(BL263/2024-IST-ID)

Research Studentship for Master or Integrated Master students

Applications are open for **1** Research Studentship, within the framework of Green multi-action products for the sustainable conservation of historic porous building stones/ Centro de Química Estrutural, Associação do Instituto Superior Técnico para a Investigação e Desenvolvimento (IST-ID) (PTDC/ECI-EGC/2519/2020) financed by national funds through FCT/MCTES, under the following conditions:

Scientific Area: Civil Engineering - Construction

Admission Requirements: To be enrolled at an integrated master or a master (in Civil Engineering).

Workplan: The aim is to evaluate the durability of optimized formulations using laboratory-prepared porous stone samples. The main activities include: i) Characterizing and subjecting treated and untreated laboratory samples of stone varieties present on built heritage to salt crystallization tests in accordance with established protocols; ii) Assessing the degradation state through inspections at various scales (macroscopic, binocular analysis, etc.) and measuring the relative loss or alteration in key properties (e.g., mechanical strength, water absorption); iii) Evaluating the residual efficacy of the treatments in terms of consolidation and protection following the aging process.

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 *Centro de Química Estrutural (CQE), Instituto de Investigação e Inovação em Engenharia Civil para a Sustentabilidade (CERIS)* from *Associação do Instituto Superior Técnico para a Investigação e Desenvolvimento (IST-ID)*, under the scientific supervision of Doctor Bruno Sena da Fonseca and Prof. Ana Paula Ferreira Pinto.

Duration: The research fellowship(s) will have the duration of 6 months (not renewable). It's expected to begin in December 2024.

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 € 990,98, being the payment method an option of the Fellow by Wire Transfer/Check.

Selection methods: The selection methods will be the following: i) classification of previous academic degree; ii) experience on subjects related to the scientific area of the studentship; iii) motivation letter. The respective weights are 20%, 40% and 40%.

Composition of the selection Jury: Doctor Bruno Sena da Fonseca, Prof. Marta Alves and Prof. Ana Paula Ferreira Pinto.

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

Application deadline and formalization: The call is open from October 28 until November 11, 2024.



It is mandatory to formalize applications with the submission of the following documents:

B1 Form – Fellowship application (https://ist-id.pt/concursos/bolsas/);

- i) Curriculum Vitae;
- ii) academic degree certificate, where applicable;
- iii) proof of enrollment at an academic degree course (Master, Integrated Master)
- iv) motivation letter

Applications must be submitted to the email: bruno.fonseca@tecnico.ulisboa.pt indicating "Candidatura a Bolsa – GreenMAP – Licenciado" in the subject of the e-mail.

