

(BL63/2026-IST-ID)

Scientific Initiation Studentships

Applications are open for 1 Scientific Initiation Studentships, within the framework of CANMILK project – Carbon Neutral Milk (<https://canmilk.eu>) – financed by European funds, within the scope of Horizon Europe, under the following conditions:

Scientific Area: Chemistry and Chemical Engineering

Admission Requirements: *To be enrolled at a professional higher technical course, at a bachelor degree, at an integrated master or master degree, or to have a bachelor degree and be enrolled at a course that does not award an academic degree and it is integrated in the educational project of a higher education institution, performed in association or cooperation with one or several R&D units;*

Workplan: The CANMILK project aims to develop a new and innovative technology based on non-thermal plasma and catalysis to achieve more environmentally friendly milk production. Its ambitious goal is to reduce greenhouse gas emissions in agriculture by using a simple, efficient, and cost-effective device to mitigate methane emissions in dairy and beef farms. Methane will be converted into CO₂, a far less harmful compound with a global warming potential 28 times lower than that of methane. The research initiation fellow will work within a multidisciplinary team involving the N-PRiME team from IPFN and the experimental CATHPRO and theoretical MET teams from CQE (Structural Chemistry Center) at IST-UL, as well as collaborate with the CANMILK consortium, which consists of 8 partners from 6 European countries. The focus of the fellowship will be the study and development of supported metal catalysts for methane conversion under thermal and plasma catalysis conditions. This work will involve the synthesis of catalysts, characterization using conventional techniques such as nitrogen adsorption, X-ray diffraction, or thermogravimetry, and conducting catalytic tests in a laboratory unit. These studies will validate the models to be developed by the N-PRiME/IPFN and MET/CQE teams. We are seeking candidates with an interest in catalysis, chemical reactions, and fields such as Chemical Engineering, Chemistry, Materials Science, or related areas.

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 CATHPRO/Centro de Química Estrutural (CQE) from Instituto Superior Técnico (IST-ULisboa, Campus Alameda), under the scientific supervision of Carmen Bacariza.

Duration: The research fellowship(s) will have the duration of 4 months. It's expected to begin in May/2026. May be renewed up to the maximum of 7 Months, including the duration of the initial contract.

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 selection methods will be the following: Curriculum evaluation, motivation letter, and recommendation letters, rated on a scale of 1 to 5, with respective weightings of 40%, 40%, and 20%. Based on this evaluation, an intermediate score will be determined, and a shortlist of candidates to be interviewed will be prepared, from which the selected candidate will be chosen. Interviews will be conducted in person or, if not possible, via Zoom, and will be rated on a scale of 1 to 5. The final score will be calculated as the weighted average of the intermediate score and the interview score, with respective weightings of 60% and 40%.

Composition of the selection Jury: Carmen Bacariza, Carlos Henriques and Vasco Guerra.

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 April 15 until April 21, 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) 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;

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