

PUBLIC NOTICE

It is hereby publicly announced, by Order of the Rector, Professor Amílcar Falcão, issued on 10/08/2022, the opening of an international selection tender, for the period of 30 working days, starting on the working day following the publication of this Notice in *Diário da República* (Official Journal of the Portuguese Republic). The aforementioned tender consists of 1 position in the career of Scientific Research, in the category of Auxiliary Researcher, under a public employment contract of indefinite duration, in the scientific area of Mechanical Engineering, Electrical and Computer Engineering, Industrial Engineering and Management for the Department of Mechanical Engineering of the Faculty of Sciences and Technology of the University of Coimbra, in accordance with the Statute of the Scientific Research Career, approved by Decree-Law no. 124/99 of 20 April, as amended by Law no. 157/99 of 14 September and Decree-Law no. 373/99 of 18 September, hereinafter referred to as ECIC, by the Regulation for the recruitment, hiring and provision of services of Scientific Research Staff of the University of Coimbra, Regulation no. 810/2021, published in *Diário da República*, 2nd series, No. 168, of 30 August, hereinafter referred to as RRCPSPICUC, and other applicable legislation.

I – Reference, place of work and remuneration:

I.1. Tender reference: IT074-22-11893

I.2. Place of work: University of Coimbra, Department of Mechanical Engineering of the Faculty of Sciences and Technology

I.3. Remuneration: corresponding to the level and index provided for in the table in annex 3 of Decree-Law no. 408/89, of 18 November, in its current wording, without prejudice to legally imposed restrictions.

II – Duties to be performed:

The duties to be performed correspond to the stated in paragraphs 1 and 4 of article 5 of ECIC and no. 1 of art. 7 of RRCPSPICUC.

III – Admission requirements:

III.1. General requirements under the terms of art. 17 of the General Labour Law in Public Functions (LTFP), approved in annex to Law no. 35/2014, of 20th June: to be, on the closing date for the submission of applications, 18 years of age or older; not to be inhibited for the exercise of public functions or prohibited to exercise the public functions that they are proposing to perform; to have the physical robustness and mental profile required to perform their duties and to have fulfilled the mandatory vaccination laws.

III.2. Specific requirements in accordance with article 10, paragraph 1 of the ECIC, and article 25, paragraph 1 of the RRCPSPICUC.

III.2.1. To hold a PhD degree on the closing date for applications, valid in Portugal, in the scientific area for which the tender is open, or in a scientific area considered by the Scientific Council of the Faculty of Science and Technology of the University of Coimbra (FCTUC) to be related to the one for which the tender is open, or in a different scientific area but with a relevant scientific curriculum in

that/those area(s).

or

III.2.2 To be an Auxiliary Researcher of another institution in the scientific area for which the tender is open or in a scientific area considered by the Scientific Council of the Faculty of Science and Technology of the University of Coimbra (FCTUC) as being related to that of the call, or to be an Auxiliary Researcher in a different area but with a relevant scientific curriculum in that/those area(s).

IV – Application process

IV.1. Application procedure: candidates must access and register on the electronic platform **apply.uc.pt** to submit their application, selecting the procedure they wish to apply for.

The application must be submitted exclusively in digital format, in portable document format (pdf), except for the documents mentioned in IV.2.4 and IV.2.6, which may be submitted in other digital formats.

The application is made by filling in the available sections in the electronic platform Apply UC, in "My application".

When formally completing the application, if it shall contain a classified document that reveals a commercial or industrial confidentiality, or a secrecy regarding literary, artistic or scientific property, the candidate shall expressly state such reservations, under penalty of the work in question being freely accessed by any of the other candidates, during the consultation process.

IV.2 Documents to be delivered

IV.2.1. *Curriculum Vitae*, duly dated and signed.

The *Curriculum Vitae* must contain a preamble that includes, if it is the case, the history of all contractual relations of the candidate and respective periods, identifying the category held, the nature of the contract and the scientific area and clearly specifying the employment contract held and the institution where he/she works at the date of the application. It should also include a reasoned synopsis that demonstrates that the candidate holds a specialty appropriate to the scientific area for which the tender is open.

The candidate must also organise his/her *Curriculum Vitae* so as to respond separately to each of the criteria set out in paragraph V. and its sub-paragraphs.

IV.2.2. Copy of qualification certificate.

Applicants who hold a doctoral degree obtained abroad must prove the recognition of the diploma, under the terms of Decree-Law no. 66/2018, of 16th August, under penalty of exclusion. Applicants who are working under a public employment contract at the University of Coimbra are exempt from submitting these documents, provided that these are in their individual file and that they request the

respective exemption.

