

(BL126/2024-IST-ID)

### Post-Doctoral Research Fellowships

Applications are open for 1 Post-Doctoral Research Fellowship(s), within the framework of project WAPOSAL: *Assessment of wave energy resource in the European and Mediterranean coastal zones using high-resolution altimetry products*/ IST-ID, financed by European Space Agency, reference “ESA Contract No. 4000144113/24/I-DT-bgh”, under the following conditions:

**Scientific Area:** Marine Sciences - Renewable Energies

**Admission Requirements:** PhD degree in Physical Oceanography or related Earth Observation sciences or area related to the workplan

Proficiency in programming languages such as Python, MATLAB and web development skills are highly desired.

According to Article 7 of FCT Regulation for Research Studentships and Fellowships (Reg. nr. 950/2019):

- 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.*

**Workplan:** The selected candidate will work the **analysis of high-resolution satellite altimetry data** from the OCRE EO Horizon 2020 project to estimate wave power density along tracks, its trends in coastal zones, and the variability at specific coastal sites. He/she will support all the scientific activities that will be developed in the frame of the project and described in the proposal. The main tasks are related with the treatment of different data (wave buoys and satellite altimetry) for the different regions where the assessment of the wave power energy from ocean waves will be performed. The candidate will apply an empirical method to estimate the regression coefficients to estimate the wave period that is needed for the computation of the wave power. The candidate will work in the construction of the wave power density maps, seasonal analysis and trends for some of the planned regions. In addition to this will write papers and reports. Objectives: The main objective is to provide a database of the wave power for different coastal zones of Europe, Africa, Mediterranean Sea and some archipelagoes. Publication of three papers in Q1 and Q2 journals. The reports will be prepared and coordinated by the PI and the personnel to be hired.

**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 Centre for Marine Technology and Ocean Engineering of IST-ID, under the scientific supervision of Sónia Ponce de Leon Alvarez

**Duration:** The research fellowship(s) will have the duration of 15 months. It's expected to begin in July 2024, and will not be renewed.

**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 € 1801, being the payment method an option of the Fellow by Wire Transfer/Check.

**Selection methods:** The selection methods will be the following: (*Curriculum evaluation (50%), individual interview (30%), two letters of reference (20%)*).

**Composition of the selection Jury:** Professor Ângelo Manuel Palos Teixeira; Professor Tiago Alexandre Rosado Santos, Dra. Sonia Ponce de Leon Alvarez

**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 May 23 until July 1, 2024.

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) 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: [bolsas@drh.tecnico.ulisboa.pt](mailto:bolsas@drh.tecnico.ulisboa.pt) com copia a [soniaponcedeleon@tecnico.ulisboa.pt](mailto:soniaponcedeleon@tecnico.ulisboa.pt)