



## NOTICE OF OPENING OF AN INTERNATIONAL CALL FOR THE SELECTION OF A PhD HOLDER RESEARCHER UNDER DECREE-LAW NO. 57/2016

**Internal code: Researcher/EIC/i3S/1512/2025**

A call is opened for the position of a PhD holder, for an unfixed-term work contract to carry out research duties within the project **“Blood2Power - Blood as energy source to power smart cardiac devices”** with reference 101115525, funded by the European Innovation Council (EIC) under the topic HORIZON-EIC-2022-PATHFINDERCHALLENGES-01-04.

**Scientific Area:** Physical Engineering, Electrical Engineering, Bioengineering, Biomedical Engineering, or a related field.

### 1. Project summary and work plan

The BLOOD2POWER project aims to develop a new way to harvest energy from the body, and using it to create the next generation of cardiac medical devices. To support the activities of this project, we are looking to appoint a Junior Researcher.

The candidate's work plan will focus on R&D of energy harvesting systems that exploit different energy sources from the human body to supply intelligent cardiac electronic devices for enabling the Internet of Medical Things (IoMTs). This includes tasks of development of energy harvesting systems and *in vitro* and *in vivo* testing regarding the generated electrical outputs and mechanical/biological properties.

#### What do we offer?

- Opportunity to join a research group that works in all stages of biomaterials development, from bench to bedside, which will allow to gain both scientific and technology transfer skills.
- Obtain insights into the development of biocompatible energy harvesting systems and their *in vitro/vivo* testing.
- Possibility to embrace an international/multidisciplinary European consortium that joins i3S, Faculdade de Ciências da Universidade do Porto, University of Navarra (Spain), and Medical University of Vienna (Austria), gathering knowledge in physical engineering, bioengineering, nanotechnology, electronics, and medicine.

### 2. Applicable Portuguese legislation

Portuguese Labor Code, in its current wording.

### 3. Jury

Chairman: Dr. Inês Gonçalves; Other Members: Dr. Andreia Pereira, Dr. Daniela Sousa; Substitute: Dr. Ana Mendes.



#### 4. Workplace

Institute for Research and Innovation in Health (i3S) - Rua de Alfredo Allen, 208 Porto.  
Research group [Advanced Graphene Biomaterials Group \(led by Inês Gonçalves\)](#).  
Short-term visits to the institutes of consortium partners are possible.

#### 5. Professional category and monthly remuneration

Junior Researcher

€ 2.351,53, corresponding to index 33 of the *Tabela Remuneratória Única*, whose application is intended for PhD holders with reduced post-doctoral experience or without a post-doctoral scientific curriculum.

#### 6. Obligatory requirements for admission

- PhD degree in Physical engineering, electrical engineering, Bioengineering, Biomedical Engineering, or a related field;
- Experience in programming and data/signal processing;
- Proficiency in English language (written and spoken);
- One Reference letter and two Reference contacts (to be contacted during the interview stage);
- Immediate availability to start the contract.

#### Preferential:

- Experience in energy harvesting;
- Experience in biosensing;
- Experience in the development and characterization of biomaterials;
- Experience with cell culture or hemocompatibility tests;
- Highly motivated candidates with good teamwork and interpersonal skills.

#### 7. Evaluation of the applications and publication of the results

The evaluation of the scientific and curricular background of the candidates should focus on the activity of the last five years that the candidate considers most relevant. The five-year period may be extended by the jury, at the candidate's request, when justified by suspension of scientific activity for socially protected reasons, namely for reasons of parental leave, prolonged serious illness, and other situations of unavailability for work that are legally protected.

#### Weight of the different curricular valuation criteria:

- Detailed Curriculum (45%): including publications, oral/poster presentations in research fields relevant to the project, prizes, science outreach activities, economic valorisation activities, organization of scientific events, and advanced training;
- Research experience with relevance for the project work plan according to points previously outlined in the Admission Requirements (35%);
- Motivation Letter in English (10%);
- Interview – *facultative* (10%).



If the jury decides to obtain further clarifications and additional information about the curricular elements presented, the best 4 (four) candidates, classified on the basis of their curriculum, may be called for an interview.

Candidates who submit their application incorrectly or fail to meet the required qualifications for this competition will be excluded from admission.

The jury reserves the right to request any candidate, in case of doubt, to provide supporting documents for their statements.

False statements made by candidates will be sanctioned in accordance with the law.

The jury will draw up minutes of its meetings, which can be consulted at the candidate's request within 10 working days after the selection results are released.

The jury deliberates by means of a reasoned vote according to the evaluation criteria, with no abstentions allowed, and draws up a list of excluded and admitted candidates, ordered by respective classification.

All candidates are notified of the selection results by email. After notification, candidates have 10 working days to comment.

In the 90 days following the deadline for submission of applications, the jury's final decision is communicated to the candidates. Subsequently the institute Director, who is also responsible for the final decision of hiring, will ratify the decision of the jury.

This call is intended exclusively to fill the indicated position on offer and may be canceled before the final ranking list of candidates is ratified by the Director. Accordingly, the position will no longer be available.

## 8. Submission of applications

Applications must include all the documents proving that they fulfill the admission requirements, namely:

- a) Copy of certificate or diploma;
- b) Detailed Curriculum Vitae;
- c) Motivation Letter in English;
- d) One Reference letter and two Reference contacts (to be contacted during the interview stage);
- e) Other documentation relevant to the evaluation of qualifications in a related scientific area.

The submission of applications is digital, in PDF format, from 15/12/2025 to 04/01/2026, in the following link:

<https://dozer.i3s.up.pt/applicationmanagement/#/addapplications/fa1b20ba1c1dab5f24539f7350dffcab>



### 9. Start and duration of the contract

The anticipated start date of the contract is 01/02/2026 and is subject to budget availability. The expected duration of the contract will be 8 months.

### 10. Non-discrimination and equal access policy

i3S actively promotes a policy of non-discrimination and equal access. No applicant shall be privileged, benefited, prejudiced, or deprived of any right or exempted from any duty on the basis of ancestry, age, gender, sexual orientation, marital status, family situation, economic situation, education, origin or social condition, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological beliefs, or trade union membership.

Within the framework of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers, i3S adopts the Open, Transparent and Merit-based (OTM-R) principles for the recruitment of researchers, with the aim of conducting fair and transparent recruitment processes, bringing equal opportunities to all candidates.

### 11. Applicants with disabilities

Under the terms of Decree-Law 29/2001, of February 3, the candidate with a disability is given preference in equal ranking, which takes precedence over any other legal preference. Candidates must declare under oath their degree of disability, the type of disability and the means of communication/expression to be used in the selection process, under the terms of the aforementioned decree.

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Blood2Power

European  
Innovation  
Council



Funded by  
the European Union