

## **PUBLIC NOTICE FOR A RESEARCH SCHOLARSHIP**

**Reference PRBI/8/2025**

IPC/ i2A is now accepting applications to award 1 **Research Scholarship** (BI) within the scope of the project “HUMYK - Autonomous Community Composter”, reference CENTRO2030-FEDER-01180100, funded by PT 2030 SIID Program – Business R&D – Co-Promotion Operations – Other Territories (Notice Mr-2023-7), as follows:

1. Preliminary studies
2. Laboratory research dedicated to the formulation of the new prototype
3. Design and technical specifications
4. Prototype construction
5. Validation of the production process
6. Testing for prototype validation at a pilot scale
7. Dissemination, promotion, and valorisation of results
8. Project management and monitoring

**Scientific area:** Electrical Engineering, Computer Science, or a related field.

**Specific scientific area:** Electrical Engineering, Electrical and Computer Engineering, or Computer Engineering.

### **Requirements:**

- A. Holders of a Bachelor's degree in Electrical Engineering, Computer Engineering, or other related areas
- B. If the candidate holds a higher education degree obtained abroad, he/she must have the respective degree recognition, if applicable
- C. Enrolment in a master's degree in the field of Electrical Engineering or Computer Engineering
- D. Skills in microcontroller programming, photovoltaic solar system design, energy consumption analysis, IoT application development, and programming in PHP and JavaScript

### **Work Plan:**

1. Support for research, state-of-the-art analysis, and preparation of technical documentation
2. Identification of user needs
3. Participation in the functional and technical specification of solution components
4. Assistance in prototype design and consultation with industrial partners
5. Support in prototype assembly
6. Technical assistance in the overall operation of the prototype
7. Participation in the publication of scientific articles
8. Other development tasks identified as necessary within the project scope

### **Scholarship Length:**

The scholarship, on an exclusive basis, has a duration of 12 months, possibly renewable for identical periods, when permitted by regulation, scheduled to start on 01/04/2025.

**Monthly Maintenance Allowance:**

€1040,98 euros, according to the table of scholarships amounts awarded by FCT to positions held in Portugal. 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 developed at the Coimbra Institute of Engineering from Polytechnic Institute of Coimbra, under the scientific supervision of Professors Fernanda de Madureira Coutinho, Jorge Miguel Sousa Barreiros, and Marco José Silva.

**Selection Criteria:**

Applications will be assessed through:

- a) Curriculum Assessment (50%), with 50% allocated to academic qualifications and 50% to the degree of fulfillment of the required competencies.
- b) Interview (50%), conducted only for the top three candidates based on the criterion in point a).

**Jury of Selection:**

President: Prof. PhD Fernanda de Madureira Coutinho

Vogals: Prof. PhD Jorge Miguel Sousa Barreiros

PhD Verónica Costa Oliveira

Prof MSc Marco José Silva

Substitutes: Prof. PhD Nuno Miguel Fonseca Ferreira

Prof. PhD Fátima Coelho Monteiro

**Mandatory documents:**

- The applications must include the following documents:
- Application form available on the internet page for this competition at <https://www.ipc.pt/ipc/sobre/rh/a-decorrer-pessoal-bolseiro>
- Motivation letter, in which the candidate must explain his/her motivation to carry out this multidisciplinary work plan, as well as mention if he/she is available to start the scholarship on schedule date;
- Updated *Curriculum Vitae* of the candidate, with a description of the qualifications;

- Document(s) proving that the candidate hold the academic degree and/or diploma(s) required in the competition. Applicants with foreign qualifications must provide proof of their foreign degree and diploma in accordance with Decree-Law no. 66/2018, of 16 august;
- Document proving enrolment and registration in the master's degree;
- Document(s) proving any other evaluation criterion indicated in the application notice;
- Other certifications and/or documents considered relevant by the candidate.

### **Deadline of Application Submission:**

The application period will be of 10 working days, between 04/03/2025 and 17/03/2025.

Candidates must access and register on the website: [https://www.ipc.pt/bupc/concursos/form/concursos\\_bolseiros](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.

Application instructions are completed by filling in the sections available at the aforementioned link.

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.

### **Legislation and applicable Regulation:**

The award of this fellowship is based on Law 40/2004, of the 18th of August (Estatuto do Bolseiro de Investigação Científica), changed and republished by the Decree-Law 202/2012, of the 27th of August, updated by: Decree-Law 233/2012, Law 12/2013, Decree-Law 89/2013 and Decree-Law 123/2019; the Regulation of the Research Scholarships from Polytechnic of Coimbra Order nº 5963/2020, and, subsidiary, Regulation of the research scholarships from the Fundação para a Ciência e a Tecnologia, I. P. and the

### **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:**

For further information contact: Professor Fernanda de Madureira Coutinho through the email: [fermaco@isec.pt](mailto:fermaco@isec.pt).

Coimbra, March 2025.