

PUBLIC NOTICE

I publicly announce that, by the Rector of the University of Coimbra, Professor Doutor Amílcar Falcão, order of 25/01/2025, an international tender to fulfill 1 (one) vacancy for the position of Assistant Researcher in the scientific areas of Mechanical Engineering and related areas is hereby open for 30 (thirty) working days following the publication of the present notice in Diário da República [Official Journal of the Portuguese Republic]. The stated position will be held under a public service employment contract of unspecified duration at the Faculty of Science and Technology of the University of Coimbra.

This international tender shall be conducted pursuant to the *Estatuto da Carreira de Investigação Científica* [Career of Scientific Research Statute] in its latest version, hereinafter referred to as ECIC, and *Regulamento de Recrutamento, Contratação e Prestação de Serviço de Pessoal de Investigação Científica da Universidade de Coimbra* [Regulation on the Recruitment, Hiring and Service Providing of Scientific Staff of the University of Coimbra], Regulation Nr. 810/2021, of 30 August, hereinafter referred to as RRCPSPICUC, as well as further applicable legislation.

Under the terms of paragraph 1 of article 10 of the ECIC, the Scientific Board considers the following scientific areas as related areas to those for which the tender was opened: Materials Engineering and Chemical Engineering

I – Reference and Place of Work:

I.1. Public tender reference: IT074-25-14999

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

I.3. Salary: 3.501,28€, corresponds to the rank and index referred in the table in Annex 3 to Decree-Law nr. 408/89, of November 18, in its current version, without prejudice to legally imposed restrictions.

II – Functional content:

The functional content is that corresponding to the stipulations in article 5 paragraph 1 and 4 of the ECIC, and article 7, paragraph 1 and 4 of the RRCPSPICUC.

III – Admission Requirements:

III.1. General requirements: Applicants shall be at least 18 years of age or older, not be inhibited to holding a job in the public sector nor forbidden to perform the intended position; applicants shall also be in good health and possess the psychological profile required for the job and shall meet the compulsory vaccination requirements.

III.2. At the time of application, applicants shall fulfill, the special admission requirements set forth in article 10, paragraph 1 of the ECIC and article 25, paragraph 1 of the RRCPSPICUC.

Individuals holding a PhD degree in the scientific area of the tender or in scientific areas considered by the scientific board to be related to that for which the tender is open, or those who, although holding a PhD in a different area, have a relevant scientific curriculum in those areas, as well as;

Assistant researchers from another institution, in the scientific area of the tender or in scientific areas considered by the scientific board to be related to that for which the tender is open, or those who, although from a different area, have a relevant scientific curriculum in those areas.

III.3. If the candidate's PhD is not in the scientific area of the procedure, nor in the area(s) previously defined as related (if any), the candidate is admitted if he/she presents proof that requested from the Scientific Council of the Faculty of Science and Technology of the University of Coimbra a document certifying:

- that the scientific area in which he/she has an academic qualification is also considered as a similar area to the one put up for tender procedure; or
- that the scientific area in which the candidate provided services is considered to be a related area of the one put up for tender procedure.

IV – Application:

IV.1. Submission: candidates must access and register on the electronic platform **apply.uc.pt**, to submit the application, selecting the procedure to which they intend to apply.

The documents included in the application are exclusively in digital portable document format (pdf), with the exception of the documents referred in IV.2.4. and IV.2.6., which can be delivered in other digital formats.

The application submission is carried out by completing the sections available on the Apply UC electronic platform, under “My application”.

If the Scientific project or any of the works/papers submitted contains classified information, revealing trade or industrial secrets or literary, artistic or scientific property secrets, candidates must select that option, available on the platform for each document; otherwise, those works/papers can be freely accessed by any of the other applicants when consulting the tender records.

Candidates can highlight in their CV periods of suspension of professional activity for socially protected reasons, namely, for reasons of parental leave, prolonged serious illness, and other legally protected situations of unavailability for work, always attaching supporting documents, and the jury must ensure that their evaluative judgment is not influenced by these pauses.

