

**Research Studentships (Master or Integrated Master students)**

Applications are open for 1 Research Studentship, 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 be enrolled at an integrated master or a master in the area of Mathematics.*
- b) *To hold a bachelor degree in Computational and Applied Mathematics, or similar degree.*
- c) *Solid knowledge in Matlab. Preference will be given to candidates demonstrating experience with the finite element method in the frame of fluid dynamics.*

**Workplan:** Research on optimal control problems governed by the time dependent Stokes equations. The studentship holder will analyze, from the theoretical and numerical points of view, the control problem and corresponding optimality conditions. Afterwards, numerical simulations should be undertaken. The research activity will take place in collaboration with the team from 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 CEMAT- Center for Computational and Stochastic Mathematics of Instituto Superior Técnico, under the scientific supervision of Jorge Tiago.

**Duration:** The research fellowship will have the duration of 6 months. It’s expected to begin in July/2021, and may be eventually renewed up to the maximum of 12 months.

**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 € 835,98, being the payment method an option of the Fellow by Wire Transfer/Check.

**Selection methods:** The selection methods will be the following: Curriculum evaluation, individual interview (possibly by videoconference) to the top 2 candidates, with the respective weight of 60%/40%.

**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 22 June until 5 July 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) proof of enrollment at an academic degree course (Master or Integrated Master) or at a course that does not award an academic degree; v) motivation letter.

Applications must be submitted to the email: [jorge.tiago@tecnico.ulisboa.pt](mailto:jorge.tiago@tecnico.ulisboa.pt)