

(BL119/2029-IST-ID)

### Post-Doctoral Research Fellowships

Applications are open for 1 Post-Doctoral Research Fellowship, within the framework of project “HemoControl”, reference PTDC/MAT-APL/7076/2020, financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

**Scientific Area:** Mathematics (Numerical Analysis , Optimization, Mathematical Modelling)

**Admission Requirements:**

- a) *to hold a Ph.D. degree in one of the areas (or equivalent): applied mathematics, computational mechanics, computational engineering, aerospace engineering, 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 Ph.D. 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.*

**Workplan:** To implement an algorithm for the 3D solution of flow control problems. Construction of 3D computational domains from medical images. Medical data assimilation. The research activity will take place in collaboration with the team of the project HemoControl.

**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 Center for Computational and Stochastic Mathematics of Instituto Superior Técnico (CEMAT, IST-ID), under the scientific supervision of Jorge Tiago.

**Duration:** The research fellowship will have the duration of 12 months. It’s expected to begin in September or October 2021, and may be eventually renewed up to the maximum of 24 months. For any questions related to the duration of the contract, please contact [jorge.tiago@math.tecnico.ulisboa.pt](mailto:jorge.tiago@math.tecnico.ulisboa.pt).

**Monthly maintenance allowance:** According to the values for Research Fellowships awarded by FCT in Portugal (<http://www.fct.pt/apoios/bolsas/valores>), the amount of the monthly maintenance allowance is € 1646, being the payment method an option of the Fellow by Wire Transfer/Check.

**Selection methods:** The selection methods will be the following: Curriculum evaluation - 70% (*preference given to publications in computational fluid dynamics, PDE-constrained optimization and numerical methods in PDE’s*), individual interview via Zoom – 30% (only the top 3 candidates).

**Composition of the selection Jury:** Jorge Tiago, Adélia Sequeira and Ana Leonor Silvestre.

**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 28 July until 10 August 2021.

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 Ph.D. 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)