etc.) or reform and improvement of existing projects (e.g., reformulation of existing curricular unit programs, participation in the reorganization of existing courses or study programs), implementation of projects with an impact on the teaching/learning process, as well as participation in accreditation or certification processes. Projects related to Aeronautical and Aerospace Engineering are particularly relevant.

##### **CE2 - Production of teaching material**

Quality and quantity of teaching material produced by the candidate, as well as publications of a pedagogical nature in prestigious international journals or conferences. Teaching material related to Aeronautical and Aerospace Engineering is particularly relevant.

##### **CE3 - Teaching activity**

Quantity and quality of the candidate's teaching activity, including supervision of MSc Dissertations and end-of-course projects. Quality assessment should use, whenever possible, objective methods based on broad opinion surveys (pedagogical surveys), with relevance given to demonstrating teaching experience in Aeronautical and Aerospace Engineering.

#### **4.3.3 Criteria for assessing Extension, Economic and Social Valorization of Knowledge Tasks ( $V_{TC}$ ) - 10%**

##### **CTC1 - Registration and ownership of rights, drafting of technical standards and legislation**

Authorship and co-authorship of patents, registration of intellectual property rights for software, mathematical methods, and rules of mental activity. Participation in drafting legislation and technical

standards.

### **CTC2 - Consultancy services and study and development contracts**

Coordination of and participation in consultancy services, study and development contracts, vocational training and technological specialization courses in the public sector or business environment, among others, particularly those developed related to Aeronautical and Aerospace Engineering.

Participation as an expert in panels and evaluation processes for research and technological development (R&TD) projects in companies and/or organizations in the scientific and technological system (SCT).

The assessment of this criterion should also consider the economic value of the research results achieved, as measured by the development and technology transfer contracts to which they gave rise and the spin-off companies to whose creation they contributed.

### **CTC3 - Dissemination of science and technology**

Dissemination of science and technology activities, where those related to Aeronautical and Aerospace Engineering will be particularly relevant.

Coordinate and participate in scientific and technological dissemination initiatives for the scientific community (e.g., organization of congresses and conferences) and various audiences.

Scientific and technological publications and other means of dissemination.

#### **4.3.4 Criteria for assessing the University Management ( $V_{GU}$ ) aspect - 10%**

**CGU** - Participation of the candidate in scientific, pedagogical or institutional management activities.

#### **4.3.5 Criterion for assessing the Scientific-Pedagogical Project ( $V_{PCP}$ ) - 20%**

### **CPCP - Program for the development of research, teaching, and university extension activities**

Proposal for research, teaching, and university extension activities that the candidate intends to carry out during the first five years of their activity as a Full Professor within the disciplinary area of Mechanical Engineering and in the specific field of Applied Mechanics and subfields of Aeronautics and Aerospace.

## **5. Procedural guidelines for the Selection Committee**

### **5.1. Candidates Score**

Each member of the jury will carry out an evaluation exercise, scoring each candidate for each assessment aspect on a scale of 0 to 100 points, rounded up to the nearest tenth, considering the criteria approved for each assessment aspect and program, with a degree of demand appropriate to the category for which the competition is open.

### **5.2. Final Result**

The Final Result (FR) of the assessment of each candidate by each member of the Jury is calculated using the formula for weighting the various curricular aspects:

$$RF = 0.40 * V_{MC} + 0.20 * V_{EMP} + 0.10 * V_{TC} + 0.10 * V_{GU} + 0.20 * V_{PCP}$$

which reflects the weights associated with each assessment aspect, as shown in Table 1.

As defined in the table presented in Annex I of this Public Notice.

**Table 1. Weights associated with the evaluation aspects**

Dimension	Weight	Criteria
<b>V<sub>MC</sub></b> (Scientific Merit)	<b>0.40</b>	<b>CI1</b> (Scientific production)
		<b>CI2</b> (Coordination and implementation of research projects)
		<b>CI3</b> (Creation of research teams)
		<b>CI4</b> (Involvement in the scientific and professional communities)
<b>V<sub>EMP</sub></b> (Teaching Experience and Pedagogic Merit)	<b>0.20</b>	<b>CE1</b> (Coordination of pedagogical projects)
		<b>CE2</b> (Production of teaching materials)
		<b>CE3</b> (Teaching activity)
<b>V<sub>TC</sub></b> (Tasks of Outreach and Economic and Social Enhancement of knowledge)	<b>0.10</b>	<b>CTC1</b> (Patents, registration and ownership of rights...)
		<b>CTC2</b> (Consulting and study and development contracts)
		<b>CTC3</b> (Dissemination of science and technology)
<b>V<sub>GU</sub></b> (University Management)	<b>0.10</b>	<b>CGU</b> (University management activities)
<b>V<sub>PCP</sub></b> (Scientific and Pedagogic Program)	<b>0.20</b>	<b>CPCP</b> (Scientific, pedagogic and valorization of knowledge activities)

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 4, where there can be no tie between candidates in the final ranking.

### 5.3. Deliberations of the Selection Committee

**5.3.1.** Any decision results from no. 12 of Article 17, of the Regulations, applicable under Article 83-A of the ECDU, which determines its approval with a view to implementing the rules of that legal diploma, covering the procedural requirements of the calls for applications, namely the system of evaluation and final classification.

