

1. By my order of 17th August 2023, under a proposal of the Scientific Counsel of the Centre for Rapid and Sustainable Product Development – CDRSP, it is open by a period of 30 working days, from the date of publication of this notice in the Diário da República, an international public tender for an auxiliary researcher, the procedure is for a contract of employment in public functions for an indefinite period, for the scientific research career, category auxiliary researcher, in exclusive dedication, in the scientific area of Mechanical Engineering - specific area of additive manufacturing, and in view to the development of research activities in the Research Unit CDRSP - Centre for Rapid and Sustainable Product Development of the Polytechnic Institute of Leiria (from now on referred to as the Polytechnic of Leiria), as determined by the articles 9, 11 and 15 of Decree-Law no. 124/99 of April 20, which approved the Career Statute Scientific Research, hereinafter referred to as ECIC.

2- By Joint Order No. 373/2000, dated March 31, of the Minister for Reform of the State and Public Administration and the Minister for Equality, it is establishes the obligation of mentioning in entry and access competitions the following statement: "In compliance with Article 9 (h) of the Constitution, the Public Administration, as an employer, actively promotes a policy of equal opportunities for men and women in accessing employment and professional advancement, scrupulously any form of discrimination".

3 - Employment quota: According to Decree-Law no. 29/2001, of February 3, the disabled candidate has a preference in equal classification, which prevails over any other legal preference. Candidates must declare in the application form, in addition to the media/expression to be used in the selection process, under an honour commitment, the respective degree of disability, and the type of disability, and the means of communication/expression to be used in the selection process, in accordance with the above mentioned diploma.

4 - Scientific area. Related scientific areas. Category, career and institution

4.1 - The scientific area of the present competition is Mechanical Engineering - specific area of additive manufacturing.

4.2 - The present competition is open to contract for employment in public functions, by the Polytechnic of Leiria, of an auxiliary researcher, category of research career provided for in article 4 (a) of the ECIC.

5 - General and special admission requirements

5.1 - General requirements - those defined in article 17 of the General Labor Law in Public Functions (LTFP), approved by Law no. 35/2014 of June 20.

5.2 - Specific requirements - those defined in article 10 of the ECIC and taking into account the scientific areas and related scientific areas considered by the Scientific and I Council, can only be admitted to it:

5.2.1 - Individuals who hold a doctoral degree in the scientific area of Mechanical Engineering - specific area of additive manufacturing and and those who, although of diverse area, have a scientific curriculum whose merit the jury considers to be level compatible with the scientific area of the competition. If the doctorate has been conferred by a foreign higher education institution, it must comply with the provisions of Decree-Law no. 66/2018, of August 16.

5.2.2 – Auxiliary Researcher from another institution, from the scientific area of the contest or scientific areas considered by the Scientific Council as related, and those who, although of

diverse area, have a scientific curriculum whose merit the jury considers to be level compatible with the scientific area of the competition.

#### 6- Compensation. Work conditions

6.1 - The remuneration is that of the position of the single salary scale equivalent to the salary that was due to the index 195 of the 1st level of the category of Auxiliary Researcher, as mentioned in Annex I of the ECIC, unless the candidate declared as winner of this contest, having already been hired in public service in this category by another institution, receives a higher remuneration.

7- Functional content: the Auxiliary Researcher must carry out, on a regular basis, research and development activities and all other scientific and technical activities included in the mission of CDRSP and included in article 5, paragraph 1, of the ECIC:

- a) To participate in the design, development and execution of research and development projects and related scientific and technical activities;
- b) To guide the work carried out in the context of the projects under its responsibility;
- c) Collaborate in the development of training actions within the research and development methodology;
- d) To monitor the research work carried out by the fellows, research trainees and research assistants and participate in their training;
- e) Orient and participate in training programs of the institution.

#### 8 - Place of work. Type of contest. Number of places to fill. Period of validity of the competition

8.1 - The place of work is located in the CDRSP premises, located in Marinha Grande, or in other places connected to the Polytechnic of Leiria, or others, according to the requirements and needs to the mission of CDRSP.

8.2 - This present procedure is, in accordance with Article 9 (a) and Article 10 (2) of the ECIC, a documentary competition that will constitute an assessment of the candidates' curriculum vitae and scientific work, and the Jury, under the terms of no. 2 and 3 of Article 10, may decide to conduct an interview to obtain clarification or to explain elements contained in the curricula of admitted candidates.

8.3 - The number of places to fill is one.

8.4 - The contest is valid until it is hired in public functions by the Polytechnic of Leiria the candidate who was declared the winner.

