

(BL66/2024)

Scientific Initiation Studentships

Applications are open for 2 Research Studentship, within the framework of project PRODUTECH R3 (Recuperação-Resiliência-Reindustrialização) - Agenda Mobilizadora da Fileira das Tecnologias de Produção para a Reindustrialização, financed under invitation notice n. 02/C05-i01/2022 framed and financed under the Recovery and Resilience Plan of Portugal, under the following conditions:

Scientific Area: Scientific Area of Mechanical Design and Engineering Materials

Admission Requirements:

- a) *To be enrolled at an integrated master or a master.*
- b) *Experience in Friction Stir Welding*
- c) *Knowledge of Mechanical Behaviour of Materials*

Workplan: The work plan is part of WP5 – (Centros de Produção Híbrida para a Indústria Metalomecânica) of the PRODUTECH R3 Agenda (Recovery-Resilience-Reindustrialisation).

This work plan is relevant to the progress of studies in progress in the candidate's academic plan, related to the increase of scientific competences and research methods.

The workplan comprises at least these tasks:

- a) Fabrication of Aluminum-Polymer composite joints using Friction Stir Welding as joining technology;
- b) Perform thermo-mechanical characterization of the composite joints including:
 - a. Quasi-static Lap Shear Strength behaviour under different temperature conditions;
 - b. Fatigue behaviour under different loading and temperature conditions;
 - c. Lap Shear Strength behaviour under different loading rate conditions.

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: at Scientific Area of Mechanical Design and Engineering Materials of IST, under the scientific supervision of Prof Virginia Infante.

Duration: The research fellowship(s) will have the duration of 6 months. It's expected to begin in June/2024, and may be eventually renewed up to the maximum of 12 months, including the duration of the initial contract.

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), the amount of the monthly maintenance allowance is € 601,12, being the payment method an option of the Fellow by Wire Transfer/Check.

Selection methods: The selection methods to be used will be the following: curriculum evaluation (70%) and letter of motivation (30%). In the case of several candidates, there will be an interview with the top 3 classifieds where the winning candidate will be chosen.

Composition of the selection Jury: Chairman of the Jury: Prof. Marco Leite; Member of the Jury: Prof. Virgínia Infante; Member of the Jury: Prof. Pedro Amaral

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 April 29 until May 13, 2024.

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; v) motivation letter;

Applications must be submitted to the email: carina.tavares@tecnico.ulisboa.pt and virginia.infante@tecnico.ulisboa.pt