

Scientific Initiation Studentships

Applications are open for 1 Scientific Initiation Studentship, within the framework of project NGS - New Generation Storage, 1801P.01313.1.01 NGS - Contrato Nº 58 - IST-ID, financed by Plano de Recuperação e Resiliência (PRR), under the following conditions:

Scientific Area: Sustainable Resource Management (*Gestão Sustentável de Recursos*)

Admission Requirements: *be enrolled in a master's degree, integrated master's degree or non-degree courses, both taught at institutions belonging to the Portuguese public higher education system;*

Workplan: Batteries, critical raw materials and resilient EU energy transition

The path to energy transition will require the large-scale deployment of diverse clean energy technologies, such as solar panels, wind turbines, and fuel cells, all of which depend on critical and strategic raw materials. Material criticality results from the combined risks of supply disruption and the importance of these materials for economic and technological development. The general objective of this project is to advance knowledge on the dynamics of critical materials in the European energy transition, thereby supporting frameworks for resource efficiency, circularity, strategic autonomy, and social balance. More specific objectives include reducing supply chain vulnerabilities of critical materials and promoting proximity strategies, reuse, and recycling. To achieve these goals, the work will focus on developing stock-flow models for selected technologies with high relevance to the energy transition (e.g., solar panels combined with stationary batteries) at both the EU and Member State level. By considering production and entry rates of these technologies, together with their expected end-of-life, the project will estimate recycling requirements and reuse rates of critical raw materials. Future energy transition scenarios will also be incorporated to provide a forward-looking perspective. ***The expected output of this fellowship is the completion and submission of a MSc thesis dissertation at IST.***

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; IST-ID Regulation of Scientific Research Fellowships, available on <https://ist-id.pt/recursos/documentos/recursos-humanos/bolseiros/#1690453819726-6707f7f2-ce04>

Workplace: The work will be developed at the Laboratory of Industrial Ecology and Sustainability of IN+ - Center for Innovation, Technology and Policy Research (<https://in3.dem.ist.utl.pt/>) - located at Instituto Superior Técnico (Alameda Campus), under the scientific supervision of Professor Marta Ramilo Abrantes and Professor Patrícia de Carvalho Baptista.

Duration: The research fellowship(s) will have a duration of 6 months. It begins in January 2026. Renewal of the fellowship is not possible due to project end.

Monthly maintenance allowance: the amount of the monthly maintenance allowance is € 651.12, being the payment method an option of the Fellow by Wire Transfer/Check.

Selection methods: The candidates will be evaluated according to following criteria:

- a) Curriculum evaluation, 50%, including adequacy of BSc and MSc program to working plan, BSc final grade and MSc intermediate grade, number of completed curricular units of MSc, other activities and skills;
- b) Motivation letter, 20%;
- c) Individual interview conducted in English/Portuguese, 30%.

Composition of the selection Jury: Professor Marta Ramilo Abrantes, Professor Patrícia Carvalho Baptista and Professor Maria de Fátima Grilo da Costa Montemor.

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

Deadlines and procedures of complaint and appeal. After notification of the provisional list of evaluation results, candidates have a period of 10 working days to, if they wish, make a statement at a preliminary hearing of interested parties, in accordance with Articles 121 et seq. of the Code of Administrative Procedure. The final decision will be made after analyzing the statements presented at the preliminary hearing of interested parties. The final decision may be appealed to the competition jury or to the President of IST-ID within 15 working days of notification.

Application deadline and formalization: The call is open from December 22, 2025 until January 6, 2026.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<https://ist-id.pt/recursos-humanos/bolseiros/#documentos-relacionados>); ii) *Curriculum Vitae*; iii) BSc certificate; iv) proof of enrollment at master degree at Instituto Superior Técnico with information about curricular units completed; v) motivation letter;

Applications must be submitted to the email: jobs@in3.tecnico.ulisboa.pt