## (BL7/2024-IST-ID)

## **Post-Doctoral Research Fellowships**

Applications are open for one Post-Doctoral Research Fellowship, within the framework of R&D institution of IST-ID, CEMAT – Centro de Matemática Computacional e Estocástica, UIDP/04621/2020, financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific Area: Mathematics (Numerical Analysis, Optimization and Mathematical Modeling).

## **Admission Requirements:**

- 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 postdoctoral researcher should develop his scientific activities at CEMAT, in one of the following research lines:

- *Numerical Analysis and Applications*: Research work on this area gathers analytic, numerical and computational aspects, and often its integration, to achieve efficient numerical algorithms. It includes computational fluid dynamics, heat transfer processes, numerical methods for differential and integral equations, neural field modeling.
- Mathematical Modeling and Simulations in Biomedicine: Development and analysis of mathematical models and algorithms to simulate clinically relevant problems related with cardiovascular diseases, using personalized data. Other research topics: modeling of infection diseases and computational virology.

**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 <a href="https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf">https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf</a> and <a href="https://dre.pt/application/file/a/127230968">https://dre.pt/application/file/a/127230968</a>.

**Workplace:** The work will be developed at CEMAT – Centro de Matemática Computacional e Estocástica (IST-ID), under the scientific supervision of at least one full member of CEMAT – Research Areas: *Numerical Analysis and Applications or Mathematical Modeling and Simulations in Biomedicine* )

**Duration:** The research fellowship will have the duration of 10 months. It's expected to begin in march 2024 and may be eventually renewable.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (<a href="https://www.fct.pt/wp-content/uploads/2023/02/Tabela-de-Valores-SMM\_2023.pdf">https://www.fct.pt/wp-content/uploads/2023/02/Tabela-de-Valores-SMM\_2023.pdf</a> ), the amount of the monthly maintenance allowance is the amount of € 1.741,00, being the payment method by Wire Transfer.

**Selection methods**: The selection methods will be the following: Curriculum evaluation-70%, individual interview via Zoom (Colibri) – 30% (only the top 3 candidates from the curricular evaluation).

**Composition of the selection Jury**: Ana Leonor Mestre Vicente Silvestre, Pedro Miguel Rita da Trindade e Lima, Adélia da Costa Segueira dos Ramos Silva.

**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 January 24 until February 6, 2024.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form — Fellowship application (<a href="https://ist-id.pt/concursos/bolsas/">https://ist-id.pt/concursos/bolsas/</a>); 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