

Call for a Research Scholarship

Call is open for the award of 1 (one) Research Grant under the project IDS-PAPER - PTDC/CTM-PAM/4241/2020 - Intelligent Paper for identification systems, for the development of R&D activities to be carried out by PhD students or graduates and masters enrolled in non-academic degree courses, financed by only one component of the state budget - OE, under the following conditions:

Scientific Area: Electrotechnical engineering, Micro and Nanotechnologies engineering and related areas

Recipient admission requirements /Profile:

- a) be enrolled in a PhD or be a graduate and master enrolled in a non-academic degree course;
- b) not exceed, with the conclusion of the scholarship contract in question, including possible renewals, a cumulative period of 4 (four) years if you are enrolled in a Doctorate and 1 (one) year if you are a master enrolled in a non-academic degree for this type of scholarship;
- c) Have training in the areas of Electrotechnical engineering, Micro and Nanotechnologies engineering or other related areas that have given the candidate experience in design and simulation of circuits based on thin-film transistors.

Candidates who have obtained the degree abroad must have the degree recognized in Portugal, pursuant to Decree-Law No. 66/2018 of August 16.

Work plan: The candidate will develop research work performing within task 4 of the project (Design, Architecture and Modeling of (Sub)-systems), including:

- a. Creation of models for the oxide TFTs produced by the partner FCT-NOVA, to be integrated in Cadence environment
- b. Design and simulation of the multiple circuit blocks composing a NFC/RFID tag based on n-type oxide TFTs
- c. Mask layout of the circuits mentioned above, considering the design rules defined in collaboration with FCT-NOVA
- d. Implementation of electrical characterization setups for the circuits produced by FCT-NOVA, including PCB design if needed. Characterization of the circuits
- e. Preparation of reports and scientific articles based on the work described above.

Applicable legislation and regulations: Statute of the Scientific Research Grantee, approved by Law No. 40/2004 of August 18, amended and republished by Decree-Law No. 202/2012, of August 27 and amended by Decree-Law No. 233/2012 of 29 October, Law No. 12/2013 of January 29 and Decree-Law No. 123/2019 of August 28 and The Regulation of Research Grants of the Foundation for Science and Technology, IP - 2019, available in

<https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf>

and

<https://dre.pt/application/file/a/127230968>.

Workplace : The work will be carried out at Uninova's facilities, in other facilities located on the FCT/NOVA Campus and/or in other facilities that may be necessary for its execution, under the scientific guidance of Professor João Goes. UNINOVA will be the contracting entity.

Duration of the grant: The grant will have a minimum duration of 12 months, possibly renewable within the duration of the project, provided that it does not exceed the period referred to in point (b) of the admission requirements and is scheduled to start in March, 2022.

Monthly maintenance allowance amount: The amount of the scholarship corresponds to € 1 144.64, according to the table of values of the scholarships awarded by FCT, I.P. in the country (<http://www.fct.pt/apoios/bolsas/valores>).

The grantee also benefits from personal accident insurance during the period of granting the scholarship and may be reimbursed for voluntary social insurance equivalent to the 1st tier.

The scholarship will be paid monthly on the last business day of each month by bank transfer.

Application deadline and form of submission of applications: The competition is open for the period from 14 to 28 February 2022.

Applications must be formalised by submitting the following documentation:

- ... Letter of application;
- ... Curriculum Vitae;
- ... Motivation Letter;
- ... Certificate of Qualifications or declaration of commitment of honor on the ownership of the respective academic degree according to draft available on the UNINOVA website (www.uninova.pt), in the Job Opportunities tab.
Upon contracting, the Certificate of Qualifications must be delivered;
- ... Informed consent statement duly dated and signed, according to the draft available on the UNINOVA website (www.uninova.pt), in the Job Opportunities tab;
- ... Copy of ID;
- ... Other documents attesting to what was reported on the CV.

In the event of contractualization, the selected candidate must present the Proof of registration in a doctorate or in a course not conferring an academic degree.

Applications must be submitted to UNINOVA or submitted by email to cenimat.secretariado@fct.unl.pt, and to recrutamento@uninova.pt with the subject *BI-Mestre-IDS-Paper-06/2022*.

Selection methods: The selection methods to use will be as follows:

- Curriculum Vitae [50%];
- Level of knowledge in the area of design and simulation of circuits based on TFTs [50%].
- If the jury deems it necessary, an interview will take place only with the selected candidates, with each of the previous items valid [40%] and the interview [20%]

Composition of the Selection Jury:

1. Doctor João Goes, Full Professor, NOVA University Lisbon, Portugal
2. Doctor Pedro Barquinha, Associate Professor, NOVA University Lisbon, Portugal
3. Doctor João Oliveira, Assistant Professor, NOVA University Lisbon, Portugal

Additional Members (Replacements):

1. Doctor Nuno Paulino, Assistant Professor, NOVA University Lisbon, Portugal
2. Doctor Rodrigo Martins, Full Professor, NOVA University Lisbon, Portugal

Form of advertising/notification of results: Both admitted and excluded candidates list and final classification list shall be posted at UNINOVA building, located at Campus da Caparica, Quinta da Torre, 2829-516 Caparica, it will be published on the UNINOVA website (<https://www.uninova.pt/>) and all candidates will be notified by email.

Preliminary Hearing and Deadline for Decision: After communicating the provisional list of the results of the evaluation, the candidates have a period of 10 working days to express their opinion during a prior hearing of interested parties, pursuant to articles 121 et seq. of the Code of Administrative Procedure.

The final decision will be rendered after the analysis of the statements presented during a prior hearing of interested parties. A complaint may be filed against the final decision within 15 working days, or, alternatively, an appeal may be filed within 30 working days, both counting from the respective notification.

Models of scholarship contract, final report of the grantee and final report of the advisor: These minutes are available on the uninova website (www.uninova.pt), in the job opportunities tab.