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ANNOUNCEMENT OF A RESEARCH FELLOWSHIP

Reference: ISEC/BI/ 01

A research grant is now open for the attribution of a Research Scholarship for a Graduate in the field of applied research work, with the operational code ISEC/BI/2021_01 of the Polytechnic Institute of Coimbra - School of Engineering, with the reference ISEC/ BI/2021_01, under the following conditions:

The scholarship will have the purpose of implementing and developing the following activities:

- 1) Execution of Research and Development activities (R&D) to be carried out in the applied mechanics (LMAP) and applied biomechanics (LBA) laboratories of ISEC;
- 2) Handling, controlling, and maintaining experimental equipment in the applied mechanics (LMAP) and applied biomechanics (LBA) laboratories of ISEC, integrated in the R&D activities.

Generic scientific area: Mechanical Engineering

Specific scientific area: Mechanical Engineering

Requirements:

- Student of a master's degree, with preference for Mechanical Engineering;
- Degree in Mechanical Engineering or related;
- With knowledge and experience in:
 - a) 3D modelling;
 - b) Instrumentation and experimental analysis;
 - c) Manufacturing Additive;
 - d) Scanning of geometries using a scanner.

Work plan:

The work plan involves the following steps:

1. The grantee will have an initial phase of contact with the equipment and procedures of the laboratories, as well as the need for handling software, 3D modelling and equipment to support R&D projects to be developed in the laboratories:



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2. The grantee will be integrated into the R&D projects in progress in the laboratories, being responsible for the implementation of the 3D modelling and experimental execution associated with the development of these works;

3. The grantee will be responsible for the preparation and execution of the structural and complementary components associated with the R&D activities of the laboratories;

4. Within the context of the R&D activities, the grantee will be responsible for handling the equipment associated with LBA and LMAP, such as 3D printers, reverse engineering equipment, thermographic camera, vibration acquisition devices, among others, being diligent in their maintenance and safety;

5. In its activities, the grantee will collaborate in the writing and disseminating of the results of research projects associated with the laboratories.

Scholarship period:

The grant lasts for one year, renewable up to the legal limit, on an exclusive basis, following the Research Grants Regulation of the Foundation for Science and Technology, I.P. into force, scheduled to start on November 1, 2021.

Monthly Maintenance Allowance:

835.98 euros, according to the table of values for Research Grants in the Country awarded by FCT, I.P. (www.fct.pt/apoios/bolsas/valores) and payment is made monthly by bank transfer.

To this amount is added the voluntary social insurance corresponding to the first step, if the candidate opts for the respective registration, with room also for the realization of personal accident insurance.

Workplace:

The work will be carried out at the Instituto Superior de Engenharia of Coimbra, under the scientific supervision of Professor Luis Roseiro.

Selection Criteria:

The evaluation will be carried out according to the following formula:

Score given (from 0 to 100) = $(0.60 \cdot C1 + 0.20 \cdot C2 + 0.20 \cdot C3) \cdot F1$

criteria C1 to C3 being evaluated from 0 to 100 according to the following:

C1 - Appropriateness of the candidate's profile to the scholarship's needs;

C2 - Experience in the area of tasks to be developed;

C3 – Motivation and Autonomy.

The F1 weighting factor is defined as follows:



F1 - Degree Area:

F1 = 1.00 for a Degree in Mechanical Engineering;

F1 = 0.75 for Licensing Related Degrees.

Composition of the Jury:

The jury responsible for the selection process will be composed of the PhD Professors:

Effective:

Professor Luís Manuel Ferreira Roseiro (Chairman);

Professor Fernando António Gaspar Simões (Member);

Professor Pedro Miguel Soares Ferreira (Member)

Alternates:

Professor Carlos José de Oliveira Pereira e Jorge Alcobia (Substitute Member);

Professor Pedro Jorge Borges Fontes Negrão Beirão (Substitute Member);.

Documents to be submitted:

Applications must include the following documents:

- Application addressed to the head of the Scholarship, Professor Luis Roseiro;
- Detailed Curriculum Vitae, dated and signed;
- Certificate(s) of qualifications;
- Letter of motivation;
- Letter of recommendation (optional).

Deadline for receiving applications:

Ten working days, from 10/7/2021 to 10/20/2021.

Applications must be sent by email to the following e-mail address: bolsas.investig@ipc.pt, including the reference: ISEC/BI/2021_01 in the subject line

Applicable legislation and regulations:

The grant award is based on Law nº 40/2004, of August 18 (Statute of Scientific Research Fellows) amended and republished by Decree-Law nº 202/2012, of August 27, updated by: Decree-Law n. 233/2012, Law No. 12/2013, and Decree-Law No. 89/2013; the Regulation on Scholarships and Research of the Foundation for Science and

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Technology (www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2015.pdf), the Dispatch no. 12709/2016 published in the DR, II series of 21/10/2016, of the Polytechnic Institute of Coimbra, respecting the IPC Scholarship Regulation.

The model for the fellowship contract and the final reports to be drawn up by the grantee and the coordinator are those contained in the annexes of the Scientific Research Grantee Statute mentioned above.

Form of advertising/notification of results:

The final results of the evaluation will be publicized, through a list sorted alphabetically, by the final grade obtained, posted in a visible and public place of the Instituto Superior de Engenharia of Coimbra, near the Academic Services. The successful candidate will be notified, as well as all other candidates, for prior hearing of interested parties, by e-mail.

For more information contact: Luis Roseiro Iroseiro@isec.pt

Coimbra, September 21st, 2021