

PUBLIC NOTICE

OPENING OF AN INTERNATIONAL CALL FOR A PHD HIRING, UNDER THE SCOPE OF THE R&D UNIT SMART CITIES RESEARCH CENTER (Ci2), WITH THE REFERENCE UIDP/05567/2020

Note: This is a free translation of the original announcement written in Portuguese, provided only for convenience of non-Portuguese speakers. Only the Portuguese version has official value.

1. We hereby announce that, by decision of the President of the Polytechnic Institute of Tomar (IPT), of August 03, 2020, an international call for applications to recruit a doctorate is open for a period of 30 working days under the terms of number 1, paragraph a), of article 11 of Decree-Law No. 57/2016, of 29 August (which approved the regime for hiring PhDs aimed at stimulating scientific and technological employment in all areas of knowledge), by means of an employment contract in public functions for a fixed term, for one 36 (thirty-six) month period, aiming to fill a position as a researcher in the key scientific areas of the Smart Cities Research Center (Centro de Investigação em Cidades Inteligentes, Ci2) R&D Unit.

The contract resulting from this procedure is financed exclusively through the program-contract signed between the Foundation for Science and Technology (Fundação para a Ciência e a Tecnologia, FCT) and the IPT, supported by national funds allocated in the FCT budget and developed in the Ci2 R&D Unit.

Duties include carrying out scientific research activities in the areas of Electrical Engineering, Computer Engineering, Computer Science and related areas, or other Engineering areas related to the main research areas of the Ci2 R&D Unit, with the key objectives of studying and developing sensors and devices of the "Internet of Things" (IoT), remote sensing systems and distributed systems, remote sensing applications, data collection and their analysis.

Experience in "Data Analytics", "Big Data" and "Machine Learning" techniques, within the scope of smart cities and smart processes, will be favored. Mastery of the English language is also favored.

The R&D activities will take place under the UIDP/05567/2020 program. The contract to be signed will end when this program expires on the scheduled date of December 31, 2023, but may be renewed for periods of 12 months up to the cumulative limit of 72 months, if the program is also renewed ensuring the financing of the contract.

2. Special admission requirements are:

- 2.1. A doctoral degree in one of the areas mentioned in Section 7;
- 2.2. Relevant research in one or more of the scientific areas mentioned in Section 1, preferably on topics focused on the core R&D themes of Ci2: Intelligent and Pervasive Environments and Sustainable Resource Management;
- 2.3. Experience in research management and organisation of multidisciplinary teams, preparation of project proposals and project reports, and organisation of project promotion activities.

3. Applicable legislation:

- Decree-Law No. 57/2016 of August 29 which approved the system for recruiting PhD graduates to stimulate scientific and technological employment in all areas of knowledge (RJEC), in its current wording, regulated by Regulatory Decree No. 11-A/2017, of December 29;
- General Labour Law in Public Functions (LTFP) approved by Law No. 35/2014 of June 20, as currently drafted.

4. In accordance with Article 13 of the RJEC, the selection panel is composed as follows:

- Henrique Joaquim de Oliveira Pinho, Adjunct Professor at the IPT (Chairman);
- Luís Miguel Lopes de Oliveira, Adjunct Professor at the IPT;
- Paulo Manuel Machado Coelho, Adjunct Professor at the IPT;
- Pedro Daniel Frazão Correia, Adjunct Professor at the IPT;
- Manuel Fernando Martins de Barros, Adjunct Professor at the IPT, as substitute member.

5. The workplace is located in any of the facilities of the IPT where the activity of the Ci2 R&D Unit can be developed.

6. The monthly remuneration is as provided for in Article 2(2) of Regulatory Decree No. 11-A/2017 of December 29 and Article 15(1) of Decree-Law No. 57/2016 in its current wording, which corresponds to position 1 of the career position of Auxiliar Researcher laid down in the Statute of the Scientific Research Career approved by Decree-Law no. 124/99 of April 20, in its current wording, corresponding to remuneration of 3,201.40 Euros.

7. National, foreign and stateless applicants who hold a PhD in Electrical Engineering, Computer Science and Engineering, or in related scientific and engineering areas related to the main areas of the Ci2 R&D Unit may apply to the procedure, and must provide an updated

academic and professional CV. If the PhD has been awarded by a foreign higher education institution, it must comply with the provisions of Decree-Law No. 341/2007 of October 12 or Decree-Law No. 66/2018 of August 16 and any formalities established therein must be complied with by the selected applicant by the date the contract is signed.