#### 9- Jury of the contest.

9.1 - Composition: The Jury of this competition, which will be chaired by the President of the Polytechnic of Leiria, Professor Doutor Carlos Manuel da Silva Rabadão, and the following Professors will be part of the jury:

Nuno Manuel Fernandes Alves, Professor Coordenador do Departamento de Engenharia Mecânica da Escola Superior de Tecnologia e Gestão do Instituto Politécnico de Leiria;

Albano Augusto Cavaleiro Rodrigues de Carvalho, Professor Catedrático, Departamento de Engenharia Mecânica, Faculdade de Ciências e Tecnologia da Universidade de Coimbra;

Cândida Maria dos Santos Pereira Malça, Professora Coordenadora do Departamento de Engenharia Mecânica do Instituto Superior de Engenharia de Coimbra, Instituto Politécnico de Coimbra;

Fátima Maria Carvalhinhos Barreiros, Professora Coordenadora do Departamento de Engenharia Mecânica da Escola Superior de Tecnologia e Gestão do Instituto Politécnico de Leiria.

Substitutes:

António Pedro Rodrigues Aguiar, Professor Catedrático do Departamento de Engenharia Eletrotécnica e Computadores, da Faculdade de Engenharia da Universidade do Porto;

Maria Leopoldina Mendes Ribeiro Sousa Alves, Professora Coordenadora do Departamento de Engenharia Mecânica da Escola Superior de Tecnologia e Gestão do Instituto Politécnico de Leiria.

9.2 - The jury will respect the rules of operation established in the ECIC.

9.3 - The jury, at its 1st meeting, held on October 13th, 2023, approved the criteria for approval in absolute merit of the candidates and evaluation parameters, ranking and final classification of successful candidates on absolute merit, which are mentioned below.

10 - Selection method and evaluation criteria:

10.1 - The methods of selection of the candidate, in terms of article 10 of the ECIC, will be:

Assessment of curriculum vitae (CV);

Scientific work of candidates.

10.2 – Approval on absolute merit: Candidates will be considered approved on absolute merit if they cumulatively prove that the following requirements have been met:

on the basis of the curriculum vitae submitted, the Jury considers that they have the necessary ability to perform the duties of an Assistant Researcher in the scientific area in which the competition is open;

authors of at least 3 scientific articles (first or second quartile - Q1/Q2) published in Scopus indexed journal(s) in the last 5 years;

h-index value (Scopus) of no less than 5;

a total of at least 175 citations (Scopus).

10.3 - Ranking of successful candidates on absolute merit: In accordance with Article 16 (3) of the ECIC, the following factors shall be considered and weighted:

C1) Integrated assessment of scientific production over the last five years, taking into account books, book chapters, articles in scientific journals and international conference proceedings of which the candidates were authors or co-authors, 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 and the importance of the works that have been selected by the candidates as most representative, namely in terms of their contribution to the development and evolution of the scientific area for which the competition is open;

C2) Assessment of applied or practice-based research activities, taking into account i) the coordination/participation in scientific projects by candidates, subject to competitive tendering, considering the territorial scope and size, the technological level and importance of the contributions, innovation and diversity; ii) the creation and reinforcement of laboratory resources, taking into account the participation and/or coordination of initiatives by candidates that have resulted in the creation or reinforcement of laboratory infrastructures of an experimental and/or computational nature to support research; and iii) the dynamisation of scientific activity, taking into account the capacity for coordination and leadership of research teams demonstrated by candidates;

C3) Evaluation of outreach and knowledge dissemination activities over the last five years, namely the impact and national and international recognition of scientific production, taking into account i) awards, editorial activities in scientific journals, participation in editorial boards

of scientific journals, participation in scientific and technical meetings, participation in the organisation of scientific events, and participation as a member of scientific societies with competitive admission; ii) participation in monitoring and mentoring activities (students, interns and research fellows) and participation in training programmes and/or training actions; iii) management of competitively-funded projects; iv) participation in and/or provision of specialised services with other institutions or companies, taking into account the size, diversity, scientific-technological level and innovation; v) participation in and/or preparation of technical-scientific reports; vi) intellectual property, namely authorship and co-authorship of patents, models, trademarks or industrial designs, taking into account their nature, territorial scope and scientific-technological level; and vii) active participation in research, promotion, preparation, organisation and support in preparing applications for competitive funding;

C4) Evaluation of activities in the management of science, technology and innovation programmes, or of experience in observing and monitoring the scientific and technological system in Portugal or abroad;

C5) Evaluation of the scientific project for the next 3 years, extendable to 6 years, with a limit of 5 pages, relating to the lines of research in the disciplinary area for which the competition is open, to which the candidates propose to dedicate themselves at the CDRSP-IPLeiria.

The weight of each of the sub-criteria defined above will be as follows: C1) - 35%; C2) - 35%; C3) - 10%; C4) - 5% and C5 - 15%. Candidates will be ranked by the assessment of their scientific and curricular background (APCC) quantified by the following expression:

$$APCC = C1 \times 0,35 + C2 \times 0,35 + C3 \times 0,10 + C4 \times 0,05 + C5 \times 0,15$$

The grading system for the assessment criteria - C1) to C5) -, as well as the final classification system for candidates will be expressed on a scale of 0 to 100 points, with all results rounded up to the nearest tenth.