IV.2.3. Document issued by the Scientific Council of the Faculty of Science and Technology of the University of Coimbra (FCTUC) proving the fulfilment of the requirement foreseen in paragraph III.2, when applicable.

IV.2.4. A separate copy of the 5 a 8 papers that the candidate considers best represent his/her most significant contributions to advance knowledge in the area for which the tender is open; the reasons for their choice should be justified in a separate document.

IV.2.5. Copy of all works/papers mentioned in *Curriculum Vitae*.

IV.2.6. A Scientific project for the next 5 years, with a limit of 5 pages, related to the lines of research in the disciplinary areas for which the competition is open, to which the candidate proposes to devote himself to the context of advanced manufacturing systems, integration of industrial systems, industrial robotic systems and management of industrial processes, complying with the following requirements presentation of the main problems to which the candidate intends to dedicate his/her future research, contextualising them in the current state of the art in these areas; systematised and succinct description of the research strategies that the candidate proposes to adopt, in order to develop his/her research and solve or contribute to solving the problems he/she proposes to solve; explanation of the reasons and motivations of his/her choices.

IV.2.7. Any other elements that the candidate may deem relevant.

IV.3. All application documents listed in IV.2. must be submitted in Portuguese or English, with the exception of those listed in IV.2.5. and IV.2.7. Whenever the original documents mentioned in IV.2.2. and IV.2.4. are in a different language, a translation into Portuguese or English must be provided. Exception is made to Diplomas, when written in Latin, in which case no translation is required.

IV.4. Candidates who are not Portuguese or English native speakers should have language skills at level C1 of the Common European Framework of Reference for Languages (CEFR) in at least one of the two languages.

IV.5. Applications that are not duly completed or do not meet the formal criteria for admission to the competition under the terms defined in the legislation in force and in this announcement shall not be admitted. Submission of any required documentation after the established deadline also determines non-admission to the tender selection.

IV.6. The present tender ceases with the fulfilment of the job positions, or when the positions cannot be totally filled, due to the inexistence or insufficiency of candidates for the prosecution of the tender.

V– Selection methods and evaluation criteria:

V.1. The selection methods to be used are approval in absolute merit and evaluation of the candidates' scientific and curricular background.

V.2. Evaluation of Absolute Merit

V.2.1. Approval on Absolut Merit will be given to candidates who hold a curriculum vitae that the jury

considers adequate for the position to be filled, namely the merit of their scientific and technical work, as well as their professional experience and training, compatible with the category and scientific area for which the tender is open, always taking into account, for this evaluation, the following reference criteria:

- i. Having participated in the conception, development and execution of research projects and/or lines of research of R&D units of the national scientific system or of others;
- ii. Have been responsible for the guidance of work within the scope of projects;
- iii. To have created and/or participated in the development of laboratory infrastructures and/or laboratory prototypes of an industrial nature;
- iv. Be the author or co-author of book chapters, articles in journals or conference papers indexed in the Clarivate Analytics Web of Science, or others of relevant national and international scientific interest, related to the disciplinary area for which the competition is open.

V.2.2. The Jury shall decide on admission or exclusion on absolute merit by roll-call vote, based on compliance or non-compliance with the requirements set out in paragraph V.2.1, and by an absolute majority of votes in favour from among the members present at the meeting.

The members of the jury may include their statement of dissenting vote in a document attached to the minutes.

V.3.Evaluation criteria and parameters

The following should be considered as evaluation criteria: the quality of the candidates' scientific and technical work, professional experience, professional training, contribution to scientific guidance activities, participation in teaching activities and management bodies, community service and the quality of the scientific project, according to the following weighting and parameters;

V.3.1. Quality of the scientific and technical work, with a weighting of 40%, considering the following evaluation parameters:

V.3.1.1. Scientific production: the candidate's contribution to the dissemination of knowledge in the area(s) and/or subarea(s) for which the competition is open, as well as the capacity of the candidates to have, in the future, a highly relevant scientific production at the University of Coimbra, namely through the publication/participation in books, book chapters, articles in scientific journals and proceedings of international conferences of which they were authors or co-authors, considering its nature, impact factor and number of citations, scientific/technological level and innovation, diversity and multidisciplinary, international collaboration, importance of the contributions for the advancement of the current state of knowledge, importance of the works selected by the candidate as most representative and the scientific project presented;

V.3.1.2. Coordination and participation in scientific projects: the candidate's potential and previous experience in participating and coordinating scientific projects submitted to a competitive call, as well as in research teams, in the area(s) and/or sub-area(s) for which the call is open, namely taking into account the territorial scope and dimension, the technological level and importance of the contributions, innovation and diversity, must be considered;

V.3.1.3. Creation and reinforcement of laboratory facilities: the candidate's participation in the creation or reinforcement of laboratory infrastructures, of experimental and/or computational nature, in the area(s) and/or sub-area(s) for which the competition is open, should be considered;