- 8.** According to Article 5 of the RJEC, the selection should be based on the evaluation of scientific and curricular achievements of the applicants.
- 9.** The evaluation of the scientific and curricular achievements of the applicants focuses on the relevance, quality and topicality of the:
 - 9.1.** Scientific and technological production of the last five years considered more relevant by the applicant;
 - 9.2.** Applied or practice-based research activities developed in the last five years and considered more relevant by the applicant;
 - 9.3.** Outreach and dissemination activities developed in the last five years, namely in the context of promoting culture and scientific practices, considered of greatest relevance by the applicant;
 - 9.4.** Management activities of science, technology, and innovation programs in Portugal or abroad.
- 10.** The period of five years referred to in the previous paragraph may be increased by the selection panel at the request of the applicant when grounded on the suspension of scientific activity for socially driven motives, namely for reasons of parental leave, prolonged serious illness, and other situations of non-availability for work covered by law.
- 11.** The evaluation of the scientific and curricular achievements has two components, namely:
 - 11.1.** Analysis of the CV and other documentation submitted, with particular reference to the contributions considered most relevant by the applicant over the last five years, which will be expressed on a scale of 0 to 20, taking into account the elements and criteria referred to in Section 12, and the classification of the curriculum evaluation of each candidate is obtained by the arithmetic average of the scores attributed by the members of the selection panel;
 - 11.2.** The applicant(s) with a score greater than or equal to 14 in the previous component must make a presentation in person. In this session, they should comment on the results of their scientific activity and future prospects, following which the members of the panel should stimulate an open debate on their content and innovative character. The score of the presentation session is expressed on a numerical scale from 0 to 20

and should take into account the scientific knowledge and communication skills demonstrated by the applicant as well as the answers to the questions posed by the panel. The score of each candidate in the presentation session is represented by the arithmetic average of the score proposed by each member of the evaluation panel, rounded to the nearest integer.

12. The scoring criteria in 11.1 are defined in this section:

12.1. Quality of the scientific and technological production considered more relevant by the applicant and relevance for the duties to be performed to which a weighting factor of 85% is applied, including:

- 12.1.1. Scientific publications: a parameter that takes into account books, chapters of books, articles in indexed scientific journals with an impact factor, and paper presentations at international conferences of which the applicant was the author or co-author, considering their nature, impact, scientific/technological level and innovation; diversity and multidisciplinary, international collaboration and the importance of contributions to the advancement of current state-of-the-art;
- 12.1.2. Creation and reinforcement of laboratory resources: a parameter which takes into account initiatives in which the applicant has participated, and in particular coordinated, and which have resulted in the creation or reinforcement of experimental and/or computational laboratory infrastructures to support research;
- 12.1.3. Recognition by the international scientific community: parameter that takes into account awards from scientific societies, editorial activities in scientific journals, participation in editorial bodies of scientific journals, coordination and participation in program committees of scientific events, lectures by invitation at meetings or events for the dissemination of scientific knowledge; participation as a member of scientific associations and other similar distinctions;
- 12.1.4. Coordination and participation in scientific projects: a parameter which takes into account the participation and coordination of scientific projects by the applicant, subject to competitive calls for proposals, taking into account the territorial scope and size, the technological level and importance of contributions, their innovation and diversity;
- 12.1.5. Monitoring and guidance of students, trainees and research fellows: a parameter that takes into account the supervision of doctoral, master and undergraduate students, and trainees and research fellows, taking into account the number, quality, scope and scientific/technological impact of the resulting publications, theses,

dissertations and end-of-course assignments, with particular emphasis to the works awarded with prizes and international recognition.

12.2. Applied or practice-based research activities considered of greatest relevance by the applicant and relevant to the duties to be performed, to which a weighting factor of 5% is applied, including:

12.2.1. Provision of services and consultancy in line with the institutional mission: parameter which takes into account participation in activities involving the business community and the public sector, particularly the type of participation, the size, diversity, technological intensity and degree of innovation;

12.2.2. Generation, project design and production of scientific results: a parameter that takes into account the value of relevant professional activities.

