



NOTICE FOR THE OPENING OF AN INTERNATIONAL SELECTION TENDER PROCEDURE FOR THE HIRING OF A DOCTORAL RESEARCHER UNDER THE LEGAL REGIME OF SCIENTIFIC EMPLOYMENT

CTTI-PI-32/25-Lab2PT(2)

Doctor Rui Manuel Costa Vieira de Castro, Professor and Rector of Universidade do Minho, in the use of his own competence, in accordance with the terms of subsection d) of section 1 of article 92 of Law no. 62/2007, from September 10th and subsection d) of section 1 of article 37 of the Statutes of Universidade do Minho, approved by Normative Order no. 15/2021, published in *Diário da República*, 2nd series, no. 115, of June 16th, makes it known that, for a period of 10 working days counting from the business day immediately after the date on which this notice is published, an international selection tender is open for recruitment, in the form of an uncertain term contract celebrated under the Labour Code, of 2 (two) doctoral researcher positions of initial level under private law, for the exercise of scientific research activities, in the scientific area of Civil Engineering, subarea of Architectural Engineering), within the scope of the project FORMA – Fabrication Oriented for Architectural Resilience and Modularity, ref. NORTE2030-FEDER-02698300, financed by the European Regional Development Fund (ERDF), with a view to the development of R&D activities, namely: to participate in the development and execution of R&D projects and in related scientific and technical activities; monitor the work carried out within the scope of the projects under his/her responsibility; collaborate in the development of training actions within the scope of the R&D methodology; monitor the research work carried out by the scholarship holders, research interns and research assistants and participate in their training; collaborate in teaching and participate in the institution's training programs; guide higher education students, namely undergraduate, master's and doctoral students; perform the functions so that they have been elected or appointed in the bodies of the institution to which they belong.

1. **Applicable Legislation:** This tender, open by Decree of 20/10/2025, by the Rector of Universidade do Minho, is governed by the provisions of Decree Law No. 57/2016, of August 29th, amended by Law No. 57/2017 of July 19th, which approved a hiring regime of doctorates aimed at stimulating scientific and technological employment in all areas of knowledge, by the Regulation of Scientific Employment (RSE), by the *Regulamento da Carreira, Recrutamento, Contratação e Avaliação do Desempenho do Pessoal Investigador em Regime de Direito Privado da UMinho* (RPI-UM), amended and republished by the Rectoral Order RT-10353/2022, published in the *Diário da República*, Series II, No. 163, of the 24th of August 2022, and other applicable laws and regulations.
2. **Place of Work:** The work placement is located at the University of Minho facilities.
3. **Monthly salary:** The salary to be attributed is 2.351,53€, corresponding to the remuneration level 10 included in the annex 1 of the RPI-UM.
4. **Eligibility Criteria:** Any national, foreign and stateless candidates who hold a doctoral degree in the field of knowledge / specialty that shows an appropriate profile for the activities to be developed.

Opponents of this tender with qualifications obtained abroad must prove the recognition, equivalence or registration of the doctoral degree, under the terms of the applicable legislation. This formality must be completed by the signing date of the contract.

- 4.1. General admission requirements are those defined in point 4. For the purpose of determining the appropriate profile for the activity to be developed, the following are special requirements:
 - a) Proven experience in the scientific area of this international selection tender of at least 1 year.
 - b) CV with scientific activity in the competition's scientific subarea, namely with regard to the integration of digital tools for the development of reversible modular construction systems. In particular, candidates must demonstrate experience in at least three of the following topics:
 - Digital fabrication and robotics, with emphasis on additive manufacturing of cementitious or clay-based materials, integrating multi-axis processes and automation;
 - Computational and parametric design, including design-to-manufacturing workflows and BIM integration;

