

#3446

Public Notice - International Selection Procedure

PhD Scientific Researcher Recruitment

CHIPAI - Grant Agreement nº 828841

FCiências.ID - Associação para a Investigação e Desenvolvimento de Ciências, through its Chairman of the Board of Directors, hereby announces the opening of an international call for the recruitment of one scientific researcher with a PhD degree, in the framework of the CHIPAI - Energy-efficient and high-bandwidth neuromorphic nanophotonic Chips for Artificial Intelligence systems, Grant Agreement nº 828841, funded by European Union's Horizon 2020 Research and Innovation Programme in the form of an indefinite duration fixed-term employment contract, according to the Portuguese Labour Code and complementary legislation.

I - Admission Requirements

Portuguese nationals, foreign and stateless persons may submit applications to this selection procedure, provided they hold a doctoral degree¹ in Physics and Physics Engineering or similar areas, have specialised skills and/or expertise in the field of modelling and characterization of high frequency optoelectronics (or associated fields), and fully comply with the following requirements:

- a) The PhD must have been granted at least 3 years ago.
- b) Demonstrated scientific and/or professional experience in modelling of characterization of high frequency optoelectronic device.
 - c) Demonstrated experience in programming with Matlab.

¹ Please note that Degrees obtained in foreign countries need a Portuguese Recognition issued by a Portuguese high degree Institution, according to the <u>Decree-Law nr. 66/2018</u>, of august 16th and the <u>Ministerial Order nr. 33/2019</u>, of January 25th. The presentation of such Recognition is mandatory for contract signature. More information can be obtained in: https://www.dges.gov.pt/en/pagina/degree-and-diploma-recognition.

II. Applicable Law

- 1. Portuguese Labour Code, as approved by Law No. 7/2009, of February 12th, in its current version (CT);
- 2. Administrative Procedure Code, as published in Decree-Law No. 4/2015, of January 7th, in its current version (CPA).

III. Work Plan

The objectives of the work plan are to realize tasks within the scope of workpackages 2 and 4 of the project ChipAi, namely: i) Design of semiconductor optoelectronic devices incorporating resonant tunnel diode structures (RTDs); ii) Implementing software tools to simulate devices and circuits incorporating RTDs; iii) Characterization of the modes of operation and functionalities of electronic and optoelectronic devices and circuits incorporating RTD structures within the scope of the project.

The work plan is included in tasks WP2 and WP4 of the ChipAi project.

IV. Composition of the Jury

The members of the jury are:

- President Prof. José Figueiredo
- 1st Member of the jury Prof. António Amorim
- 2nd Member of the jury Prof. André Moitinho de Almeida
- 1st Alternate Member of the jury Dr. Bruno Romeira (INL)
- 2nd Alternate Member of the jury Prof. Paulo Gordo

V. Place of work



Work will be developed at the facilities of Research Center CENTRA-Ciências at the Faculty of Sciences, University of Lisbon, Campo Grande, Lisbon, Portugal.

VI. Contract Duration

The full-time indefinite duration fixed-term employment contract is expected to start on January 1st, 2021 and will last until the Work Plan referred to in section III is completed. It will have an expected duration of 14 months, will not exceed the limits set in the CT, including an initial experimental trial period of 30 days.

VII. Monthly Allowance

The gross monthly salary corresponds to 2392,96 Euros, corresponding to TRU38 of the Single Remuneratory Table, as approved by Government Order No. 1553-C/2008, of December 31st, updated by the decree-law nr. 10-B/2020, of March 20th, plus holiday and Christmas allowances, as well as food allowance in the amount and conditions set out for workers with a legal employment relationship under the Labour Code.

VIII. Evaluation of applications

- 1. Failure to comply with the Admission Requirements implies the non-admission of candidates in absolute merit.
- 2. The final classification of candidates is given on a scale of 0 to 100%.
- 3. Evaluation of the relative merit of candidates, will rely on the following criteria:
 - a) Training and professional experience in optoelectronics 30%.
 - b) Participation in scientific projects in optoelectronics with relevance to the tasks to be realized 30%.
 - c) Scientific publications in the area 20%.
 - d) Pedagogical and outreaching activities, in particular in the context of promoting scientific practices, organization of courses, seminars and conferences, in the area 10%.
 - e) Assessment of the references provided by the candidate 10%.
 - f) Interview, if deemed necessary by the jury 30%.
- 4. The jury may decide to interview the three best ranked candidates [in criteria a) to e) of paragraph 3)], for clarifications and improved explanations of curricular elements. If there is an interview, the sum of the classification obtained in the evaluation criteria a) to e) will correspond to 70% of the final classification and the interview will correspond to 30%.
- 5. The jury shall deliberate by means of a roll-call vote based on the evaluation criteria.
- 6. Minutes of the jury meetings are drawn up, summarizing all relevant elements considered by jury members, as well as their individual votes and justifications.
- 7. After completion of the evaluation process, the jury will draw up a ranking of successful candidates with their classifications.
- 8. Hiring will be decided by the Chairman of the Board of Directors of FCiências.ID, based on the final jury recommendation.
- 9. The evaluation results will be published on the website of the FCiências.ID ("Concursos" tab). The candidates will be individually notified of the evaluation results by e-mail sent to the address indicated in the "Personal Data" section of the submitted form.



- 10. With the notification referred to in paragraph 9, the hearing phase of interested parties referred to in Article 121 *et seq.* of the CPA will begin, and last for ten working days.
- 11. The possible pronouncement of the candidate in a prior hearing must be addressed to the President of the jury and submitted in writing to concursos@fciencias-id.pt. The President of the jury will convene a jury's meeting to produce the final decision, within thirty working days.
- 12. Within five working days of the final jury decision, the Chairman of the Board of Directors of FCiências.ID will approve it and the candidates will be notified.
- 13. The communication between FCiências.ID (<u>concursos@fciencias-id.pt</u>) and the candidates will be electronic and will comply with the following rules:
 - a) At the time of electronic submission of any document namely in the case of paragraph no 11 the candidates must generate proof of "sent message".
 - b) FCiências.ID will send an email message acknowledging documents received to the email address used by the candidates, within two working days.
 - c) In case of absence of a confirmation receipt by FCiências.ID showing the possibility of technical problems that should neither be the responsibility of the candidate nor FCiências.ID the candidates should contact FCiências.ID, with the proof referred to in point (a), to ensure delivery and proper receipt of the documents concerned.

IX. Compliance with public policies

- 1. FCiências.ID actively promotes a policy of non-discrimination and equal access, so that no candidate can be privileged, benefited, disadvantaged or deprived of any right or exempt from any duty due to, inter alia, 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 beliefs and trade union membership.
- Under the terms of D.L. No. 29/2001, of February 3, a disabled candidate has a preference in equal classification, which prevails over any other legal preference. Candidates must declare their respective degree of disability, the type of disability and the means of communication / expression to be used in the selection process, under the terms of the above-mentioned diploma.

X. Submission of Applications

- 1. The present call will be open from 27/11/2020 to 14/12/2020.
- 2. The application and all the required documents may be submitted in Portuguese or English.
- 3. Applications will be submitted online, through the electronic platform of FCiências.ID (http://concursos.fciencias-id.pt).
- 4. On the electronic platform, applicants will complete a *mandatory* section on Personal Data [name, address, date of birth, contact email, nationality and scientific identifiers] and upload files with the documents listed below:
 - i. Detailed curriculum vitae mandatory;
 - ii. A motivation letter clearly demonstrating that the candidate has an adequate profile for the position and fully complies with the Admission Requirements - mandatory;
 - iii. Up to five publications relevant for the objectives of the Work Plan mandatory;
 - Digital copies of documents proving formal academic degrees (PhD) and/or other scientific and professional qualifications - original documents must be provided in case of actual recruitment- mandatory;
 - v. Other documents that candidates consider relevant for the assessment of their scientific merit, or to declare the personal situation in the cases covered in section IX-2 of this Notice *optional*.



5. By decision of the Chairman of the Board of Directors of FCiências.ID, candidates who do not submit the documents identified in paragraph 4 will not be admitted to the call. In case of doubts, the Chairman may also invite candidates to substantiate specific data or statements with official supporting documents, before accepting the candidates' submission.

This Public Note was approved by the jury on 26/11/2020.