IV.2 Mandatory documents to be delivered:

IV.2.1. Curriculum Vitae duly dated and signed

The Curriculum Vitae shall include a foreword with the candidate’s full professional background in higher education institutions, when applicable, with reference to category, field or scientific area, identification of the higher education institution in which the candidate has exercised functions, type and length of the contract, specifying the position and type of contract held at the time of application. The foreword shall also include a summary clearly demonstrating that the candidate specialises in the scientific area or related areas for which this tender is open.

The candidate's Curriculum Vitae shall be structured to separately respond to the different items listed below in section V.

IV.2.2. Copy of qualification certificates. Opponents selected for the position(s) to be filled who hold a foreign doctoral degree must present the recognition or registration (as applicable) of their degree at the time of contract signing, in accordance with Decree-Law No. 66/2018, dated August 16th, under penalty of exclusion. If the recognition is requested at the University of Coimbra, it will cover the costs of the recognition or registry for the candidate(s) who will be hired, and the candidate(s) are exempt from paying the fee until the final ranking. You can find more information at the following link: <https://www.uc.pt/academicos/graus/reconhecimentos>

The candidates who hold a public service employment contract with the University of Coimbra may be exempt from the qualification certificates submission. To this end, they must select this option on the platform, stating that they are already in their individual process.

IV.2.3. Separate copy of the 5 (five) of the candidate's most relevant works/papers that have contributed to the development of the scientific area or related areas for which this tender is open, and justified, in a separate document, the reasons for this choice.

IV.2.4. Copy of all works/papers mentioned in the Curriculum Vitae.

IV.2.5. Scientific project for the next 5 years, with a limit of 5 pages, related to the research lines in the scientific area or related areas for which this tender is open to which the candidate proposes to dedicate himself in the UC, obeying the following requirements: Presentation of the main problems to which the candidate intend to dedicate the future research, contextualizing them in the current state of the art in these field; Systematic and succinct description of the research strategies that the candidate proposes to adopt in order to develop his research and solve or contribute to the resolution of the problems he has mentioned; Explanation of the reasons and motivations for his choices.

IV.2.6. Any other information considered relevant by the candidate.

IV.2.7. Document mentioned in point III.3., if applicable.

IV.3. All application documents above indicated in IV.2 shall be submitted in Portuguese or English, exception made to those mentioned in IV.1.2.4 and IV.2.6, which may be submitted in a different language. If the original documents mentioned under IV.2.2 and IV.2.3 are written in a language other than Portuguese or English, candidates are required to include a version in one of those languages. Exception is made to Diplomas, when written in Latin, in which case no translation is required.

IV.4. Applicants, who are non-native speakers of either Portuguese or English, shall attest their proficiency at level C1 of the Common European Framework of Reference for Languages (CEFR) in, at least, one of those 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 occupation of the position, or, when the position cannot be totally occupied, due to the inexistence or insufficiency of candidates to continue this tender.

V – Selection methods and 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 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 or related areas for which the tender is open, always taking into account, for this evaluation, the following reference criteria:

1. Have participated in the conception, development and execution of 1 (one) or more research projects, corresponding to the management of at least €45,000 of competitive funding, as Principal Investigator (PI) or responsible person at the Participating Institution, in the scientific area or related areas for which the tender is open;
2. Have supervised or be supervisor at least 1 (one) doctoral student in the scientific area or related areas for which the tender is open;
3. Be the author or co-author of at least 15 (fifteen) articles in the scientific area or related areas for which the tender is open, indexed in the Science Citation Index Expanded of the Web of Science of Clarivate Analytics as document type = article or document type = review or in SCI Verse of SCOPUS with the same characteristics, in the last 5 (five) years.

Candidates must fulfill all of the above criteria.

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.

V.3. Assessment of scientific and curricular background

For the assessment of the scientific and curricular background of the candidates, the following evaluation criteria should be considered: 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.

V.3.1. Quality of the scientific and technical work, with a weighting of 50%, considering: the candidate's contribution to the dissemination of knowledge in the scientific area or related areas for which the tender is open, as well as the candidate's ability to have a very relevant scientific production at the University of Coimbra in the future, namely through the publication/participation in books, book chapters, scientific journal articles and international conference proceedings of which the candidate was author or co-author, considering their nature, impact factor and number of citations, scientific/technological level and innovation, diversity and multidisciplinary, international collaboration, the importance of the contributions to the advancement of the current state of knowledge in the areas of computational mechanics, production and processing of materials, synthesis of coatings and thin films, manufacturing processes, robustness and optimization in mechanical modelling, advanced materials characterization.

