

(BL125/2024-IST-ID)

### Research Studentships (for Master or Integrated Master students)

Applications are open for one (1) Research Studentship(s), within the framework of the project HELIPOINT (2022.08947.PTDC), financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

**Scientific Area:** Geotecnia

**Admission Requirements:** *To be enrolled at an integrated master or a master.*

**Workplan:** HELIPOINT is a joint academic-industry research project between CERIS and the SME, Hélica which has the aim of contributing to the wider fundamental understanding of this type of helical steel piles (HSP) and the development of a rational basis for the design of HSP based on Limit State and Sustainability principles, while also promoting the technique through the development of design guidance and demonstrating this through case studies supported by Life Cycle Analysis comparisons with other techniques.

The research student will be primarily involved in the formulation and validation of numerical models through the back-analysis of field tests on single HSP and HSP groups and the extension of these analyses to other configurations. In addition, there will be opportunities to be involved in field and laboratory load testing of helical piles.

**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 CERIS – Civil Engineering Research and Innovation for Sustainability of Instituto Superior Técnico (Alameda Campus), under the scientific supervision of Professors Teresa Maria Bodas Freitas and Peter Bourne-Webb.

**Duration:** The research fellowship will have a duration of twelve (12) months and is expected to begin in June 2024. The fellowship is non-renewable.

**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](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: *Curriculum evaluation and individual interview*, with the respective weightings of 60% and 40%. Experience of geotechnical numerical modelling and the use of PLAXIS 2D and/or 3D tools (or similar) is desirable.

**Composition of the selection Jury:** Luís Manuel Calado de Oliveira Martins, Prof. Peter John Bourne-Webb, Prof<sup>a</sup> Teresa Maria Bodas Freitas

**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 May 13 until May 24, 2024.



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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, where applicable; iv) proof of enrollment at an academic degree course (Master, Integrated Master); v) motivation letter;

Applications must be submitted to the email: [bolsas@drh.tecnico.ulisboa.pt](mailto:bolsas@drh.tecnico.ulisboa.pt); [peter.bourne-webb@tecnico.ulisboa.pt](mailto:peter.bourne-webb@tecnico.ulisboa.pt)



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