

Public Notice

It is hereby publicly announced, by Order of the Rector, Professor Amílcar Falcão, issued on 16/07/2023, 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, that will be held under a public employment contract of indefinite duration, in the scientific area of Physics, for the Faculty of Science 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 Wage:

I.1. Public Tender reference: IT074-23-12843

I.2. Place of work: University of Coimbra, Faculty of Science and Technology – Physics Department

I.3. Salary: 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 the number 1 and 4 of article 5 of ECIC and numbers 1, 4, 5 and 6 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 the number 1 of the article 10, of the ECIC, and number 1 of the article 25 of the RRCPSPICUC:

III.2.1. To hold a PhD degree on the closing date for applications, valid in Portugal, in the scientific area and subarea for which the tender is open, or in a scientific area considered by the Scientific Council of the Faculty of Science and Technology 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 area.



or

III.2.2. To be an Assistant Researcher of another institution in the scientific area and subarea for which the tender is open or in a scientific area considered by the Scientific Council of the Faculty of Science and Technology 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 area.

IV – Application process

IV.1. Submission: 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.2.5 and IV.2.7, 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 Mandatory documents

IV.2.1. Curriculum Vitae, duly dated and signed and complying with the following instructions:

- 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 Curriculum Vitae must include a Table attesting compliance with the minimum criteria for admission in absolute merit referred to in section V.2.
- In the Curriculum Vitae, candidates must provide evidence, separately, of compliance with each of the criteria listed in section V.3. and their respective sub-sections.

IV.2.2. Copy of qualification certificates.

Applicants who hold a Ph.D. 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 proving the fulfilment of the requirement foreseen in paragraph III.2, when applicable.

IV.2.4. A separate copy of the 2 to 5 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, limited to 5 pages, concerning the lines of research in the disciplinary area for which the tender is open and on which the candidate intends to focus his/her research at the UC, in accordance with the following requirements: presentation of the main issues to which he/she intends to dedicate his/her future research, contextualising them in the current state of the art in these areas; structured and brief description of the research strategies that the candidate proposes to adopt in order to carry out his/her research and solve or contribute to solving the problems he/she proposes to solve; explanation of the reasons and motivations for 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 do not comply with the instructions or that fail to meet the tender's formal requirements, pursuant to the applicable laws and to this Public Notice, shall not be accepted. In the same way, if the required documents or papers are submitted outside the established timeframe, the application shall not be accepted.

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 criteria:

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

V.2. Approval on Absolute Merit

V.2.1. Approval on Absolute 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 considering, for this evaluation, the following reference criteria:

- i. Have participated in the design, development and execution of research projects and/or lines of investigation of R&D units of the national scientific system or others, especially in the area of national and high-performance computing systems (High Performance Computing - HPC). international;
- ii. Having been responsible for guiding work within the scope of projects under his responsibility, especially in the area of national and international HPC systems;
- iii. Have participated in the development of training actions within the scope of research and development methodology, especially in the area of national and international HPC systems, and advanced training in parallel computing techniques and tools, among others, OpenMP and MPI and their most common applications to Computational Physics;
- iv. Be the author or co-author of books, book chapters, articles in indexed journals or others of relevant national and international scientific interest, related to the disciplinary area and subareas for which the competition is open;
- v. Have created and/or participated in laboratory infrastructures to support research, in particular high performance computing infrastructures (High Performance Computing - HPC);
- vi. Have proven experience in science and technology management, namely development of research and innovation and interdisciplinary construction of projects and services, with special emphasis being placed on the integration of teams associated with national or international HPC systems.

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. Assessment criteria and parameters

The following should be considered as assessment 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 25%, considering the following assessment parameters:

V.3.1.1. Scientific production: the candidate's contribution to the dissemination of knowledge in the area for which the tender is open, as well as his/her capacity to contribute, in the future, to 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 the applicants were authors or co-authors, considering their nature, impact factor and number of citations, scientific/technological level and innovation, diversity and multidisciplinary, international collaboration,

importance of the contributions to the advancement of the current state of knowledge, importance of the works selected by the applicant as most representative and the scientific project presented.

V.3.1.2. Co-ordination and participation in scientific projects: the jury should consider the potential and previous experience of the applicant in the participation and co-ordination of scientific projects subject to competitive calls, as well as in research teams, in the area for which the tender is open, namely considering the territorial scope and dimension, the technological level and importance of the contributions, innovation and diversity;

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

V.3.1.4. Promotion of scientific activity: the candidate's participation in national and international research networks, including scientific infrastructures and technologies associated with them, scientific dissemination initiatives, namely through the organisation of international scientific events, in the area for which the tender is open, should be considered.