V.3.1.4. Dynamization of the scientific activity: the applicant's participation in national and international research networks, scientific dissemination initiatives, namely through the organisation of international scientific events, in the area(s) and/or subarea(s) for which the competition is open, should be considered;

V.3.1.5. Impact and national and international recognition of the scientific production: the recognition by the international scientific community of the results obtained by the candidates in the area(s) and/or subarea(s) for which the competition is open, taking into account, namely, awards from scientific societies, editorial activities in scientific journals, participation in editorial boards of scientific journals, coordination and participation in programme committees of scientific events, invited lectures at scientific meetings or other institutions, participation as a member of competitive admission scientific societies and other similar distinctions.

V.3.2. Professional experience and training, with a weighting of 5%, considering the following evaluation parameters:

V.3.2.1 Level and adequacy of academic degrees and diplomas or professional qualifications, in the area for which the tender is open;

V.3.2.2. Professional experience of the candidate for the exercise of functions as an Auxiliary Researcher in the area for which the call is open;

V.3.2.3. Orientation, development or participation in training programmes and/or training actions in the area for which the call is open.

V.3.3. Involvement in scientific advisory activities and participation in teaching activities, with a weighting of 10%, considering the following evaluation parameters:

V.3.3.1. Supervision and guidance of students, trainees and research fellows, taking into account the supervision of doctoral students, master's students and undergraduate students,

trainees and research fellows;

V.3.3.2. Vocational training actions, taking into account the participation and coordination of training actions aimed at companies and the public sector, taking into consideration their nature and the results achieved;

V.3.3.3. Pedagogical content, taking into account the publications, software applications and experimental prototypes of pedagogical scope that the candidate has produced or participated in, considering their nature and their impact on the national and international community;

V.3.3.4 Participation in teaching activities: the curricular units that the candidate has coordinated and taught should be considered, considering the diversity, the pedagogical practice and the universe of students.

V.3.4. Participation in management bodies, with a weighting of 5%, considering the following evaluation parameters:

V.3.4.1 Holding positions or functions in bodies of Higher Education Institutions, and in Research Units, considering their nature, duration and responsibility;

V.3.4.2. Performance of temporary positions and tasks, namely editorial activities of international journals, evaluation in scientific programmes, juries of academic tests, juries of competitions and others that have been assigned by the competent management bodies;

V.3.4.3. Performance of other positions, namely those legally considered equivalent to the effective exercise of teaching functions and those carried out in national and international scientific organizations.

V.3.5. Community service, with a weighting of 10%, considering the following assessment parameters:

V.3.5.1. Provision of services and consultancy: integrated in the mission of the University of Coimbra, namely the participation in and implementation of projects, as well as the provision of specialised services, with other institutions or companies; the dimension, diversity, scientific-technological level and innovation of the project must be considered;

V.3.5.2. Intellectual property: namely authorship and co-authorship of patents, models, trademarks or industrial designs, taking into consideration their nature, territorial scope, scientific-technological level and the results obtained;

V.3.5.3 Participation in the preparation of draft legislation and standards: their nature, territorial scope and technological level should be considered;

V.3.5.4. Active participation in obtaining competitive funding for research and development activities;

V.3.5.5. Promotion and/or participation in studies and debates within society with the aim of

diagnosing problems, studying alternatives and defining paths of evolution.

V.3.6. Quality of the scientific project in the area and/or sub-area(s) for which the tender is open, with a weighting of 30%.

VI– Selection process

VI.1. Preliminary meeting

VI.1.1. In the preliminary meeting the Jury will verify the requirements for admission of the applications, prepare the list of admitted and excluded candidates, and proceed to the evaluation in absolute merit, in accordance with the provisions in V.2.

VI.1.2. The list of admitted and excluded candidates shall be notified to the candidates for the purposes of a hearing of interested parties in accordance with the provisions of Article 121 et seq. of the CPA.

VI.1.3. If any allegations are made by the candidates, the Jury will meet to discuss them and the interested parties will be notified of the Jury's decision.

VI.1.4. The list of admitted and excluded candidates shall be approved by the Rector after the conclusion of the preliminary meeting or after the conclusion of the assessment and allegations, should these take place. The Rector may appeal against the ratification decision under the terms of the general law.

VI.2. Evaluation meeting

VI.2. 1. If no candidates are excluded, the Jury also evaluates in the admission meeting the candidates admitted with absolute merit and draws up the final ranking list.

VI.2.2. If during the admission meeting the jury decides to exclude any candidate, after the period for public hearing an evaluation meeting must be held in order to evaluate the admitted candidates and to draw up the final classification list as well as the final report.

