

(BL46/2026-IST-ID)

### Post-Doctoral Research Fellowships

Applications are open for 1 Post-Doctoral Research Fellowship(s), within the framework of project/R&D institution (IST-ID), InsectERA\_Contrato nº 20, financed by national funds through PRR (Plano de Recuperação e Resiliência, through IAPMEI – Agência para a Competitividade e Inovação, , under the following conditions:

**Scientific Area:** Chemistry and Mechanical Engineering

**Admission Requirements:**

- a) *to hold a PhD degree obtained in the 3 years previously to the submission of the fellowship application;*
- b) *to have carried out the research work that led to the PhD degree in a different entity from the host institution of the fellowship;*
- c) *Not to exceed, with this fellowship contract, including the possible renovations, an accumulated period of 3 years in this type of fellowship, continuously or with interruptions;*
- d) *Not to have previously held a post-doctoral fellowship from IST-ID.*
- e) *Hold a bachelor's degree in chemistry and a PhD Degree in Mechanical Engineering or vice-versa.*

**Work Plan: Thermophysical and Mechanical Characterization of Chitosan from Different Sources**

This study aims to characterize chitosan extracted from Black Soldier Fly (BSF), *Tenebrio molitor* (TM), and *Acheta domesticus* (AD). Chitosan thermophysical properties, including thermal stability, decomposition, and glass transition temperatures, will be evaluated using TGA and DSC, along with solubility and moisture absorption. Mechanical properties of chitosan films, such as tensile strength, elongation, and Young's modulus, will be assessed. Results will be compared across sources to determine correlations between origin and material performance, providing insights for sustainable biopolymer applications.

**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 Centro de Química Estrutural of Instituto Superior Técnico under the scientific supervision of Doutora Ana P.C. Ribeiro.

**Duration:** The research fellowship(s) will have the duration of 4 months. It's expected to begin in 04/2026, and not renewed.

**Monthly maintenance allowance:** the amount of the monthly maintenance allowance is € 1851, being the payment method an option of the Fellow by Wire Transfer/Check.

**Selection methods:** The selection methods will be the following: *Curriculum evaluation, individual interview (specifying its conditions)*, with the respective weight of 70% and 30%.

**Composition of the selection Jury:** Professor Luísa M.D.R.S. Martins, Doutora Marta M. Alves e Doutora Ana P.C. Ribeiro

**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 March 24 until April 7, 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; iv) motivation letter; v) declaration on honour that the applicant does not exceed with this contract an accumulated period of three years in this type of fellowship, continuously or with interruptions, within the technological and scientific system, and that the research work that led to the PhD degree was carried out in a different entity from the host institution of the fellowship.

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