

## Call for a Research Scholarship

Call is open for the award of 1 (one) Research Grant under the project PTDC/EQU-EPQ/2195/2021 – CO2RED - Understanding the electro-reduction of CO<sub>2</sub> in porous materials, 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 a component of the state budget - OE, under the following conditions:

**Scientific Area:** Electrochemistry for CO<sub>2</sub> conversion

### 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 or 1 (one) year for a master enrolled in a non-academic degree for this type of scholarship;
- c) Have training in the areas of Applied Chemistry and Electrochemistry, Materials Engineering, and/or other related areas that have given the candidate experience in Electrolysis for CO<sub>2</sub> electro-reduction.

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 the following tasks with the following objectives:

- Simulation of electro-chemical devices and components with mesh-based numerical solver;
- Optimization of the materials and geometry of porous (3D) electrodes;
- Computational design of CO<sub>2</sub> electrolysers including previously-optimized components;
- Characterization of materials and devices fabricated according to the modelling guidelines.

**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 CEMOP-UNINOVA's facilities, in other facilities located in FCT/NOVA Campus and/or in other facilities that may be necessary for its execution, under the scientific guidance of Dr. Manuel J. Mendes. 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 €1144.64, 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 17 February to 02 March 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 honour on the ownership of the respective academic degree according to draft available on the UNINOVA website ([www.uninova.pt](http://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](http://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](mailto:cenimat.secretariado@fct.unl.pt), and to [recrutamento@uninova.pt](mailto:recrutamento@uninova.pt) with the subject *BI-Mestre-CO2RED-10/2022*.

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

- Curriculum Vitae [50%];
- Knowledge in the field of electrochemical CO<sub>2</sub> reduction, with emphasis on the area of the work plan [50%].
- If the jury deems it necessary, an interview will take place only with the selected candidates. In such case, the classification of each of the previous items becomes with a 40% weight, with the interview having a 20% weight.

**Composition of the Selection Jury:**

1. Doctor Manuel J. Mendes, Assistant Professor, New University of Lisbon, Portugal
2. Doctor Hugo Aguas, Associate Professor, New University of Lisbon, Portugal
3. Doctor Rodrigo Martins, Full Professor, New University of 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, and it will also be published in 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](http://www.uninova.pt)), in the job opportunities tab.