- Research on sustainable and circular materials, including rheological and mechanical characterization of mortars (with natural fibers, industrial waste, biopolymers, etc.), applicable to additive manufacturing processes in construction;
 - Experimental validation and structural testing, including full-scale modular prototype testing, according to international certification standards;
 - Resilient and sustainable design methodologies, capable of responding to urban and climate challenges (adaptable infrastructures, modular solutions for emergency scenarios, etc.);
- c) Scientific communication skills in English (oral and written), demonstrated through international publications and conference presentations;
 - d) Previous participation in national or international R&D projects in the field of additive manufacturing, robotics, BIM, or sustainability in architecture;
 - e) Ability to work in transdisciplinary teams, collaborating with researchers in architecture, engineering, design, and materials science;
 - f) Ability to propose and implement R&D projects, as well as to develop R&D collaboration networks and dissemination and technology transfer strategies, including publications, workshops, and demonstrator prototypes;
 - g) Ability to propose and implement scientific projects, as well as to participate in and create scientific networks;
 - h) Ability to establish scientific collaboration networks and to participate in dissemination and technology transfer strategies, including publications, workshops, and demonstrator prototypes.
5. **Formalization of the applications:** Applications are formalized through a request addressed to the Rector of Universidade do Minho, under the terms defined in the attached template.
- 5.1. The application must include the following documents:
 - a) Copy of certificate or diploma degree.
 - b) Detailed *curriculum vitae* structured in accordance with point 9.
 - c) Proof of professional experience (when applicable).
 - d) Motivation letter.
 - e) At least 1 (one) letter of recommendation.
 - f) Copy of the 2 (two) most relevant publications.
 - g) Other relevant documents for the evaluation of qualification in the related scientific area.
 - h) Any other documents that the applicant considers relevant, namely for the assessment of the information referred to in paragraph 2 of article 5 of the RSE.
 - 5.2. Candidates must submit the request and supporting documents, using digital tools, in PDF format, mandatorily, by electronic means, to the address info@lab2pt.uminho.pt, until the deadline for submission of applications established in this notice, indicating in subject "CTTI-PI-32/25-Lab2PT(2)".
 - 5.3. Failure to comply with the deadline for submitting the application, such as failure to submit or late submission of the application referred to in point 5 and the documents referred to in points a) to c) of point 5.1, determines the exclusion of the application. The exclusion decision is notified to the candidates, by email, for the purpose of holding the hearing of interested parties.
 - 5.4. The jury may, whenever it finds necessary, request candidates to provide documents complementary to the facts referred to in the submitted curriculum, determining a deadline for this purpose.
 - 5.5. False statements provided by the candidates will be punished by law.
6. **Members of the Jury:** The selection jury has the following composition, according to article no. 13 of the RSE and article no. 35 of the do RPI-UM:
- President of the jury (by delegation of powers): Doctor Paulo Jorge de Sousa Cruz, Full Professor at the School of Architecture, Art and Design of the University of Minho.
- Other members:
- Doctor Aires Fernando Fernandes Leite Camões Azevedo, Associate Professor at the School of Engineering of the University of Minho;
- Doctor Bruno Acácio Ferreira de Figueiredo, Associate Professor at the School of Architecture, Art and Design of the University of Minho;

Doctor Ornella Iuorio, Associate Professor, Department of Architecture, Built Environment and Construction Engineering, Polytechnic of Milan;

Doctor Sara Eloy Cardoso Rodrigues, Associate Professor, Department of Interior Architecture, Faculty of Design.

7. **Rules of operation of the Jury:** The jury shall deliberate by means of a nominal vote in accordance with the adopted and published selection criteria, and abstentions will not be allowed.

7.1. The jury meetings will be documented in written minutes, containing a summary of what has taken place, as well as the votes cast by each of the members and the respective grounds, being provided to the candidates whenever requested.

8. **Approval on absolute merit:**

8.1. The jury must decide on the absolute merit of the candidates, based on the merit of the global curriculum of the candidates in the scientific area for which the tender is open and also considering the fulfilment, cumulatively, of at least one of the following requirements:

- a) Participation in R&D project(s) in the scientific subarea of the present call;
- b) Publication in the last two years of at least one (1) article in an indexed journal or two (2) articles in international conferences in the scientific subarea of the present call.

8.2. The decision of exclusion on absolute merit is notified to the candidates, by email, for the purpose of holding the hearing of interested parties.

8.3. Once the deadline for the exercise of the right of hearing the interested parties has expired, the jury analyses the allegations presented and, if it keeps the exclusion decision, notifies the excluded candidates by email with delivery receipt, subsequently beginning the application of the selection methods to the admitted candidates.