V.3.1.5. Impact and national and international recognition of scientific production: the recognition by the international scientific community of the results obtained by the candidates in the area(s) and/or sub-area(s) for which the tender is open, namely taking into account 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, guest 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 10%, considering the following assessment 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 to carry out duties as an Assistant Researcher in the area for which the tender is open;

V.3.2.3. Supervision, development or participation in training programmes and/or training sessions within the scope of the area for which the tender is open.

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

V.3.3.1. Activities of follow-up and advising of research work developed by scholarship holders, research interns and research assistants, participating in their training, as well as of supervision of students' theses, namely undergraduate, postgraduate, master's and doctoral students;

V.3.3.2. Collaboration in professional training sessions, namely participation and coordination of training sessions aimed at the public and private sectors, according to their characteristics and the results achieved;

V.3.3.3. Pedagogical content: publications, computer applications and experimental prototypes of a pedagogical nature that the candidate has produced or participated in, and their impact on the national and international community should be considered;

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

V.3.4. Participation in management bodies, with a weighting of 20%, considering the following assessment parameters:

V.3.4.1 Holding positions or duties in bodies of Higher Education Institutions, Research Units and Scientific Infrastructures for Advanced Computing, taking into consideration their nature, duration and responsibility;

V.3.4.2. Holding temporary positions and tasks, namely editorial activities in 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 in other positions, namely those legally considered equivalent to the effective exercise of teaching activities and those carried out in national and international scientific organizations.

V.3.5. Community service, with a weighting of 25%, considering the following assessment parameters:

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

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

V.3.5.3 Participation in the preparation of draft legislation and regulations: 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 improvement paths.

V.3.6. Quality of the scientific project in the subarea for which the tender is open, with a weighting of 10%

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 in due respect for their right to a fair hearing, pursuant to Article 121 of the Código do Procedimento Administrativo [CPA - Code of Administrative Proceedings]

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. Assessment meeting

VI.2.1. If no candidates are excluded, the Jury also evaluates in the assessment 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. After the debate on the candidates towards establishing a final deliberation about the ranking, each member of the Selection Committee will present a written document, which will be attached to the meeting minutes with their individual ranking proposal, based on the selection criteria and evaluation parameters stated in this Public Notice. Throughout the various vote rounds, each member of the Selection Committee must respect their proposed rankings.

VII.2. The first vote round is intended to select the candidate to be ranked in the first place. If a candidate obtains more than half of the votes, they shall be placed in the first position. If this is not the case, candidates with no votes shall be eliminated, as well as the candidate with the least votes, provided the latter obtained at least one vote. In the event of more than one candidate being placed in the last position with only one vote, there shall be a vote to decide whom to eliminate. In this vote round, committee members shall vote on the candidate who had the lowest score according to their individual ranking, and the candidate who obtains the most votes shall be eliminated. If a tie persists between two or more candidates, the Selection Committee Chairman shall decide which candidate should be eliminated.

After this process, the Selection Committee shall vote on the ranking of the remaining candidates. This process is repeated until one of the candidates obtains more than half of the votes for the first place.

VII.3. The candidate placed in the first position shall then be excluded from the next vote round, which shall decide the second place. This process shall be consecutively repeated until all approved candidates are ranked.

VII.4. During the voting of the Selection Committee abstentions are not allowed.

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.2. 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 – Selection Committee:

According to notice no. 14716/2023, published in Diário da República, 2nd Series, no. 151, of 1 July, 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:

Luís Miguel de Oliveira e Silva, Full Professor of the Physics Department of the Instituto Superior Técnico of the University of Lisbon;

Ricardo Fonseca, Full Professor at the Department of Information Sciences and Technologies at ISCTE - Instituto Universitário de Lisboa;

António Joaquim Onofre Abreu Ribeiro Gonçalves, Associate Professor with Aggregation of the Department of Physics at the University of Minho;

Maria Leonor Nunes Ribeiro Cruzeiro, Associate Professor with Aggregation of the Department of Physics at the University of Algarve;

Maria Constança Mendes Pinheiro da Providência Santarém e Costa, Full Professor of the Physics Department of the Faculty of Science and Technology of the University of Coimbra;

Pedro Almeida Vieira Alberto, Associate Professor with Aggregation of the Physics Department of the Faculty of Science and Technology of the 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 Maria Constança Mendes Pinheiro da Providência Santarém e Costa, Full Professor of the Physics Department 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 Chairmain, Paulo Eduardo Aragão Aleixo e Neves de Oliveira



