

## Call for a Research Scholarship

Call is open for the award of 1 (one) Research Grant under the project **UNI/OCCAM BIO LIMITED**, for the development of R&D activities to be carried out by PhD students or graduates and masters enrolled in non-academic degree courses, under the following conditions:

**Scientific Area:** Microfabrication and flexible electronics

### 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 Materials Engineering, Micro and Nanotechnologies Engineering, Physics Engineering, or other related areas;
- d) have experience in clean room work, namely in the deposition of thin films by evaporation and sputtering on flexible substrates, its patterning by photolithographic techniques and electrical+mechanical characterization of thin films/devices on flexible substrates.

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

**Work plan:** The candidate will develop research work performing the following tasks with the following objectives:

- Preparation of flexible substrates on rigid substrate carriers (e.g., Si, glass), including lamination processes withstanding deposition/patterning processes of conductive thin films, as well as the corresponding delamination process with minimal impact on electrical and mechanical properties of the thin films;
- Deposition of conductive thin films with mechanical and electrical properties adapted to the intended application of the final wearable prototype;
- Electrical and electrochemical characterization of the fabricated electrodes;
- Optimization of the mechanical properties of the prototype using encapsulation layers with controlled thickness/uniformity
- Fabrication of a series of 25 final prototypes using optimized processes.

**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.

**Workplace:** The work will be carried out at UNINOVA's facilities, in other facilities located at the FCT/NOVA Campus and/or in other facilities that may be necessary for its execution, under the scientific guidance of Dr. Pedro Miguel Cândido Barquinha. UNINOVA will be the contracting entity.

**Duration of the grant:** The grant shall last for 5 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 October 2021.

**Monthly maintenance allowance amount:** The amount of the scholarship corresponds to a minimum value of € 1 104.64.

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 call for applications is open for the period from September 21<sup>st</sup> to October 6<sup>th</sup>.

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 (<https://www.uninova.pt/jobs-opportunities>).
- ... 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 (<https://www.uninova.pt/jobs-opportunities>);
- ... 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](mailto:cenimat.secretariado@fct.unl.pt), [pmcb@fct.unl.pt](mailto:pmcb@fct.unl.pt) and to [gestprojuni@uninova.pt](mailto:gestprojuni@uninova.pt) with the subject *BI-Mestre-WILDBRAINS\_01/2021*.

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

- Curriculum Vitae [50%];
- Level of knowledge according to what is described in d), section "Recipient admission requirements /Profile" [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 Pedro Barquinha Associate Professor  
New University of Lisbon, Portugal
2. Doctor Joana Pinto Invited Assistant Professor  
New University of Lisbon, Portugal
3. Doctor Rodrigo Martins Full Professor  
New University of Lisbon, Portugal

**Form of advertising/notification of results:** The final results of the evaluation will be advertised, through an alphabetically ordered list, posted in a visible and public location of UNINOVA as well as on its *website*, and the candidate will be selected notified by e-mail.

**Preliminary Hearing and Deadline for Decision:** After the publication of the results, candidates have 10 working days to rule at a prior hearing, pursuant to Article 121 of the Code of Administrative Procedure.

The final decisions of the Panel shall be pronounced within a period of 90 days from the application deadline.

**Models of scholarship contract, final report of the grantee and final report of the advisor:** These minutes are available at the UNINOVA website (<https://www.uninova.pt/jobs-opportunities>).