12.3. Knowledge exchange and outreach activities, namely in the context of the promotion of culture and scientific practices, considered of greater relevance by the applicant and relevant to the duties to be performed, to which a weighting factor of 5% is applied, including:

12.3.1. Industrial and intellectual property;

12.3.2. Scientific and technological publications: a parameter which takes into account articles in national journals and conferences and other publications for scientific and technological dissemination, not considered in 12.1, taking into account their professional and social impact;

12.3.3. Service provision to the scientific community and society: a parameter that takes into account the coordination of or participation in scientific and technological dissemination initiatives and taking into account the nature and results achieved by them when addressed to the scientific community, including the organisation of conferences and similar events, the involvement of the media or the involvement of companies or public sector entities.

12.4. Contribution to activities related to the management of science, technology and innovation programmes or experience in the observation and monitoring of the scientific and technological system or higher education, in Portugal or abroad, which are relevant to the duties to be performed, with a weighting factor of 5%, including:

12.4.1. Management positions in HE institutions, college schools, research institutes or research units in areas relative to the duties to be performed, taking into account the nature and responsibility of the position;

12.4.2. Other offices or positions within national and international scientific organizations.

13. The final classification of each candidate admitted to the presentation session is obtained by assigning a weighting factor of 90% to the grade of the curriculum evaluation, by applying Sections 11.1 and 12, and a weighting factor of 10% to the grade of the presentation session, pursuant to Section 11.2.
14. The final classification of the candidates is expressed on a numerical scale from 0 to 20, rounded to the nearest integer. In the event of a tie, the decision to withdraw is taken by the chairman of the selection panel.
15. The selection panel shall deliberate by means of a roll-call vote based on the evaluation criteria adopted and disclosed, with the score and any relevant information expressed by each member of the panel being attached to the minutes of the respective meeting, with no abstentions being allowed.
16. Minutes of the panel meetings are drawn up which include a summary of what occurred during them as well as the votes cast by each individual member and their respective grounds and are made available to the applicants whenever requested.
17. After the selection criteria have been applied, the selection panel will draw up a list of successful applicants ranked according to their overall score. The selection panel is given the option of not selecting any of the applicants.
18. The panel's final decision shall be approved by the President of the institution who shall also decide on hiring.
19. Preparation of applications:
 - 19.1. Applications shall be made by means of an motivation letter addressed to the IPT's President including identification of this public notice, full name, affiliation, number and date of identity card or citizen's card, or passport, or civil ID number, tax ID number, date and place of birth, marital status, profession, residence and contact address, including e-mail address and telephone contact.
 - 19.2. Applications must be accompanied by the supporting documents required under sections 7 and 8 for admission to the selection procedure, or a digital version thereof, in particular:
 - 19.2.1. A copy of a diploma certificate where, in the case of a PhD obtained abroad, the formalities referred to in Section 7 must be complied with;

19.2.2. Doctoral Dissertation;

19.2.3. Detailed CV structured according to the items in Section 12;

19.3. Applicants must deliver the documents to the Human Resources Department of the Instituto Politécnico de Tomar located on the campus of Tomar or send them by registered mail to those services with address at the campus of Tomar, 2300-313 Tomar, or alternatively, send all the documentation in digital format to the e-mail addresses drh@ipt.pt and ci2@ipt.pt.

20. Applicants whose applications are incomplete or incorrect or fail to fully address the requirements of this call will have their applications rejected. The selection panel may, in cases of doubt, require any applicant to provide supporting documents.
21. False statements by applicants will be punished in accordance with the law.
22. The list of admitted and rejected applicants, as well as the final ranking list, will be posted on the premises of the IPT located on the campus of Tomar and applicants are notified by e-mail.
23. Preliminary Hearing and deadline for Final Decision: After being notified, applicants have 10 working days to comment on the decision. The final decisions of the selection panel will be made within a maximum of 90 days from the deadline for submission of applications.
24. This call for applications is solely for the purpose of filling the abovementioned vacant position, may be terminated until the final ranking list of applicants is approved and expires with the respective occupation of the job on offer.
25. Non-discrimination and equal access policy: The Instituto Politécnico de Tomar and the Ci2 R&D Unit actively promote a non-discrimination and equal access policy.
26. The selection panel approved this notice at the meeting held on July 28, 2020.