(BL165/2026-IST-ID)

Research Studentships (for PhD students)

Applications are open for 1 (one) Research Studentship, within the framework of projectInnovative NanoFluids (NFs) for multiscale thermal systems through the recovery of industrial wastes (Waste2NFs - 2023.18254.ICDT), financed by national funds through FCT, under the following conditions:

Scientific Area: Mechanical Engineering**,** Energy and Environment and similar areas

Admission Requirements: *To be enrolled at a PhD.*

Workplan: Development of surface microstructure shape and arrangement on flow boiling and heat transfer characteristics in microscale devices for cooling applications. This plan gathers numerical and experimental approaches to develop microscale devices integrating smart interfaces to optimize heat transfer minimizing pressure losses. It is expected to obtain an integrated design for a prototype, including an efficiency analysis from both thermodynamics and economic point of view. LCA analysis is also an important step towards the development of a more sustainable solution. This is a complex topic to be developed in the context of a PhD thesis.

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://dre.pt/application/file/a/127230968 .

Workplace: The work will be developed at IN+ of LARSyS/IST-ID at Instituto Superior Técnico, under the scientific supervision of Ana Sofia Oliveira Henriques Moita.

Duration: The research fellowship will have the duration of 12 months. It's expected to begin in December/2026, and may be eventually renewed up to the maximum of 24 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/fct-atualizou-o-valor-das-bolsas-para-2026/), the amount of the monthly maintenance allowance is € 1359.64, being the payment method an option of the Fellow by Wire Transfer/Check.

Selection methods: The selection methods will be the following: The selection methods will be the following: *Curriculum evaluation 80%, individual interview 20% (for the candidates with the highest scores in the curriculum evaluation*). The curriculum evaluation addresses the respective weight of 40% for curricular experience and 40% for experience relevant for the project.

Composition of the selection Jury: Prof Paulo Manuel Cadete Ferrão, Prof Edgar Caetano Fernandes e Prof Ana Sofia Oliveira Henriques Moita

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 November 23 until December 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, where applicable; iv) proof of enrollment at an academic degree course (PhD); v) motivation letter;

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