ANNOUNCEMENT OF A RESEARCH GRANT (BI)

REFERENCE: IIA – BACHELOR'S DEGREE – TRANSFORM: MELHOR FLORESTA

Reference PRBI/36/2025

An open call for a research grant is being launched under the project **"PRR 02/C05-i01/2022/34 - TRANSFORM WP1 Management of Resilient Forests, Programa Melhor Floresta",** of the Polytechnic Institute of Coimbra, financed by the Recovery and Resilience Plan under the following conditions:

Generic scientific area: *Forestry*
Specific scientific area: *Silviculture and Forest Management*

Requirements:

- Hold a Bachelor's degree in Forestry Sciences;
- Be enrolled in a master's or integrated master's program aimed at consolidating scientific training through the development of research work leading to the attainment of the respective academic degree (in Forestry Sciences);
- If the candidate holds a higher education degree obtained abroad, the corresponding degree recognition must be provided, if applicable;
- Have experience in the establishment of projects/plots for the demonstration of good silvicultural practices, preferably in the Central Region of Portugal;
- Have knowledge of and experience in conducting inventories in uneven-aged and mixed stands;
- Be familiar with the use of Multispectral Drones and Mobile Terrestrial LiDAR (HMLS);
- Possess proficiency in the use of Geographic Information Systems (ArcGIS Pro) with the application of Deep Learning methods for the assessment of forest stand characteristics and the evaluation of storm-induced damage;
- Have experience in participating in demonstration activities and public engagement related to forest resource management;
- Have proficiency in oral and written Portuguese and English;
- Possess a valid driver's license.

Work Plan:

The work plan to be developed includes the following components:

1) Conducting inventories and dendrometric and environmental characterization of forest stands in the project's pilot areas;

2) Obtaining and processing images from the Multispectral Drone and Mobile Terrestrial Lidar (HMLS);

3) Evaluating the characteristics of forest stands after disruptive events such as storms, using deep learning methods applied in ArcGIS Pro software.

4) Evaluating the success of artificial regeneration using drone images (orthophotomaps) and deep learning methods applied in ArcGIS Pro software.

5) Organization and monitoring of demonstration activities in pilot areas;

6) Preparation of reports, scientific articles, and other material to disseminate the project results.

Scholarship Length:

The scholarship, on an exclusive basis, has a duration of 6 months, renewable, on an exclusive regime, according to the Research Grant Regulations of the Polytechnic Institute of Coimbra – Order No. 5963/2020, of 01/06, with a planned start date of January 2026.

Monthly Maintenance Allowance:

1.040,98 euros, according to the table of scholarships amounts awarded by FCT to positions held in Portugal (https://www.fct.pt/wp-content/uploads/2025/02/Tabela_valores_SMM_2025.pdf). The payment will be made by bank transfer monthly, to the account to be designated by the Fellow. To this amount is added the voluntary social insurance corresponding to the first tier, and a workplace accident insurance contract.

Workplace:

The work will be carried out at ESAC – Coimbra Polytechnic Agriculture School, and in various forest areas in the Central region, under the scientific supervision of Professor Raúl Salas González.

Selection Criteria:

The evaluation, focused on the merit of the candidates, will be assessed through the weighted linear sum of a set of criteria evaluated on a scale of 0 to 10, and using the vector of weights indicated below:

1- Oral and written proficiency in Portuguese and English (weight: 0.1);

2- Knowledge of the installation of demonstration projects/plots of good forestry practices (weight: 0.1);

3- Knowledge of conducting multi-resource inventories in irregular and mixed forest stands (weight: 0.2 points);

4- Demonstrated proficiency in the utilization of Geographic Information Systems (GIS), multispectral unmanned aerial systems (UAS) and mobile terrestrial LiDAR technologies, as well as in the implementation of Deep Learning methodologies (weight: 0.4);

5- Participation in demonstration activities and public participation in forest resource processes in the Central Portugal region (weight: 0.1);

6- Interpersonal skills and experience in organizing and carrying out teamwork with different types of audiences (weight: 0.1).

In the case of a tie between the best-ranked candidates in the evaluation of the previous criteria, an interview will be held to refine the evaluation of the criteria: motivation of the candidate; verbal and written fluency in English; autonomy and spirit of initiative; analytical capacity and critical thinking.

Jury of Selection:

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

President: Prof. PhD Raúl Salas González (President); Vogals: Prof. PhD Maria Beatriz Machado Fidalgo, PhD Mateus Mendes; Substitutes: Prof. PhD José de Jesus Gaspar; Prof. PhD José Manuel Serras Tavares.

Documents to be submitted:

Candidates must access and register on the website: https://www.ipc.pt/bupc/concursos/form/concursos_bolseiros to submit the application, selecting the procedure for which they intend to apply.

Applications must be delivered exclusively in digital format, in portable document format (pdf), with the exception of documents whose delivery is scheduled in other digital formats.

The application process is carried out by completing the sections available at the aforementioned website.

The application must be accompanied by the following documents:

- Identification, identification document number, and tax identification number;

- Documents proving that the candidate meets the conditions defined in the admission requirements, namely, 1) certificate of qualifications of the Bachelor's degree in Forestry Sciences; 2) certificate of enrollment or registration in a master's degree course also in the field of Forestry Sciences; 3) Applicants with foreign qualifications must prove their academic degree and foreign diploma in accordance with Decree-Law no. 66/2018, of 16 August;

- Applicant's curriculum vitae, dated and signed;

- Letter of motivation;

- Letter(s) of reference or recommendation, including the contact details of the authors of the recommendations.

When formalizing the application, if it contains a classified document that reveals commercial or industrial secrets, or secrets relating to literary, artistic or scientific property, the candidate must expressly indicate such reservation, under penalty of the work in question being freely accessed by any one of the other candidates, in consultation with the process.

When submitting the application, the candidate must provide the data strictly necessary for the purpose, under the terms of this public notice, and must hide personal data that may exist in the documentation submitted, otherwise these data may be freely accessed by any of the other candidates, in the process query.

Deadline of Application Submission:

The application period will be of 10 working days, starting on 10/12/2025 a and ending on a 23/12/2025.

Legislation and applicable Regulation:

The award of this fellowship is based on:

- Law No. 40/2004, of August 18, in its current wording (Statute of the Scientific Research Grant Holder);

- Order No. 5963/2020, of June 1, in its current wording (Research Grant Holder Regulations of the Polytechnic Institute of Coimbra)

The grant contract template and the final reports to be prepared by the grant holder and the coordinator are those contained in the annexes to the Research Grant Holder Regulations of the Polytechnic Institute of Coimbra, mentioned above.

Information of Results:

The results of the evaluation will be published within 90 working days from the deadline for submission of applications, by sending a communication to the candidates, via email. After the results have been published, candidates will be notified to, if they wish, give their opinion in a prior hearing within a maximum of 10 working days after that date. After this deadline, the selected candidates will have to declare their acceptance in writing. Unless a justifiable reason is provided, failure to make the declaration within the deadline will be considered as a waiver of the scholarship. In case of resignation or withdrawal of the selected candidate, the immediately best ranked candidate will be notified.

For further information please contact the President of the Jury, by e-mail:rsalas@esac.pt.

Coimbra, 05 of December 2025