

(BL104/2022)

ANNOUNCEMENT FOR THE ATTRIBUTION OF SCHOLARSHIPS IN THE SCOPE OF R&D PROJECTS AND INSTITUTIONS

Research Studentships for Student PhD

Applications are open for 1 Research Scholarship (Profile 131), within the framework of project Produtech Sustentável & Circular – Soluções inovadoras, sustentáveis e circulares com impacto na fileira das tecnologias de produção, financed by the European Regional Development Fund - FEDER, through the Lisbon Regional Operational Program 2020 (LISBOA-01-0247-FEDER-046102), under the following conditions:

Scientific Area: Scientific Area of Control, Automation and Industrial Informatics.

Admission Requirements:

- a) To hold a master's degree and be enrolled at a PhD program in the realm of Mechanical Engineering
- b) Not to exceed with this contract, including the possible renovations, an accumulated period of two years in this type of studentship, continuously or with interruptions;
- c) Have completed a master's degree in Mechanical Engineering, with an average mark of 18 or higher in the 2nd Cycle;
- d) To have completed a master's thesis or academic and scientific work in the following areas: localization, control and navigation of mobile robots;
- e) To have experience in the development of Matlab, Simulink, Microcontrollers and Embedded Systems;
- f) Availability to travel within the country and to stay for 1 week in the northern region of Portugal.

Workplan: The work plan fits into PPS3 - Sistemas de produção sustentáveis, do Projecto Mobilizador Produtech 4S&C, in activity 14, Soluções de Robótica Móvel para Logística Interna (3.4):

- 1) Development of optimal control and estimation techniques for Autonomous Robotic Vehicles.
- 2) Experimental validation using off-the-shelf Autonomous Robotic Vehicles.
- 3) Preparation of scientific articles.
- 4) Support in the implementation of industrial prototypes.
- 5) Support in the development of deliverables and Milestone report.
- 6) This work plan is relevant to the progress of studies related to the course that does not award an academic degree, related to the increase of scientific competences and research methods.

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 in the facilities of the Scientific Area of Control, Automation and Industrial Informatics, specifically in the Mechanics III Building, under the scientific supervision of Professor Carlos Cardeira.

Duration: The research fellowship will have the duration of 6 months. It's expected to begin in June 2022 and it is not renewed.

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 €1.104,64, being the payment method an option of the Fellow by Wire Transfer/Check.

Selection methods: The selection methods will be the following: In the first phase, 3 candidates will be selected based on their CV and letter of motivation with a weighting of 80% and 20% respectively. The candidates selected in the first phase will then be selected through an individual interview.

Composition of the selection Jury: Chairman of the Jury: Prof. Paulo Peças, n. mec. 3379; Member of the Jury: Prof^a. Carlos Cardeira, n. mec. 2462; Member of the Jury: Prof. Paulo Oliveira, n. mec. 3093

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 within 30 working days, both counted from the respective notification

Application deadline and formalization: The call is open from 26 May until 8 June, 2022.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<http://drh.tecnico.ulisboa.pt/bolseiros/formularios/>); ii) *Curriculum Vitae*; iii) academic degree certificate, where applicable; iv) proof of enrollment at an academic degree course (PhD); v) motivation letter;

Applications must be submitted to the email: paulataborda@tecnico.ulisboa.pt