

Research Studentships (for students of a course that does not award an academic degree)

Applications are open for one (1) Research Studentship, within the framework of project (1801P.01471.1.01) OREOBATT - 2023.15074.PEX - IST-ID financed by national funds through FCT/MCTES (PIDDAC) under the following conditions:

Scientific Area: Chemical Engineering

Admission Requirements: *to hold a master degree and be enrolled at a course that does not award an academic degree.*

Workplan: - The grant holder will be first involved in the synthesis of organic electroactive materials (OEMs). The OEMs will be synthesised following different procedures.

- Chemical characterisation of the OEMs. The compounds synthesised will be analysed through various techniques, such as FTIR, UV-Vis, and NMR, to confirm the synthesis of the target molecule and gain information about its properties.
- Electrochemical characterisation of the OEMs. The electrochemical properties of the OEMs will be studied using techniques such as cyclic voltammetry, galvanic charge-discharge curves, electrochemical impedance spectroscopy, and chronoamperometry to evaluate the compounds' potential as electrode materials.
- Charge-discharge properties of rechargeable batteries. Based on the electrochemical characterisation, materials will be selected, and batteries will be constructed for testing.
- Work on the dissemination of the project results.

Legislation and Regulations: Statute of Scientific Research Fellow, approved by Law nr. 40/2004, of August 18, as worded by Decree-Law nr. 123/2019, of August 28; FCT Regulation for Research Studentships and Fellowships, available on <https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf> and <https://dre.pt/application/file/a/127230968>.

Workplace The work will be developed at CeFEMA, of Instituto Superior Técnico under the scientific supervision of Professor Diogo Santos and Dr. Sandra Rabaça.

Duration: The research fellowship(s) will have the duration of 6 months. It's expected to begin as soon as possible and may be renewed.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (<https://www.fct.pt/fct-atualizou-o-valor-das-bolsas-para-2025/>), the amount of the monthly maintenance allowance is €1309,64€, being the payment method by Wire Transfer.

Selection methods: The selection methods will be the following: The selection methods to be used will be the following: curricular assessment and previous experience, with the respective valuation of 60 and 40 out of a total of 100 values.

Composition of the selection Jury: Diogo Santos, Sandra Rabaça, Biljana Šljukić.

Announcement/ notification of the results: The final evaluation results will be communicated to all applicants by email.

Deadlines and procedures of complaint and appeal. A complaint may be lodged from the final decision within 15 working days, or an appeal to the Executive Board of IST-ID within 30 working days, both counted from the respective notification

Application deadline and formalization: The call is open from October 15 until October 28, 2025.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<https://ist-id.pt/concursos/bolsas/>); ii) *Curriculum Vitae*; iii) academic degree certificate, where applicable; iv) proof of enrollment at a course that does not award an academic degree; v) motivation letter.

Applications must be submitted to the email: diogosantos@tecnico.ulisboa.pt



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