The Institute of Environment, Technology and Life (Instituto do Ambiente, Tecnologia e Vida, IATV) publicly announces an international tender, reference IATV/20/D07R, for the hiring of a doctorate degree holder, hereby open for 10 working days following the publication of the present notice at Diário da República [Official Journal of the Portuguese Republic], in the form of an Uncertain Term Work Contract, under the Portuguese Labour Code, the Decree-Law no. 57/2016, of August 29th, in its latest version, the Regulatory Decree no. 11-A/2017, of December 29th, as well as further applicable legislation, for the scientific areas of Exact and Natural Sciences, Engineering, Computer Science and High Performance Computing, financed by the Regional Operational Programme Centro 2020 (reference CENTRO-04-3559-FSE-000142), in the thematic area of Competitiveness and Employment, through the European Social Fund (FSE), according to the procedures listed below.

I – Place of Work and Monthly Wage

I.1. Place of Work: The activities will be carried out at the INTERFACE@UC technological headquarters, in Coimbra, and may involve field activities to be carried out in the facilities of partners/customers, in Portugal and/or abroad.

I.2. Job description:

a) Collaboration in the administration of the supercomputer Navigator+ at the Advanced Computation Laboratory of the Universidade de Coimbra (UC-LCA);

b) Improvement of software for supercomputing applications;

c) Participation in national and international projects in the field of advanced computing;

d) Cooperation and assistance to researchers that use advanced computing resources;

e) Development of user guides for the utilization of advanced computational resources;

f) Cooperation in training actions for parallel computing applications and their optimization, including hardware accelerators as GPGPUs.

I.3. Gross monthly wage: 2 392.96 euros, corresponding to level 38 of the single remuneration table, pursuant to article 15 of Decree-Law no. 57/2016, of August 29th, and to the Regulatory Decree no. 11-A/2017, of December 29th.

I.4. Duration

The contract is signed for uncertain term, based on the provision of specific, accurately established non-long term services, according to the terms stipulated under paragraph g) of No. 2 of article 140 of the Labour Code, in conjunction with the No. 3 of article 6 of the Decree-Law no. 57/2016, of August 29th, in its current wording, specifically for the execution of the financed project and other activities associated with the development, promotion and transfer of...
II. Admission Requirements

II.1. National, foreign and stateless candidates who are 18 years of age or older can apply to this competition.

II.2. At the time of application, candidates must hold a Ph.D. in the above-mentioned scientific area(s) or in a correlated one, in which case the candidate’s scientific background must demonstrate the ability to thoroughly develop work in the main field(s) of the tender.

II.3. Candidates who are non-native speakers of either Portuguese or English must attest their proficiency at level C1 of the Common European Framework of Reference for Languages (CEFR) in, at least, one of those languages.

II.4. Candidate(s) should have an academic and professional specialization in: i) administration of Linux systems; ii) use of libraries, tools and parallelization directives, including programming languages and tools used in the programming of GPUs such as CUDA or Open CL, iii) knowledge and management of virtual machines/containers.

II.5. Experience in the participation of advanced computing projects and in scientific projects under EU framework programmes or national programmes is a preferential factor.

III – Application Procedure

III.1. Submission of applications: Applications should be submitted by e-mail to iatv@uc.pt, and must indicate the reference of the tender (IATV/20/D07).

All documents must be submitted in PDF format.

III.2 Documents:

III.2.1. Curriculum Vitae, duly dated and signed, pertaining to the last five years (or the extended period to which the decision of the selection committee refers, if requested by the candidate, on grounds of suspension of scientific activity for socially protected reasons, namely parental leave, prolonged serious illness, and other situations of unavailability for legally protected work, in which case the candidate must indicate the period of assessment desired and attach a document proving the grounds invoked).

The Curriculum Vitae must contain a preamble, containing, if applicable, the history of all contractual relations of the candidate during the last five years (or the extended period to which
he/she is entitled) and respective periods of time, identifying the career category, the nature of the bond and the respective scientific area and also explaining, precisely, the employment bond and the institution where he/she performs functions on the date of application. It must also include a substantiated synopsis showing that the candidate has a specialty appropriate to the scientific area or areas for which the tender is open.

The candidate must also organize his/her Curriculum Vitae in such a way as to respond separately to each one of the criteria listed in point IV.2. and respective subpoints, as well as, under penalty of exclusion, identify and substantiate, from among the works he/she produces, which 3 to 6 he/she considers to be his/her most significant contributions in the perspective of each evaluation criterion, explained in point IV.2.

