

PUBLIC NOTICE OF A COMPETITION FOR THE AWARD OF A DOCTORAL POSITION

Title: Position for a Doctorate (PhDP) - 1 position

ITeCons – Institute for Research and Technological Development in Construction, Energy, Environment and Sustainability, based in Coimbra, is opening an international selection competition, from 16 to 30 October 2018, with reference PhDP/007/2018/SUBSEAPIPE to recruit a person holding an entry-level doctorate for 1 (one) vacancy, in the form of an employment contract for an undefined term (contrato de trabalho a termo incerto) in accordance with the Portuguese Labour Code (Código de Trabalho).

The successful applicant will carry out research in the scientific area of civil engineering, and engage in research and development activities within the project "Cementitious cork composites for improved thermal performance of pipelines for ultradeep waters — SUBSEAPIPE", reference POCI-01-0145-FEDER- 032108. The project is financed by the Operational Thematic Program for Competitiveness and Internationalization (POCI), through its FEDER component, and the by FCT — Foundation for Science and Technology, through its State Budget component (OE). This competition was authorised by decision of the ITeCons Board of Directors on 20 September 2018.

1 – Scientific area: PhD in Civil Engineering, Mechanical Engineering or related areas. Experience in numerical modelling of heat transfer phenomena and structural behavior will be valued.

2 - Main activities:

- a) to develop numeric models and numerically simulate heat transfer;
- b) to perform structural analysis of pipelines through numerical modelling using the finite element method;
- c) to participate in the experimental validation of the pipeline;
- d) to participate in the preparation of project reports;
- e) to prepare articles for publishing in scientific journals and national and international conferences;
- f) to disseminate the project results in conferences and other scientific, academic or industrial events.

3 - Applicable legislation and regulation:

- a) Decree-Law No. 57/2016, of 29 August (amended by Law no. 57/2017, of 19 July) approving the regime for recruiting postdoctoral researchers, designed to stimulate employment in science and technology, in all areas of knowledge (Regime Jurídico do Emprego Científico RJEC);
- b) Portuguese Labour Code (*Código do Trabalho*), approved by Law No. 7/2009, of 12 February, in its current wording;
- c) other legislation and regulations that might apply.
- **4 Workplace:** ITeCons Institute for Research and Technological Development in Construction, Energy, Environment and Sustainability.
- 5 Monthly salary: Monthly remuneration is that set by Article 15 of RJEC, corresponding to level 33 of the Single Salary Scale, approved by Order no. 1553-C/2008 of 31 December, i.e., €2128.34.
- **6 Duration:** The contract of employment will be a fixed term contract of unspecified duration (*contrato de trabalho a termo incerto*), which will last until the Work Plan, referred to in point 2 has been executed in full in



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accordance with Article 6(3) and (1)(b) of Decree-Law no. 57/2016, of 29 August, as amended by Law no. 57/2017 of 19 July, in conjunction with Article 140(2)(g) of the Portuguese Labour Code (*Código de Trabalho*).

- **7 Admission requirements:** Any national, foreign or stateless candidate(s) with a PhD degree in Civil Engineering, Mechanical Engineering or related areas and a scientific and professional curriculum whose profile is suited to the work involved can apply.
- **8 Application formalisation:** Applications should be sent to the Chair of the Board of Directors of ITeCons, as indicated below:
- 8.1 The application should include the following details:
- a) competition identification and reference;
- b) applicant's full name, date of birth, nationality, postal address and email;
- c) specification of the degrees held;
- d) notify degree of disability, the type of disability and the means of communication/expression to be used in the selection process;
- e) statement declaring that the details and facts contained in the application are true.
- 8.2 The application should be accompanied by the following documents:
- a) copy of Curriculum Vitae detailed and structured according to the items stated in point 11;
- b) other documents relevant to assessing the qualification in any related scientific area;
- c) any other documents that the applicant considers relevant to assessing the information referred to in Article 5 (2) of the RJEC.
- 8.3 The Curriculum Vitae should contain:
- a) full identification:
- b) contacts: postal address, telephone number and email;
- c) copy of qualification certificates with the respective grade or mark, or other document legally recognised for the purpose;
- d) all pertinent information for assessing the application, considering the selection and ranking criteria of the present competition, organised in accordance with the evaluation criteria given below in point 11.
- 8.4 Submission of the application:
- 8.4.1 The application may be submitted in Portuguese or in English, by email, to the ITeCons email (itecons@itecons.uc.pt), until 23.59 of the deadline date stipulated in this Notice.
- 8.4.2 Applicants are required to present a "read receipt/message sent" electronic confirmation as proof the application has been submitted.
- 8.5 Applicants who fail to comply with the deadline for submission of the application and/or incorrectly formalize their application will be excluded from the competition. They will be notified of such exclusion by email for the purpose of holding a hearing of the interested parties.

9 - Competition Jury:

9.1 - In accordance with Article 13 of the RJEC, the members of the competition jury are:

Chair: Professor António José Barreto Tadeu, Full Professor at the University of Coimbra;

Jury members: Dr Joana de Sousa Dias Prata, Researcher at ITeCons;

Dr Carla Alexandra Gonçalves Correia de Carvalho, Researcher at ITeCons.