Is also considered the importance of the works that were selected by the candidate as most representative and the scientific project presented, the candidate's potential and previous experience in participating and coordinating projects subject to competition on a competitive basis, as well as in research teams, in the scientific area or related areas for which the tender is open, namely taking into account the territorial scope and its dimension, the technological level, the interdisciplinary dimension, and the importance of contributions, innovation and diversity.

It will be valued the participation by the candidate in the creation or reinforcement of laboratory infrastructures of an experimental and/or computational nature to support research, and in national and international research networks, scientific dissemination initiatives, namely through the organisation of international scientific events in the scientific area or related areas for which the tender is open.

Finally, will be taken into account the recognition by the international scientific community of the results obtained by candidates in the scientific area or related areas for which the tender is open taking into account, in particular, 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, membership of scientific societies with competitive admission and other similar distinctions.

V.3.2. Professional experience and training, with a weighting of 5%, considering: the level and adequacy of academic degrees and diplomas or professional qualifications, in the scientific area or related areas for which the tender is open; the professional experience of the candidate to carry out duties as an Assistant Researcher in the scientific area or related areas for which the tender is open; the supervision, development or participation in training programmes and/or training sessions within the scope of the area and/or sub-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: 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; 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; the 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; the courses units that the candidate has coordinated and taught, considering the diversity, the pedagogical practice and the students' background.

V.3.4. Participation in management bodies, with a weighting of 5%, considering: holding positions or duties in bodies of Higher Education Institutions, and in Research Units, taking into consideration their nature, duration and responsibility; 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; performance in other positions, namely those legally considered equivalent to the effective exercise of researching activities and those carried out in national and international scientific organizations.

V.3.5. Community service, with a weighting of 10% considering: the 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, taking into account diversity,

scientific-technological level and innovation; authorship and co-authorship of patents, models, trademarks or industrial designs, considering their nature, territorial scope, scientific and technological level and the results obtained; the participation in the preparation of draft legislation and regulations considering their nature, territorial scope and technological level; active participation in obtaining competitive funding for research and development activities; 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 area and/or sub-area(s) for which the tender is open, with a weighting of 20%: the scientific project should present the main topics that will be the focus of future research, contextualizing them in the current state of the art in the areas of computational mechanics, production and processing of materials, synthesis of coatings and thin films, manufacturing processes, robustness and optimization in mechanical modelling, advanced materials characterization; systematically and succinctly describe the research strategies to be adopted in order to carry out research and solve or contribute to solving the questions posed; explain the reasons and motivations for the choices.

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.

VI.1.2. If there are no excluded candidates, at the preliminary meeting the jury also evaluates the candidates.

VI.1.3. 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.1.4. 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.1.5. 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 if these take place. The candidates may appeal against the ratification decision under the terms of the general law.

VI.2. Evaluation meeting

VI.2.1. If, at the preliminary meeting, the jury decides to exclude some candidates, the evaluation meeting is held after the period for the hearing of interested parties and approval of the list of admitted and excluded candidates.

VI.2.2. In the evaluation meeting, the jury starts by deciding on the approval of candidates on absolute merit, under the terms of point V.2. It then proceeds to evaluate the candidates admitted on absolute merit and prepares the final ranking list.

VI.3. The assessment of the scientific and curricular background may be complemented by an interview for all candidates, whenever the jury so decides. The interview does not constitute a selection method and is not graded. It is intended solely to obtain clarification or explanation of elements contained in the candidates' CVs.

VII – Ranking and voting methods:

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 assessment criteria 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. – Final Report

The Jury draws up a Final Report, signed by all its members, which contains the results of the tender.