Consequently, under the terms of article 17, n. 12 of the aforementioned Regulations, the Selection Committee will deliberate by means of a nominal vote based on the selection criteria adopted for the admission, selection and ranking of the candidates. An absolute majority is required for any deliberation; from which abstentions are not permitted.

### 5.3.2. Ranking methodology

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 first 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, from which the least voted candidate is 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, from which the least voted candidate is 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 or by a casting vote, according to the situation. The candidate voted by the President of the Selection Committee will be included in 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 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 voting process and then the selection procedure begins for the candidate who will be placed in second place, repeating the process mentioned in the previous paragraphs for the subsequent places until there is a single ranked list of candidates.

## 6. Submission of applications

### 6.1. Delivery of applications

The application must be submitted exclusively on the FEUP website, at the following address: [https://sigarra.up.pt/feup/pt/cnt\\_cand\\_geral.concurso\\_show?pct\\_conc\\_id=1195](https://sigarra.up.pt/feup/pt/cnt_cand_geral.concurso_show?pct_conc_id=1195) , until the established deadline.

### 6.2. Required application procedures and documents

Applications must be accompanied by the following documents, under penalty of exclusion:

a) Application form (personal details and declarations), fully completed, dated and signed, in accordance with the compulsory form available at

[https://sigarra.up.pt/up/pt/conteudos\\_geral.ver?pct\\_pag\\_id=1004282&pct\\_parametros=p\\_pagina=1004282&pct\\_grupo=3123&pct\\_grupo=2013&pct\\_grupo=2015&pct\\_grupo=2461#2461](https://sigarra.up.pt/up/pt/conteudos_geral.ver?pct_pag_id=1004282&pct_parametros=p_pagina=1004282&pct_grupo=3123&pct_grupo=2013&pct_grupo=2015&pct_grupo=2461#2461) ;

b) PhD certificate and Habilitation certificate, except for cases corresponding to obtaining a doctorate degree and/or a habilitation degree from 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) Certificate or diploma of communicative competence in Portuguese from the Council of Europe's Common European Framework of Reference for Languages, in the case of candidates of foreign nationality, except those from Portuguese-speaking countries, under the terms of point 2.2. of this notice;

e) Curriculum vitae containing all relevant information for the application assessment, considering the selection and ranking criteria set out in paragraph 4 of this notice, namely information on scientific publications in SCI and/or SCOPUS databases, including journal impact factors and citation indicators, excluding self-citations.

The candidate must structure their CV in such a way as to facilitate the rapid and complete identification of their contribution in the disciplinary area in which the competition is open in each of the sub-sections of point 4.2.;

f) Works mentioned in the curriculum vitae submitted, with candidates being able to highlight up to ten of those they consider most representative of their work;

g) Scientific and pedagogical program describing the research, teaching, and university extension activities that the candidate proposes to carry out as a Full Professor within the disciplinary area of Mechanical Engineering in the field of Applied Mechanics and subfields of Aeronautics and Aerospace.

The Scientific and Pedagogical Program may not exceed 12 A4 pages;

**6.3** - Each document listed in f) of point 6.2. of this notice must be submitted in an individual file and in full

in the Sigarra system. The documents can be integrated into folders with a compressed format (zip, rar, 7z). However, it is necessary to consider the system's limit for uploading, which is set at a maximum of 720 MB per file or compressed folder. Each application can submit several compressed files or folders, each with a limit of 720 MB, and the total number of compressed files/folders submitted is not limited.

**6.4** - To access applications, any documents that can be accessed via links will not be considered, except those that refer to publications with a DOI, although these documents must still be submitted to the Sigarra system, as defined in point 6.3. above.

**6.5** - The documents mentioned in point 6.2. must preferably be submitted in a non-editable format.

**6.6** - Failure to comply with point 6.1. will result in the application being rejected.

**6.7** - Failure to submit or submit after the deadline of the documents referred to in points a) to g) of paragraph 6.2. will result in the application not being accepted.

## **7. Notification of the results and requests for a prior hearing**

**7.1.** 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 the fulfilment or non-fulfilment of the conditions established in the legislation in force and in paragraph 2 of this Notice, and the conditions established regarding the application instructions referred to in paragraph 6.2.

**7.2.** The candidates who have not been admitted administratively, or have not been approved on absolute merit, as well as candidates who appear on the ranked list of candidates in positions that do not allow them to fill 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.

**7.3.** 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.

## **8. Composition of the Selection Committee**

**Chairman: Doctor José Manuel Pereira Dias de Castro Lopes**, Full Professor at the Faculty of Medicine of the University of Porto, Vice-Rector of the same University.

### **Members:**

**Doctor Afzal Suleman**, Full Professor, Department of Mechanical Engineering, Instituto Superior Técnico da Universidade de Lisboa;

**Doctor Jorge Alberto Cadete Ambrósio**, Full Professor, Department of Mechanical Engineering, Instituto

Superior Técnico da Universidade de Lisboa;

**Doctor João Paulo Flores Fernandes**, Full Professor, Department of Mechanical Engineering, School of Engineering, University of Minho;

**Doctor João Manuel Ribeiro da Silva Tavares**, Director of the Department of Mechanical Engineering, Full Professor, Faculty of Engineering, University of Porto;

**Doctor Pedro Manuel Ponces Rodrigues de Castro Camanho**, Full Professor, Department of Mechanical Engineering, Faculty of Engineering, University of Porto.

## **9. 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.

11 June 2024 – The Vice-Rector, Professor José Manuel Pereira Dias de Castro Lopes