9. **Method(s) and evaluation criteria:** The selection method consists of a Scientific and Curricular Path Assessment (SCPA), weighing 90% and the Interview (I), weighing 10%.

All candidates, approved on absolute merit, are subjected to the evaluation of the scientific and curricular path to be carried out according to the criteria and weights defined in point [9.3. and 9.4, if applicable]. However, only the 5 (five) candidates approved and best positioned in the ranking resulting from the evaluation of the scientific and curricular path will be admitted to the Interview (or to the PPS or the PDS).

9.1. The evaluation of the Scientific and Curricular Path Assessment (SCPA) focuses on the relevance, quality and timeliness:

- a) Of the scientific, technological, cultural or artistic production of the last five years considered most relevant by the candidate for the area of recruitment and applied research activities, or based on practice, considered to have the greatest impact by the candidate for the area of recruitment, with a minimum weight of 80%.
- b) Of the activities of extension and dissemination of knowledge, namely in the context of the promotion of the cultural and scientific practices considered most relevant by the candidate, and activities for the management of science, technology and innovation programs, or experience in observation and monitoring of the scientific and technological system, with a maximum weight of 20%.

9.2. The five-year period mentioned in the preceding paragraph may be increased by the jury, if requested by the candidate, and when justified on grounds of suspension of scientific activity for socially protected reasons such as parental leave, prolonged serious illness, and other situations of unavailability for work that are legally protected.

9.3. In the evaluation of the Scientific and Curricular Path Assessment (SCPA) the following parameters and evaluation criteria are considered with the respective weights:

STP – Scientific and Technological Production, weighted at 80%:

This corresponds to the evaluation of scientific and technological productivity, which will be assessed through the following subfactors:

- STP1: Quantity of scientific or technological output (number of articles published in peer-reviewed international scientific journals, including review articles, book editing, book chapters, conference papers, etc.);

- STP2: Quality of scientific or technological output (recognition by the scientific community, reflected in the quality of the publication venues, the impact of the scientific production, and the citations it receives from other authors).

Each subfactor will be assessed according to the following parameters:

STP = up to 100 points: Scientific and technological production in the subarea of the present call;

STP = up to 70 points: Scientific and technological production in related areas;

STP = up to 30 points: Scientific and technological production in other areas.

The score for the PCT criterion will be obtained by applying the following formula:

$STP = 0.3STP1 + 0.7STP2$.

EMA – Extension and Management Activities, weighted at 20%:

This corresponds to the evaluation of extension and management activities carried out, which will be assessed through the following subfactors:

- EMA1: Scientific-pedagogical activities (participation in academic management bodies and scientific/academic juries);

- EMA2: Science and technology dissemination activities (organization/participation in scientific events/science and technology dissemination initiatives: congresses, conferences, lectures, seminars, among others).

Each subfactor will be assessed according to the following parameters:

EMA = up to 100 points: Extension and management activities in the subarea of the present call;

EMA = up to 70 points: Extension and management activities in related areas;

EMA = up to 30 points: Extension and management activities in other areas;

EMA = 0 points: No extension and management activities.

The score for the EMA criterion will be obtained by applying the following formula:

$EMA = 0.1EMA1 + 0.9EMA2$.

The final SCPA score is obtained by applying the following formula: **$SCPA = 0.8STP + 0.2EMA$** .

- 9.4. The Interview (INT), with the duration of 10 minutes, will be classified on a numerical scale from 0 to 100 points, applying the following parameters and criteria evaluation, represented in the formula $INT = 0,1CM + 0,6RRR + 0,1OC + 0,2FLE$:

CM – Candidate's Motivation (10% weight):

Corresponds to the assessment of the candidate's level of motivation for carrying out the activities to be developed in the project: MC = up to 100 points.

RRR – Relevance of Research Results (60% weight):

Corresponds to the assessment of the clarification of aspects related to the candidate's research results: RRI = up to 100 points.

OC – Oral Communication (10% weight):

Corresponds to the assessment of the candidate's oral communication skills: CO = up to 100 points.