IX. Notification of the candidates:

IX.1. The candidate(s) will be notified of the list of admitted and excluded candidates and its approval, of the Draft Final Ranking List, of the Final Report and of the act of approval of the Final Report, by registered letter, by email, by notice or by electronic notification automatically generated by a system incorporated into an electronic site belonging to the UC, on the electronic platform for the management of competitive procedures of the University of Coimbra, Apply UC, with the prior consent of the notifying party, under the terms of Article 26 paragraph 5 and Article 27, paragraph 3 of the ECIC, and Article 27, paragraph 4 and Article 29, paragraph 3 of the RRCSPICUC.

Candidates may, if they wish, within 10 working days, 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 time limit begins on the day following notification, under the terms of article 87 of the CPA.

IX.2. The administrative records of the tender may be consulted by the candidates, upon previous appointment, requested by e-mail sent to the Human Resources Management Service's e-mail address: sgrh@uc.pt.

X. Selection Committee:

According to Notice nr. 3092/2025/2, published in Diário da República, II Série, nr. 23, of 03 February, the Selection Committee is constituted as follows:

Chairman:

Edmundo Heitor da Silva Monteiro, Full Professor and Dean of Faculty of Science and Technology of the University of Coimbra

Committee members:

Nuno Manuel Fernandes Alves, Coordinator Professor at School of Technology and Management of Instituto Politécnico de Leiria;

José Luís de Carvalho Martins Alves, Full Professor at Department of Mechanical Engineering of School of Engineering of University of Minho;

Maria Amélia Martins de Almeida, Associate Professor at Department of Chemical Engineering of Instituto Superior Técnico of University of Lisbon;

Gabriela Tamara Vincze, Associate Professor at Department of Mechanical Engineering of University of Aveiro;

Marta Cristina Cardoso de Oliveira, Associate Professor with "Agregação" at Department of Mechanical Engineering of Faculty of Science and Technology of the University of Coimbra;

Bruno Miguel Quelhas de Sacadura Cabral Trindade, Associate Professor at Department of Mechanical Engineering of Faculty of Science and Technology of the University of Coimbra.

In the event of absences or impediments of the Chairman he shall be replaced by Luís José Proença de Figueiredo Neves, Full Professor and Vice-Rector of University of Coimbra whom shall be replaced, likewise, by the Committee member Marta Cristina Cardoso de Oliveira, Associate Professor with "Agregação" at Department of Mechanical Engineering of Faculty of Science and Technology of the University of Coimbra;

This Public Notice will be published in Portuguese in Diário da República, 2nd Series, on the website Bolsa de Emprego Público (Governmental Public Employment Portal) and in two daily newspapers with national circulation, as well as in both Portuguese and English at Apply UC (apply.uc.pt) and on the EURAXESS Portugal Portal, at <http://ec.europa.eu/euraxess/>.

Pursuant to subparagraph h) of Article 9 of the Portuguese Constitution, the University of Coimbra, 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 and encouraging underrepresented minorities in each area to apply.

Therefore, no one can be privileged, benefited, harmed or deprived of any right or immune from any duty on account of, in particular, ancestry, age, sexual orientation, gender, marital status, family, economic situation, education, origin or social condition, 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.

The University of Coimbra also promotes measures to facilitate worklife balance, recognizing the efforts of workers and promoting motivation.

The job profile of this competitive procedure corresponds to the application to the FCT-Tenure program with the reference 2023.15623.TENURE.147, in the scientific domain of Engineering and Technology Sciences, in the scientific area of Mechanical Engineering, scientific subarea of Mechanical Engineering, whose goal, in short, is the development of work in Computational mechanics, Production and processing of materials, Synthesis of coatings and thin films, Manufacturing

processes, Robustness and optimization in mechanical modelling, Advanced materials characterization, on CEMMPRE (Centre for Mechanical Engineering, Materials and Processes).

Therefore, the selected candidate must be assigned teaching service, for a maximum of 4 hours per week, as provided for in the aforementioned FCT-Tenure program, since he/she meets the eligibility conditions within the scope of the aforementioned program, and for the time corresponding to the respective funding.

To the current tender shall apply PhD researchers who perform or have performed functions in the University of Coimbra in the scientific area or related areas of this tender and are covered by the transitional regime provided in Decree-Law nr. 57/2016, of 29th august, in its latest version, as well as further applicable legislation.

University of Coimbra,

The Chairman,

Marta Cristina Cardoso de Oliveira