10.4 - The assessment mentioned in points C1), C2), C3), C4) and C5) may be supplemented by an interview with the candidates, whenever the selection board so decides. The interview does not constitute a selection method and is not graded. Its purpose is to obtain clarification or explanation of elements contained in the candidates' CVs.

10.5 - The jury deliberates by means of a nominal vote based on the selection criteria adopted and published, and abstentions are not allowed. The President of the jury will only vote in case of a tie.

10.6 – Under the terms and for the purposes set out in Article 19(3) of the Statute of the Scientific Research Career (ECIC), once the final classification has been obtained, if there is an equality of scores between candidates, the President of the Jury, using the powers conferred on him by that provision, will consider the following tie-breaking criteria, to be applied successively:

Best overall score obtained in criterion C1) - Integrated assessment of scientific production over the last five years. If there is still a tie, the best overall score in criterion C2) - Evaluation of applied or practice-based research activities will be considered.

10.7 - Minutes of the jury meetings are drawn up, containing a summary of what has taken place in them, as well as the votes cast by each of the members and the respective reasons, being offered to the candidates whenever requested.

10.8 - Upon completion of the application of the selection criteria, the jury will draw up an orderly list of successful candidates with their classification.

10.9 – Notification of the lists of admitted and excluded candidates and the final ranking: Candidates will be notified by e-mail, with receipt of delivery of the communications, in compliance with article 14 of the CPA. To this end, candidates must indicate in their application file a valid e-mail address to which all communications and notifications that may be sent to them under the conditions laid down in this competition and in the ECIC will be sent.

11 - Formalization of applications:

11.1 - Applications are formalized by request, available on the electronic page of the Polytechnic of Leiria (<https://www.ipleiria.pt/recursos-humanos/concursos/>), addressed to the President, and the application must include:

- The reference of this notice;

- Full name, number and date of the identity card, tax identification number (if existing), date of birth, profession, residence and contact address, including e-mail and telephone contact.

11.2 The application must be accompanied by the documents proving the conditions laid down in paragraphs 5 for admission to this call, namely:

- a) Copy of the doctoral certificate or diploma;

- b) Copy of the PhD Thesis;

- c) A detailed curriculum vitae, structured in accordance with the items in this notice. The CV must also include a reasoned synopsis demonstrating that the candidates have a speciality appropriate to the scientific area for which the competition is open and adequate experience in carrying out Research, Development (R&D) and Project Management (R&D) activities with competitive funding in the scientific area for which the competition is open;

- d) A separate copy of the 5 papers that the candidates consider to best represent their most significant contributions to the advancement of knowledge in the area for which the call is open, and which should show, in particular i) scientific relevance through 3 scientific articles (first or second quartile - Q1/Q2) in Scopus indexed journal(s) in the last 5 years, ii) contribution to the development of new laboratory equipment and/or the installation of new laboratories, and iii) participation in the organisation/support of competitive funding applications, with a separate document justifying the reasons for the choices made;

- e) Scientific project for the next 3 years, extendable to 6 years, with a limit of 5 pages, related to the lines of research in the disciplinary area for which the competition is open, to which the candidates propose to dedicate themselves at the CDRSP-IPLeiria;

- h) Other documents considered by the candidate as relevant.

11.3 - The candidates present their applications and supporting documents in digital format, in PDF format, in Portuguese or English to the e-mail address [ipleiria@ipleiria.pt](mailto:ipleiria@ipleiria.pt), or in person at Rua General Norton de Matos, Leiria, during the normal business hours (09.30 to 12.30 and 14.00 to 17.00); or,

- By registered mail and with notice of receipt, until the deadline set, for Rua General Norton de Matos, section 4133, 2411-901 Leiria.

11.4 - Candidates who formalize their candidacy incorrectly or who do not prove the requirements required in this contest are excluded from admission to the competition.

Candidates who fail to submit their statements and copies of the documents entered in the CV will also be excluded from the competition. The jury has the power to require any candidate, in cases of doubt, to present documents proving their statements.

11.5 - The false statements made by the candidates will be punished according to the law.

11.6 - Publication of the unitary list of final ordering of candidates: the unitary list of final ordering of candidates, after homologation, is published in the 2nd series of the Diário da República, affixed in the Central Services of the Polytechnic of Leiria and available on its electronic page, at [www.ipleiria.pt](http://www.ipleiria.pt).

12 - Publication of the Notice: Under the terms of article 24 (1) of the ECIC, this notice will be advertised in two daily national newspapers, at the Public Employment Exchange at [www.bep.gov.pt](http://www.bep.gov.pt), on the Euraxess website <http://www.euroaxess.pt/>, and on the electronic page of the Polytechnic of Leiria <https://www.ipleiria.pt/recursos-humanos/concursos/>.

Leiria, 24 de outubro de 2023. O Presidente, Carlos Manuel da Silva Rabadão