FLE – Fluency in English (20% weight):

Corresponds to the assessment of the candidate's fluency in the English language: FLI = up to 100 points.

- 9.5. Candidates with an absolute merit score lower than 60 points in one of the methods, the following method, not being applied to them, as well as candidates who have not attended, have given up on them or, although approved, have not been included in the tranches used.

- 9.6. The valuation of the evaluation parameters is expressed on the numerical scale from 0 to 100 points.

- 9.7. The classification of each candidate is obtained by the average of the classifications of each one of the members of the jury. In case of a draw, the Chairman of the jury will make a final decision to untie the applicants.

10. **Order of candidates:** The order of the candidates must be based on the evaluation made according to the evaluation criteria described in this notice.

- 10.1. After completion of the application of the evaluation criteria, the jury will draw up an orderly list of successful candidates with their respective classification.

- 10.2. The final classification of the candidates is expressed in the numerical scale of 0 to 100 points; the classification being obtained through a weighted average.
11. **Participation of interested parties and decision:** The final ordering is notified to the candidates, by email with receipt of delivery of the notification, allowing them to pronounce for the purpose of preliminary hearing of the interested parties, pursuant to article 121 and following of the Code of Administrative Procedure, applying, with the necessary adaptations, the provisions of article 31 of the Regulation.
- 11.1. After the hearing of the interested parties, the jury analyses the allegations presented and approves the final ordering list of the successful candidates. Within 90 days, from the deadline for submission of the applications, the final decisions of the jury are given.
- 11.2. The period referred to in the previous number may be extended when the high number of candidates and or the special complexity of the competition justifies it.
- 11.3. The final decision of the jury is approved by the Rector of Universidade do Minho, who also decides on the hiring.
12. **Publication of results:** The list of admitted and excluded candidates, as well as the final ranking list of the successful candidates, are published on Universidade do Minho's website, and the candidates are notified by email with receipt of delivery of the notification.
13. The present tender is exclusively designated to fill the indicated vacancies and may be terminated up to the homologation of the final ranking list of candidates, expiring with the respective occupation of the jobs on offer.
14. The present announcement was approved by the jury of the tender at its meeting on 20/10/2025, according to the approved minutes of the said meeting.
15. **Non-discrimination and equal access policy:** Universidade do Minho actively promotes a policy of non-discrimination and equal access, so that no candidate may be privileged, benefited, harmed or deprived of any right or exempt from any duty due, namely, to ancestry, age, sex, sexual orientation, marital status, family status, economic situation, education, social origin or condition, genetic heritage, reduced working capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological convictions and trade union membership.
- 15.1. Pursuant to section h) of article 9 of the Constitution of the Portuguese Republic, 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.

The Rector, Professor Rui Vieira de Castro

ANNEX

REQUEST

To the Rector of Universidade do Minho

Name (...), birthdate (...), VAT no. (...), identification card no. (...), address (...), Postal code (...), Mobile Phone no. (...), email address (...), holder of a degree in (...), hereby requests that you kindly accept my application for the international competition for recruitment in the form of an uncertain term contract under the Labour Code and Decree-Law no. 57/2016 of August 29th, as amended by Law no. 57/2017, of July 19th and the “*Regulamento da Carreira, Recrutamento, Contratação e Avaliação do Desempenho do Pessoal Investigador em Regime de Direito Privado da UMinho*”, amended and republished by the Normative Order no. 10353/2022, published in Diário da República, 2nd Series, no. 163, of August 24th, of two doctoral researcher positions of initial level under private law, for the exercise of scientific research activities in the scientific area of Civil Engineering, subarea of Architectural Engineering, according to a notice published in the Diário da República no. __, 2nd series, of __/__/__, with ref._____.

It declares that the elements or facts contained in this application are true. I also declare that I agree to receive by email the communications and notifications resulting from the present selection tender procedure.

I consent that the personal data described above are collected by the University of Minho for the purpose of managing the administrative procedures necessary for the analysis and publication of the application results, processing of requests submitted by the candidate to UMinho, internal administrative processes of a financial nature, creation of electronics personal identity and statistical reporting.

Find attached the following documents: xxx

(Place and date)

(Signature)