III.2.2. Copy of qualification certificates. Candidates to the tender who hold a doctoral degree obtained abroad, until the end of the application deadline, under penalty of exclusion, must:
- Prove the respective recognition, under the terms of the Decree-Law no. 66/2018, of August 16th,
or,
- Attach proof that they have requested it, under the terms of Decree-Law no. 66/2018, of August 16th.

Failure to present the recognition of the degree at the time of contracting, under the terms of Decree-Law no. 66/2018 of August 16th, is grounds for exclusion.

III.2.3. Separate copy (one PDF file per paper) of the 3 to 6 papers that the candidate considers to best represent his/her most significant contributions to the advancement of knowledge in the area or areas for which the tender is open.

III.2.4. Copy of all other papers mentioned in the Curriculum Vitae.

III.2.5. Motivation letter.

III.2.6. Any other elements that the candidate considers relevant.

III.3. All application documents indicated in item III.2. must be submitted in Portuguese or English, except for those indicated in III.2.4. and III.2.6., which may be submitted in another language, in case no Portuguese or English version is available. Whenever the original documents referred to under III.2.2. and III.2.3. are produced in a different language, a translation into Portuguese or English must be submitted. Exception is made for diplomas written in Latin, of which no translation is required.

III.4. Applications that are not duly completed or do not meet the formal criteria for admission to the competition, under the terms defined in the legislation in force and in this notice, will not
be admitted. The submission of any required documentation over the deadline also determines non-admission to the tender.

**III.5.** The present tender is concluded with the fulfilment of the positions or, when the positions cannot be fulfilled, due to the inexistence or insufficiency of candidates to continue the tender.

**IV. Selection methods and criteria**

**IV.1. Selection Methods:** Assessment of scientific background and CV [ABC (90%)] and Interview [I (10%)].

**IV.2.** In the assessment of the candidate’s background and CV, the scientific performance and outreach and management activities are evaluated in accordance with the criteria mentioned below.

**IV.2.1.** Scientific performance of the candidate in the research area(s) for which the tender is open in the last five years or the extended period requested, if accepted by the committee, with a weight of 80%, based on the following parameters:

**IV.2.1.1.** Scientific, techno-scientific and technological production: Relevance, quality and national and international recognition of the scientific, technological production, with particular focus on the works/papers selected by the candidates as their most significant contributions to the development of the field;

**IV.2.1.2.** Applied research: Activities of applied or practice-based research, their impact and national and international recognition, with particular focus on the works/papers indicated as having the greatest impact, also including the activities mentioned in II.4 and II.5;

**IV.2.2.** Outreach and management activities in the last five years in the area(s) for which this tender is open, with a weight of 20%, based on the following parameters:

**IV.2.2.1.** Outreach activities: Outreach and dissemination of knowledge activities carried out in the context of the promotion of the scientific practices and culture;

**IV.2.2.2.** Management activities: Management of science, technology and innovation programs; observation and monitoring of the scientific and technological system or the higher education system, in Portugal or other countries; and also the coordination and participation in scientific projects.
IV.3. The assessment of the candidate’s background and CV is based on the criteria and parameters defined in IV.2, being duly justified and graded on a scale of 0 to 20 points (calculated up to the hundredths place) by the Selection Committee.

IV.4. The evaluation of the interview is made according to the criteria and weightings defined in IV.2., being duly substantiated and graded by the Selection Committee on a scale of 0 to 20 values, calculated up to the hundredths place, and aims exclusively at clarifying aspects related to the results of the candidates’ research. The interview is public and may be attended by all interested parties.

IV.5. All candidates complying with the application requirements are subject to the background and CV assessment, which must be conducted under the criteria and evaluation parameters defined in IV.2. and IV.3. However, only the first four candidates with the best scores in the ranking resulting from the assessment of the background and CV will be called for the interview.

IV.6. Candidates who obtain a score under 9.5 points in one of the selection methods will be excluded from the tender procedure, and the following selection method, if it exists, shall not be applied. The same applies to candidates who fail to attend to or quit in one of the selection methods.

IV.7. The final score (FS) is expressed in a scale of 0 to 20 points, calculated up to the hundredths place, based on the following formula:

\[ FS = (ABC \times 90\%) + (I \times 10\%) \]

V. Selection Process

V1. First meeting:

V1.1. The selection committee first decides on the admission and exclusion of applications. In case of non-compliance or partial compliance with any of the requirements established under section III. above, the committee decides whether this irregularity prevents them accepting the application, or if it has no relevant impact on the evaluation process, in which case the application may nevertheless be accepted.

V1.2. After deciding on the admission and exclusion of candidates, the Committee begins the procedures related to the phased application of the selection methods. First, it assesses the scientific background and CV of all the admitted candidates. The merit of the candidates will only be assessed based on their previous experience in the scientific area(s) for which the tender is open, according to the selection criteria and evaluation parameters described in this public notice. The candidates’ merit and experience in other areas must not therefore be taken into consideration by the Committee. The ranking of the candidates in the ABC method is based on the scores given to each candidate.

V1.3. Candidates both excluded and admitted to the interview must be notified by e-mail.
V.2. Second meeting:

V.2.1. The Selection Committee conducts the interviews with the admitted candidates, which must have the maximum duration of one hour, although the Chairman of the Committee may decide to extend it for a further period of 30 minutes. The Committee must only consider the merit of the candidates based on their experience in the scientific area(s) for which the tender is open. The interview is conducted by the Chairman of the Committee, although other committee members may also interact with the candidate. This interview must be held in Portuguese unless the candidate or any members of the Committee are not proficient in that language. In this case, it may be conducted in English, upon decision of the Chairman.

V.2.2. Candidates who fail to attend the interview at the set time and place must be excluded from the tender procedure. Similarly, candidates failing to attend a duly scheduled teleconference call must also be deemed excluded.

V.2.3. After conducting and scoring the interviews, the Committee calculates the final score and ranks the candidates approved in both methods by applying the formula defined above in IV.7.

V.2.4. The notification of the final draft decision, which contains the list with the provisional ranking of approved candidates, as well as the list of excluded candidates, will be sent to candidates by e-mail.

V.3. Candidates can, if they so wish, appeal the decision of the Committee, in due respect for their right to a fair hearing, pursuant to Article 121 of Código do Procedimento Administrativo [CPA - Code of Administrative Proceedings]. The period to submit an appeal begins on the day of notification of the final draft decision.

V.4. Third meeting:

V.4.1. If any of the candidates exercises their right to be heard, the Selection Committee must hold a third meeting to analyse the request, and the candidates will be notified of its deliberations by e-mail.

V.4.2. If the Selection Committee finds the candidates’ allegations well-founded, it must proceed according to its deliberations, thereby notifying the candidates by e-mail.

V.4.3. If the Selection Committee finds such allegations unfounded, the candidates are notified, and the procedure must then be submitted to the head authority of IATV for approval.

V.5. All candidates will be notified regarding the final decision by e-mail. The administrative records of the tender may be consulted by the candidates, through prior scheduling by e-mail to iatv@uc.pt.
The selection committee deliberates by roll call vote based on the selection criteria adopted and disclosed, with no abstentions allowed. The final classification results from the arithmetic average of the classifications assigned by each member of the selection committee.

VI – Selection Committee:

Chairman:

Luís Alberto Proença Simões da Silva, Professor Catedrático e Vice-Reitor da Universidade de Coimbra;

Committee members:

Manuel Joaquim Baptista Fiolhais, Professor Catedrático da Faculdade de Ciência e Tecnologia da Universidade de Coimbra;

Pedro Almeida Vieira Alberto, Professor Associado com Agregação da Faculdade de Ciência e Tecnologia da Universidade de Coimbra;

Alternate committee members:

Filipe João Boavida Mendonça Machado de Araújo, Professor Auxiliar da Faculdade de Ciência e Tecnologia da Universidade de Coimbra;

Orlando Olavo Aragão Aleixo e Neves de Oliveira, Professor Associado com Agregação da Faculdade de Ciência e Tecnologia da Universidade de Coimbra;

Pedro Nuno das Neves Lopes Simões, Professor Auxiliar da Faculdade de Ciência e Tecnologia da Universidade de Coimbra.

In the event of absence or impediments of the Chairman, he/she must be replaced by the Committee member indicated first, which, in the same case of impediment, will be replaced by the Committee member indicated next and so on.

This public notice will be published in Portuguese in Diário da República, 2nd Series, and on the website Bolsa de Emprego Público (Governmental Public Employment Portal), in both Portuguese and English, as well as on the website https://iatv.pt/ and on the pan-European Researcher’s Mobility Portal, at http://www.eracareers.pt/