

Public notice CI-CTTI-174-SGRH/2021 — Doctor Paulo Jorge dos Santos Gonçalves Ferreira, Full Professor and Rector of the University of Aveiro, hereby announces that for a period of **thirty** business days starting on the first business day immediately after the publication of the present notice, an international public call is opened for recruitment in an employment contract for an indefinite period under the Portuguese Labour Code, for 1 (one) position as Principal Researcher in labor regime (remunerative position: 39) in the scientific area of Physics, aiming at the development of the scientific domain of magnetic materials.

The present call was opened on 29th of April 2021 by order of the Rector of the University of Aveiro, following the proposal of the Scientific Council.

The contest is governed by the provisions of the Regulation on the Private Researcher Career Personnel Regime in Private Rule of Law at the University of Aveiro and respective contract, hereinafter referred to as Regulation, published in Series 2 of Diário da República, No. 174, on September 7, 2015, and other applicable laws and regulations.

- 1 Scientific area
- 1.1 The scientific area of this contest is Physics.

2 — Admission requirements:

- a) The auxiliary researcher of the same or another institution, the scientific contest area or even those who, although in a different area, have a relevant scientific curriculum in these areas, and that in any case, have a minimum of three years of effective service in that category or have been approved in a public examination for habilitation or "agregação".
- b) The principal researchers of another institution, in the scientific area of this call or of a scientific area considered by the scientific council to be similar to that for which the call is open, or even those that, although from a different area, have a relevant scientific curriculum in these areas.
- c) Applicants who have a doctor degree in the scientific area of this competition, or of a scientific area considered by the scientific council to be similar to that for which the call is open, or even those who, although having a doctoral degree in another area, have a relevant scientific curriculum in the call areas and that, in any case, have a minimum of three years of professional experience in the competition areas after obtaining a doctor degree or have been approved in a public examination for habilitation or "agregação".

Candidate(s) of the contest holding qualifications obtained abroad must prove the recognition, equivalence or registration of the doctor degree, in accordance with the applicable legislation.

This formality must be fulfilled up to the date of signing the contract.



3 — Formalisation of the applications:

The applications are addressed to the Rector of the University of Aveiro as follows:

- 3.1 The application should include, among others, the following elements:
- a) Call identification;
- b) Applicant's identification: full name, birth date, nationality, mailing address and email;
- c) Identification of the institution where the applicant is presently working and his/her position there, when applicable;
- d) Identification of degrees held by the applicant;
- e) Statement by the applicant declaring that the elements or facts contained in the application are correct and accurate.
- 3.2 The application should include the following documents:
 - a) Applicant's curriculum vitae;
 - b) Copies of papers, no more than five, selected by the applicant as the most representative of his/her *curriculum vitae*. This selection must be accompanied by a brief summary of the work and justification of the choice;
 - c) Scientific Project: Document that allows to sustain a future mission letter and that must include an activities proposal that the candidate intends to develop during the first five years of his/her activity as Principal Researcher, explaining how he/she can contribute to the progress and development of the scientific area of the call addressing the scientific and cooperation with society aspects;
 - d) Document that objectively highlights the number of citations of publications listed in the curriculum and describing the method used to count the citations with enough detail for the jury to be able to reproduce the procedure. The applicant should provide the bibliometrics search key used;
 - e) Any other elements that the applicant deems relevant.
- 3.3 The *curriculum vitae* should contain:
 - a) Full identification;
 - b) Contacts: address, telephone number and email;
 - c) Copy of the certificate with the respective mark or grade or other document that is legally recognised for the same purpose;
 - d) All pertinent information for assessing the application considering the selection and ranking criteria of the present call, organized according to the sub-items of the assessment set forth in Section 6 below;
 - e) A report of the developed scientific activities developed in various areas of the candidate's intervention.
- 3.4 The applicants from the University of Aveiro are not required to present proof of their individual process.



- 3.5 Submission of the application:
- 3.5.1 The application may be submitted in Portuguese or in English, via email, to the Human Resources Department of the University of Aveiro (sgrhf-concursos@ua.pt) until the deadline stipulated in this Notice.
- 3.5.2 The applicants are required to present a "message sent" confirmation as proof of the application submission.
- 3.5.3 Instructions for the submission of applications, in digital format, are available in the Competition and Job Offers of the Human Resources area at https://www.ua.pt/en/sgrh/investigator-staff-new-competitons-and-offers
- 3.6 Failure to comply with the deadline set will result in the exclusion of the application.

The exclusion decision is communicated to candidates by e-mail for the purpose of their hearing.

- 4 Call Jury:
- 4.1 The Call jury has the following composition:

President: Doctor Paulo Jorge dos Santos Gonçalves Ferreira, Rector of the University of Aveiro.