10 - Jury operating rules:

- 10.1 The decisions are taken by means of a roll-call vote, with an absolute majority of the votes of the jury members present at the meeting being required, and no abstentions are permitted.
- 10.2 The jury decides approval on absolute merit, based on the merit of the overall curriculum of the applicants in the scientific area of the competition and also on compliance with at least one of the following requirements:
- 10.2.1 The applicant is the author or co-author of at least one article in an indexed scientific journal in the scientific area in which the competition has been opened,
- 10.2.2 The applicant has participated in research projects in the scientific area in which the competition has been opened.
- 10.3 The decision to exclude on absolute merit is notified to applicants by e-mail for the purpose of holding a hearing of the interested parties.
- 10.4 After the absolute merit approval phase, the jury will begin to assess the applications, considering the criteria and parameters of assessment set out in this competition.

11 - Assessment and selection:

- 11.1 The selection methods are the scientific and curricular evaluation of the applicants and an interview.
- 11.2 The evaluation of the scientific and curriculum background focuses on the relevance, quality and topicality:
- a) of the scientific, technological, cultural or artistic production in the last five years, regarded as most relevant by the applicant;
- b) of the applied or practice-based research developed in the last five years, considered by the applicant as having the greatest impact;
- c) of the knowledge outreach and dissemination activities developed in the last five years, particularly in the context of fostering the culture and scientific practices deemed most relevant by the applicant.
- 11.3 The five-year period mentioned in the preceding paragraph can be extended by the jury, if requested by the applicant, whenever it is justified on grounds of suspension of scientific activity for socially protected reasons, such as parental leave, prolonged serious illness, and other situations of unavailability to work protected by law.
- 11.4 Curricular Evaluation. This component of the assessment is expressed on a numerical scale from 0 to 20 taking into account the following criteria:

11.4.1 - Curricular evaluation criteria are:

a) Criteria for assessing the scientific, technological, cultural and artistic production in the last five years regarded as most relevant by the applicant (16 points).

Quality and quantity of scientific production in the area in which the competition has been opened (books, articles in scientific journals, papers presented at conferences) expressed by the number and type of publications, and the recognition given by the scientific community (the quality of the journal in which they have been published and citations by other authors). Quality of the scientific production in the sub-areas most relevant to this project.

b) Criteria for evaluating applied or practice-based research developed over the past five years and considered by the applicant as having the greatest impact (3 points).

Research projects, with an evaluation of the submission of national and international proposals, whether approved or not, and the execution of funded research projects.



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- c) Criteria for evaluating knowledge outreach and dissemination activities developed in the last five years, particularly in the context of fostering the culture and scientific practices deemed most relevant by the applicant (1 point).
- 11.4.2 The score obtained in the curricular evaluation method is expressed on a numeric scale from 0 to 20, given to two decimal places.
- 11.4.3 The jury decides by means of a roll-call vote based on the evaluation criteria, no abstentions are allowed.
- 11.4.4 The classification of each candidate is obtained by average the scores of each jury member. In the event of a tie, the chair of the jury will cast the deciding vote.
- 11.4.5 Once the Curricular Assessment is completed, the top three rated applications proceed to the next phase of the assessment, as described in point 11.1.
- 11.5 Interview
- 11.5.1 The interview will last for 20 minutes.
- 11.5.2 The evaluation of the interview is expressed on a numerical scale from 0 to 20 and should take into consideration the applicant's scientific knowledge and ability to communicate, as well as the answers given to the questions put by the jury members and the applicant's prospects for development in the project.
- 11.5.3 The jury decides by means of a roll-call vote, no abstentions are allowed.
- 11.5.4 The classification of each candidate is again obtained by the average of the scores of the members of the jury.

12 - Ranking of applicants

12.1 – The final score of each candidate is obtained through a weighted average, with the assignment of a weighting factor of 90% to the curricular evaluation and one of 10% to the interview.

13 - Participation of the interested parties and decision:

- 13.1 The draft final order will be notified to the applicants by 13 November 2018 by email, after which they have 10 working days to give their views in a preliminary hearing.
- 13.2 After the interested parties have been heard, the jury will consider the arguments proffered and approve the final ranking of the candidates.
- **14 Publication of Competition Notice:** The present competition notice is published, in Portuguese and in English:
- a) on The Researcher's Mobility Portal Portugal website, at http://www.eracareers.pt/;
- b) on the ITeCons website, http://www.itecons.uc.pt/index.php?module=news

ITeCons actively promotes a policy of non-discrimination and equal access, such that no candidate can be favoured, gain advantage, suffer disadvantage, be deprived of any right or exempted from any duty by reason, in particular, of age, sex, sexual orientation, marital status, family situation, economic situation, education, origin or social condition, genetic heritage, reduced working capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological belief, and trade union membership. Pursuant to Decree-Law no. 29/2001, of February 3, disabled candidates are preferred in the event of equal ranking, which prevails over any other legal pre-emption right. Candidates must declare in their application, on their word of honour, the respective degree of disability, the type of disability and the means of communication/expression to be used in the selection process, in accordance with the above-mentioned law.





This competition is intended to fill only the specific vacancy indicated and can be terminated at any time until approval of final ranking of the applicants. It expires once that vacancy is filled.

21 September 2018 — ITeCons Board of Directors,

Professor Doutor António dosé Barreto Tadeu

Professor Doutor Nuno Albino Vieira Simões

Co-financed by:







