

CALL FOR AWARDING RESEARCH FELLOWSHIPS WITHIN PROJECT GRANTS AND R&D INSTITUTIONS

One Fellowship BI-RE

One Fellowship in Special Regime (BI-RE) for a master or a PhD. degree holder is open at the **FCiências.ID – Associação para a Investigação e o Desenvolvimento de Ciências**, for the project **ChipAI – Energy-efficient and high-bandwidth neuromorphic nanophotonic Chips for Artificial Intelligence systems**, funded by European Union's **H2020** research and innovation programme under grant agreement N.º 828841, under the following conditions:

1. **Scientific Area:** Physics, Physics Engineering, Electrical Engineering or related subjects
2. **Requirements for admission:** master or doctorate in Physics, Physics Engineering Electrical Engineering or related, with research activity in the non-linear physics, nanoelectronics, photonics, or optoelectronics.
3. **Factors preferred:** Work experience in modelling optoelectronic or electronic devices and circuits, such as laser diodes, light emitting diodes, photodetectors and low dimensional electronic devices; in electronic and optical characterization techniques; being familiar with nanoelectronic and nanophotonic subjects; knowledge of project-specific technical models, equipment or techniques; familiar with MATLAB, Mathematica, multiphysics and device design simulation software packages (such as Atlas, COMSOL, Lumerical, etc.), SPICE, ADS, or HFSS.
4. **Work plan:** Conduct assigned research individually or jointly including the modelling/simulation and/or the characterization of resonant tunnelling diode based light emitting diodes, nanolasers, and photodetectors, and photonic integrated circuits incorporating resonant tunnelling diode based structures. Participating in the activities associated to the build of a demonstration test-bed and performance assessment of RTD based neuromorphic devices and circuits (for more details see <https://cordis.europa.eu/project/rcn/220540/factsheet/en>).
5. **Legislation framework:** Statute of the Scientific Research Fellowship, in accordance with Law 40/2004, of 18 August, as amended and republished by Decree-Law No. 202/2012 of 27 August, and as amended by Decree-Law No. 233/2012 of 29 October and by Law No. 12/2013, of January 29, and Decree-Law No. 89/2013 of 9 July; And also by the FCT, I.P. Fellowships Regulation, in force (<http://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2015.pdf>) and **FCiências.ID** Fellowship Regulation, as approved on 23rd February 2017.
6. **Place of work:** work will be developed at Centra-Ciências, Faculdade de Ciências, Universidade de Lisboa, and at the CHIPAI partners premises, under the scientific guidance of Professor José Figueiredo, Departamento de Física da Faculdade de Ciências da Universidade de Lisboa.
7. **Fellowship duration:** The fellowships will have a duration of 6 months, and is predicted to begin on January 2020. The fellowship contract may be renewed eventually until the end date of the project, in accordance with the provisions of Regulation of Research Fellowships from the Foundation for Science and Technology, I.P.
8. **Monthly allowance:** The fellowship amounts will be within the range of € 989,70 – € 1.726,93 (for a Master degree) or € 1.509,38 – € 2.676,24 (for a PhD degree), The stipend will be defined by the jury taking in consideration the candidate's CV and work experience.
The fellowship holder will have a personal accident insurance and, if not covered by any social protection scheme can ensure the right to social security through adherence to the voluntary social insurance scheme, pursuant to Código dos Regimes Contributivos do Sistema Previdencial de Segurança Social. The fellowship will be paid monthly by bank transfer.



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9. **Selection method:** Candidates will be assessed by the quality of their:

- Motivation Letter (10%)
- Curriculum Vitae (30%);
- Work experience relevant for the project activities (40%)
- Publication record in the areas of the project (20%).

Only applicants with score equal or higher than 70% will be considered for available fellowships. If considered necessary by the selection committee, the three best-ranked candidates reaching a final score equal or higher than 70% (seventy percent) will be subjected to an interview, which will then represent 50% of their final mark; the final mark have to be equal or higher than 70%.

10. **Selection Committee:**

- Professor José Figueiredo,
- Professor António Amorim,
- Professor André Moitinho,
- Dr. Bruno Romeira, INL, alternate member.

11. **Publication/notification of results:** The final results of the evaluation will become public, through ordered list *final grade obtained* which will be posted at the entrance hall of the **FCiências.ID**, located at the Faculdade de Ciências da Universidade de Lisboa, C1 bdg – 3rd floor, Campo Grande, 1749-016 Lisboa, and the selected candidate will be notified by *e-mail*.

12. **Deadlines:** This call for applications is open from 8th November to 20th December 2019.

13. **Application:** Applications may be sent via e-mail to Professor José Figueiredo, e-mail jmfigueiredo@fc.ul.pt, Reference/subject **Fellowships-CHIPAI-2019**, by attaching the following documents:

- a. Motivation letter (mandatory);
- b. Detailed Curriculum Vitae (mandatory);
- c. Certified transcripts showing the academic degrees awarded (mandatory);
- d. Tax identification number (if applicable);
- e. Other relevant documents (e.g., dated recommendation letters).

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