Jury members:

Doctor José António de Carvalho Paixão, Full Professor of the Department of Physics, Faculty of Science and Technology, University of Coimbra;

Doutora Maria Margarida da Fonseca Beja Godinho, Full Professor of the Department of Physics, Faculty of Science, University of Lisboa;

Doutor Paulo Jorge Peixeiro de Freitas, Full Professor of the Department of Physics, Instituto Superior Técnico, University of Lisboa;

Doutor Vítor Brás de Sequeira Amaral, Full Professor of the Department of Physics, University of Aveiro; Doutor João Miguel Sequeira Silva Dias, Full Professor of the Department of Physics, University of Aveiro

- 4.2 The deliberations are held by roll-call vote requiring the absolute majority of the votes of the members of the jury present at the meeting, abstentions are not allowed.
- 5 Admission and exclusion of applications
- 5.1 Approval on absolute merit:

The jury jury deliberates approval on absolute merit, based on the merit of their overall *curriculum* in the scientific area of the Competition, taking also into account one of the following requisites:

5.1.1 — The applicant is the author or co-author of at least 70 articles in the scientific area that the Competition is open, indexed in the Science Citation Index Expanded of the Web of Science from Clarivate



Analytics where document type = article or document type = review or in the SCI Verse Scopus with the same characteristics;

or

5.1.2 — Have obtained a total of at least 2000 citations (excluding self citations) for scientific works produced in the disciplinary area for which the competition is open;

or

- 5.1.3 Have an h index, according to SCOPUS or Clarivate Analytics' Web of Science, of at least 25 regarding the scientific works produced in the disciplinary area for which the competition is open.
- 5.2 Candidates must provide proof of the compliance with the requirements expressed above (5.1.1 to 5.1.3), indicating the key to be used in the Web of Science or SCOPUS search to prove it, or including in their
- 6 Selection Methods:
- 6.1 The selection method is the *curriculum* evaluation.
- 6.2 For the *curriculum* evaluation the following criteria will be considered and weighed, in accordance with the requirements of the functions corresponding to the category of the present research position:
- a) The scientific performance of the applicant in the subject area of the call;
- b) Knowledge transfer;
- c) Participation in management entities;

CV a list of the same database to confirm it.

- d) Scientific project.
- 6.2.1 In the assessments of the criteria referred to in a), b) and c) of point 6.2, consideration should be given to the extension of the candidates' scientific *curriculum* and particular emphasis must be given to the activity developed in the last 5 (five) years, which will represent 80% of the assessment in each of these criteria.
- 6.2.2 In the evaluation of the criteria referred in a), b), c) and d) of point 6.2, the activity developed in the field of magnetic materials will also be especially weighted, applying a weighting factor of 2.

7 — Curriculum evaluation

In applying the criteria mentioned in the point 6.2 the following parameters are assessed and weighted accordingly:

7.1 — Criteria for the assessment of the Scientific Performance



- a) Scientific production. Quality and quantity of scientific production in the area that the Competition is open (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 location where it has been published and the references made by other authors).
- b) Participation in scientific projects. The quality and quantity of scientific projects in which the applicant participated within the subject area of the competition; whether financed through public funds of national or international agencies or by companies. The assessment of the quality will take into account the level of funding obtained, the role played in the project (ex: principal investigator, guest consultant, participant), the degree of difficulty of the funding programme, the expert evaluation of the completed projects, particularly if they led to the development of products or services.
- c) Intervention in scientific community. Assessing the capacity to intervene in scientific community, particularly by organising events, being (co-)editor of magazines, participation in the assessment of projects and articles, being invited to give speeches, being a member of academic juris, as well as being recognized through awards or other distinctions and respective impact.
- d) Constitution of research teams and supervision of academic work of post-doctoral, doctoral and master students in the area and domain of the competition.

7.2 — Criteria for the assessment of Knowledge Transfer

Patents, registration and ownership of rights, elaboration of technical regulation and legislation. Patent authorship and co-authorship, records of ownership of intellectual property rights regarding software, mathematical methods and rules of mental activity. Participation in standardization committees and in the drafting of legislative projects and technical regulation. The evaluation of this criterion should also take into account the resulting economic valuation of patents and intellectual property rights.

Consulting services, tests and measurements. Participation in consulting activities, tests and measurements involving private and/or public sector. Participation as a former in vocational courses or technological expertise directed at companies or the public sector. Participation as a trainer in vocational training or technological specialization courses aimed at companies or the public sector. The evaluation of this criterion will also take into account the economic valorization of research results achieved, measured by the contracts of technology transfer and development that have resulted and contribution to the creation of spin-off companies.

Dissemination of science and technology. Participation in initiatives to disseminate scientific and technological knowledge under the auspices of the scientific community (for example organisation of congresses and conferences) and to various audiences. Publications to disseminate science and technology. Presentation of lectures and seminars for the general public. Impact that the work developed by the candidate in the area and



subarea for which the competition is opened, has on the broader scientific community (e.g., references in scientific dissemination forums).

- 7.3 Criteria for evaluation of Institutional management
- a) The candidate's participation in scientific, pedagogical or institutional management activities and participation in academic juries outside his own institution.
- 7.4 Criteria for evaluation of the Scientific project

The clarity of its structure and the quality of exposure. The scientific relevance of the content and the adequacy of the proposed program, considering the frontier of knowledge in the area and domain of the competition. The degree of innovation introduced.

7.5 — The weighing for the above-mentioned criteria are presented in the following table:

Table - Weights for the assessment criteria

Items	Weights	Criteria	Weights
Scientific Performance	P1=80,0	Scientific production (C11)	P11=50,0
		Participation in and/or coordination scientific projects (C12)	P12=20,0
		Intervention in scientific community (C13)	P13=20,0
		Constitution of research teams (C14)	P14=10,0
Knowledge	P2=5,0	Knowledge transfer or industrial activities, and science	P21=100,0
Transfer		dissemination or management activities, (C21)	
Institutional Management	P3=5,0	Activities of Institutional Management (C31)	P31=100,0
Scientific Project	P4=10,0	Scientific Project (C41)	P41=100,0

- 8 Candidates ranking and voting methodology:
- 8.1 Each member of the jury applies a value, on the scale of 0-100, for each criteria or aspects regarding each applicant admitted in absolute merit.
- 8.2 The result of applying the "curriculum evaluation" method is expressed on a numerical scale of 0-100 and it is calculated by weighing each criterion with the corresponding weight which provides each item with a score. Each item has its own weight which is used to calculate the final score.



Expressed as a formula, the final result (FR) is calculated as follows:

 $\mathsf{FR} = \mathsf{P1}^*(\mathsf{C11}^*\mathsf{P11} + \mathsf{C12}^*\mathsf{P12} + \mathsf{C13}^*\mathsf{P13} + \mathsf{C14}^*\mathsf{P14}) + \mathsf{P2}^*(\mathsf{C21}^*\mathsf{P21}) + \mathsf{P3}^*(\mathsf{C31}^*\mathsf{P31}) + \mathsf{P4}^*(\mathsf{C41}^*\mathsf{P41})$

- 8.3 The ranking of candidates should be founded on the assessment made based on the criteria and parameters of assessment and corresponding weighing factors listed in this Notice.
- 8.4 Before voting, each member of the jury presents a written document, that will be attached to the minutes of the meeting, with the order of the applicants, duly founded, taking into consideration the previous paragraph.
- 8.5 On the various votes, each jury member should respect the order presented, no abstentions are allowed.
- 8.6 The jury will use the following voting method in order to obtain an absolute majority in the final ranking of candidates:

The first vote is intended to determine the applicant to be put in first place. If an applicant receives more than half the votes of the members of the jury present at the meeting, they will be placed in first place. If the applicant in first place is not determined, the voting will be repeated, but only among the candidates who received enough votes to be considered for first place, once the applicant least voted in the first round is removed. If there is more than one applicant in the position of least voted there will be another vote with only these applicants in order to determine who is to be eliminated. For this vote, the jurors vote for the applicant who has the lowest ranking, the applicant with the most votes is eliminated. If at this point there continues to be a tie among two or more applicants, the president of the jury will decide which of them is to be eliminated. Once this elimination is made, the jury returns their attention to the first vote, but only with the remaining candidates. The process is repeated until one applicant receives more than half the votes for first place. The process is repeated for second place and so on until an ordered list of all candidates is complete.

- 9 Participation of interested parties and the decision:
- 9.1 The final ranking is communicated to candidates by e-mail for their hearing.
- 9.2 After the candidate's hearing, the jury appreciates the arguments offered and approves the final ranking list of candidates.
- 10 Deadline for final decision
- 10.1 Without disregarding the provisions of the following paragraph, the deadline for rendering the jury's final decision cannot exceed ninety consecutive days, counted from the deadline for the submission of applications.



- 10.2 The deadline referred to in the previous paragraph may be extended when the high number of candidates and or the special complexity of the competition justifies it.
- 11 Publication of Competition notice
- a) The website of the Foundation for Science and Technology, I.P., in Portuguese and English;
- b) The website of the University of Aveiro, in Portuguese and English;
- c) In a national newspaper.
- 12 In compliance with paragraph h) of Article 9 of the Constitution of the Portuguese Republic, the Government, as the employing entity, actively promotes a policy of equal opportunities between men and women in access to employment and professional advancement, scrupulously taking measures to avoid any form of discrimination.

April 29th, 2021 — The Rector, *Professor Doutor Paulo Jorge dos Santos Gonçalves Ferreira*.