

(BL97/2024-IST-ID)

## Scientific Initiation Studentships

Applications are open for one Scientific Initiation Studentships, within the framework of project 1801P.01224 – BE.Neutral-00000016/IST, contract nº 35, financed by the Resilience and Recovery Plan (PRR-IAPMEI), under the following conditions:

**Scientific Area:** Environment and Energy

**Admission Requirements:** 1 scholarship for a candidate enrolled in a Master's degree in Mechanical Engineering;

**Workplan:** The candidates will be integrated in the Laboratory of "Industrial Ecology and Sustainability" of IN+ and will participate in the development and demonstration of a Digital Twin for the simulation of cities and mobility systems, contributing to the advancement of knowledge in the integrated management of sustainability of cities. This work plan is developed in the scope of the BE.Neutral Agenda, which aims at positioning Portuguese cities and industry in the future of mobility through a new generation of products and services oriented towards carbon neutrality, contributing to a transformational effect on economy, environment and society. In this context, the research initiation activities to be developed by the candidates will focus on the complementarity of between waste generation and the possibility of producing fuels to be used in the urban environment. As a result, the task to be developed consist in:

(a) development of life-cycle assessment of gasification process for the treatment of municipal solid waste towards the concept of CO<sub>2</sub> capture in urban environments.

**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 IN+ Center for Innovation, Technology and Policy Research of Instituto Superior Técnico, under the scientific supervision of Professor Paulo Ferrão.

**Duration:** The research fellowship(s) will have the duration of 6 months. It's expected to begin in May 2024, and may be eventually renewed up to the maximum of 12 months, including the duration of the initial contract.

**Monthly maintenance allowance:** According to the values for Research Fellowships awarded by FCT in Portugal ([https://www.fct.pt/wp-content/uploads/2024/02/Tabela-de-Valores-SMM\\_atualizacao-2024.pdf](https://www.fct.pt/wp-content/uploads/2024/02/Tabela-de-Valores-SMM_atualizacao-2024.pdf)), the amount of the monthly maintenance allowance is € 601.12, being the payment method an option of the Fellow by Wire Transfer/Check.

**Selection methods:** The selection methods will be the following: Curriculum evaluation (100%), with the possible holding of an individual interview for the candidates with the best curriculum evaluation. In the curricular evaluation, the following factors will be assessed: Curriculum (50%) and motivations (50%). After the ranking of the candidates, an individual interview may be held, in which case the interview will have a weighting of 25% and the curricular evaluation will have a weighting of 75% in the final classification.

**Composition of the selection Jury:** Professor Paulo Ferrão, Professor Carlos Santos Silva, Professor Patrícia Baptista

**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 April 15 until April 26, 2024.

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 an academic degree course or at a course that does not award an academic degree; v) motivation letter; vi) declaration on honour that the applicant does not exceed with this contract, including the possible renovations, an accumulated period of one year in this type of studentship, continuously or with interruptions, and has not held any other fellowship directly or indirectly funded by FCT.

Applications must be submitted to the email: [jobs@in3.tecnico.ulisboa.pt](mailto:jobs@in3.tecnico.ulisboa.pt)