VII– Ranking and voting procedure:

VII.1. When the debate on the various candidates has allowed all the members of the jury to establish a ranking of the candidates, each one of them shall present, in a written document, which shall be attached to the minutes, their proposal for the ranking of the candidates, duly founded on the selection methods and criteria and the evaluation parameters set out in the present Notice. In the various votes each member of the jury must respect the ranking he/she presented.

VII.2. The first voting is intended to determine the candidate to be placed first. If a candidate obtains more than half of the votes, he or she is placed first. Should this not be the case, all candidates who had zero votes are removed and the candidate who received at least one

vote in the first voting and received the least votes in the first voting is also removed.

In case there is more than one candidate in the position of least voted with at least one vote, a vote is taken only on those candidates who are tied for last, to decide which to exclude. For this voting, the members of the jury vote for the candidate who is lowest in their ranking and the candidate with the most votes is removed. If in this voting there is a tie between two or more candidates, the President of the Jury decides which candidate will be excluded from among them.

After this exclusion, the first voting will take place again, but only with the remaining candidates. The process is repeated until one candidate obtains more than half of the votes, and is placed first.

VII.3. Once the candidate selected in first place has been withdrawn from the voting, the entire process is repeated for the second place, and so on, until a ranked list is obtained with the number of candidates approved in the selection method.

VII.4. Abstentions are not allowed in jury votes.

VIII– Notification of candidates:

VIII.1. Candidates shall be notified of the list of admitted and excluded candidates and of its approval, of the Draft Final Ranked List, of the Final Report and of the act of approval of the final ranking list, by registered mail and by electronic mail or through electronic notification automatically generated by a system included on a web site belonging to the UC, the electronic platform for the management of tender procedures of the University of Coimbra - Apply UC - with the prior consent of the notifyee, under the terms of no. 5 of art. 26 and no. 3 of art. 27 of the ECIC and no. 4 of art. 27 and no. 3 of art. 29 of the RRCPSPICUC.

VIII.2. Candidates may, if they wish, appeal against the list of admitted and excluded candidates and the final ranking list draft, under the terms set forth in article 121 of the Portuguese Code of Administrative Procedure (CPA). The deadline begins on the date of the announcement's display and publication, under the terms foreseen in no. 8 of article 113 of the CPA.

VIII.3. The full application process can be consulted by the candidates, by appointment, requested by e-mail to the address of the Human Resources Management Service: sgrh@uc.pt.

IX – Jury members:

According to notice no. 16526/2022, published in Diário da República, 2nd Series, no. 163, of 24 August, the selection board is established as follows:



Chairman:

Paulo Eduardo Aragão Aleixo e Neves de Oliveira, Full Professor and Director of the Faculty of Science and Technology of the University of Coimbra

Committee members:

Ana Paula Barbosa Póvoa, Full Professor at the Department of Industrial Engineering and Management of the University of Lisbon, Instituto Superior Técnico;

António Paulo Gomes Mendes Moreira, Associate Professor, Department of Electrical and Computer Engineering, Faculty of Engineering, University of Porto;

Albano Augusto Cavaleiro Rodrigues de Carvalho, Full Professor in the Department of Mechanical Engineering of the Faculty of Science and Technology of the University of Coimbra;

Carlos Alberto Henggeler de Carvalho Antunes, Full Professor in the Department of Electrical and Computer Engineering of the Faculty of Science and Technology of the University of Coimbra;

Cristóvão Silva, Associate Professor with Agregação do Departamento de Engenharia Mecânica da Faculdade de Ciências e Tecnologia da Universidade de Coimbra;

Marta Cristina Cardoso de Oliveira, Associate Professor, Department of Mechanical Engineering, Faculty of Science and Technology, University of Coimbra.

In the event of absences or impediments of the Chair he/she shall be replaced by Luís José Proença de Figueiredo Neves, Full Professor and Vice Rector of the University of Coimbra, whom shall be replaced, likewise, by the Committee member Albano Augusto Cavaleiro Rodrigues de Carvalho, Full Professor in the Department of Mechanical Engineering of the Faculty of Science and Technology of the University of Coimbra.

The present Notice has been drawn up for the record and shall be published in the 2nd series of *Diário da República*, on the Public Employment Pool (BEP), and in Portuguese and English on the online platform Apply UC and EURAXESS Portugal, at <https://www.euraxess.pt/>.

Pursuant to subparagraph h) of Article 9 of the Portuguese Constitution, the Public Administration, as employer, actively promotes a policy of equal opportunities between men and women in access to employment and professional development, and takes action to prevent each and every kind of discrimination.

University of Coimbra,

The Chairman, Paulo Eduardo Aragão Aleixo e Neves de Oliveira