

(BL22/2025-IST-ID)

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

Applications are open for 2 Research Studentship(s), within the framework of project CleanFish “New strategies for sustainable production of cell-based fish”/Institute for Bioengineering and Biosciences, 2022.07677.PTDC, financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific Area: “Ambiente e Alterações Globais - Tecnologias ambientais”

Admission Requirements: Master in Biotechnology or in Biological Engineering or related fields and be enrolled at a course that does not award an academic degree. Experience on media formulation and culture of fish cell. Know how on either (i) on electrospinning and bioprinting or on (ii) cell co-culture and use of bioprocesses modeling software.

Workplan: The work plan aims to implement the CleanFish project, namely by either (i) implementing of biofabrication of fish fillets using electrospinning and bioprinting as well as biological, compositional, nutritional and mechanical characterization of intermediate materials and final prototypes or (ii) developing and optimizing co-cultivation system for fish cells and microalgae cells to close nitrogen and carbon cycles by using autotrophic and heterotrophic species together, while obtaining a hybrid, edible materials combining algae and fish cells to be used to in formation of inks for bioprinting cell based fish meat with improved organoleptic/nutritional properties as well as the development of technical economic analyses. The tasks include optimization of bioinks and electrospun composite materials or media optimization, cell culture strategies optimization, cell biomass production and composition analysis. The tasks envisaged are aligned with the studies at which the candidates are, or will be, enrolled.

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 the Institute for Bioengineering and Biosciences of the Instituto Superior Técnico, Campus Tagus Park e Alameda, Lisboa, under the scientific supervision of Prof Frederico Castelo Alves Ferreira.

Duration: The research fellowships will have the duration of 6 months. It’s expected to begin in march 2025, and may be eventually renewed up to the end of the project, with the limit of 12 months, including the duration of the initial contract.

Monthly 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), the amount of the monthly maintenance allowance is €1259,64, being the payment method of the Fellow by wire transfer.

Selection methods: The selection methods will be the following: Curricular evaluation and experience within the scope of the topic of this project (35%), scientific merit and capacity for innovation expressed in the expression of interests presented in the application (35%). Candidates will be interviewed (to be carried out in person or over the phone or through an online video conference platform) and the professional and behavioural skills evidenced in the interview will also be the basis of the assessment in the interview (30%). Candidates will be ranked on a scale of 1 to 20 points for each selection method considered.

Composition of the selection Jury: Professor Frederico Castelo Alves Ferreira, Dr Paola Sanjuan Alberte and Nuno Ricardo Torres Faria



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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 February 12 until February 25, 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, iv) proof of enrollment at a course that does not award an academic degree; v) motivation letter; vi) expression of interests, vii) declaration on honour that the applicant does not exceed with this contract an accumulated period of two years in this type of studentship, continuously or with interruptions.

Applications must be submitted to the email: frederico.ferreira@tecnico.ulisboa.pt, with carbon copy to isamar@tecnico.ulisboa.pt



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