

## Universidade de Évora - Laboratório HERCULES Announcement for the attribution of a Research Grant for a Bachelor's Degree

8 of August of 2023

A call for tenders is open for one Scholarship for a Bachelor's Degree within the scope of the project "ART3mis - Art Rehabilitation Tools: Eco-friendly Biocides of Bioactive Metabolites for Biodeteriogenic Microorganisms Innovative Solutions", 2022.07303.PTDC, financed by national funds through Fundação para a Ciência e a Tecnologia (FCT/MCTES), State budget - I&D 2022 call, under the following conditions:

Scientific area: Biochemistry, Biotechnology

## Admission requirements:

Degree in Biochemistry, Biotechnology, or a related field.

Will be valued experience in microbiology/biotechnology techniques, such as the isolation and manipulation of fungi, yeasts and bacteria strains, production and maintenance of microbial cultures, elaboration of adapted culture media, storage of microorganisms by cryopreservation and lyophilization techniques, production of bioactive metabolites in microbial cultures, antimicrobial analysis methodologies; biochemistry techniques such as separation and evaluation of biological activities of biomolecules, manipulation of cell cultures and animal tissues *in vitro*, molecular biology techniques, such as DNA/RNA extraction, quantification, purification and RT-PCR.

As set forth FCT Research Scholarship Regulation No. 950/2019 of December 16, 2019, article 3 and 6, candidates for "**BI**" (Research Grants) must comply as a rule condition for the award of the scholarship, the effective inclusion in study cycles leading to the attribution of academic degrees or in courses not leading to an academic degree. Courses that do not confer an academic degree correspond to the courses provided for in subparagraph e) of paragraph 3 of article 4 of Decree-Law No. 74/2006 of 24 March and must be developed in a higher education institution in association with at least one R&D unit, including a course plan in one or several research areas of the unit.

## Work plan:

The candidate will focus your research in the scope of the ART3mis (2022.07303.PTDC) Project developing a methodology for the implementation of new green biocides that can effectively suppress the biodeteriogenic action of a wide range of microorganisms commonly found in different materials of Cultural Heritage. These biocides should offer more effective and

sustainable alternatives while being safe for human health and the environment. The workplan will involve the following steps:

- 1) Screening of new bioactive compounds produced by different microbial strains that reveal effective antimicrobial activity against Cultural Heritage biodeteriogenic microorganisms;
- 2) Selection of promising compounds to enhance their antimicrobial activity;
- 3) Characterisation of the toxicological properties to ensure their safe use in Cultural Heritage context;
- 4) Development of a strategy for large-scale production of the new green biocides;
- 5) Design and production of a cost-effective, non-toxic set of solutions for suppressing and eliminating point-of-care biodeteriogenic microorganisms in Cultural Heritage assets.

**Applicable legislation and regulations**: The granting of the Research Scholarship will be carried out upon the signing of a contract between the University of Évora and the scholarship holder, as set in the template <a href="former.fct.pt/apoios/Minuta Contrato\_Bolsa.docx">former.fct.pt/apoios/Minuta Contrato\_Bolsa.docx</a>, pursuant to the Research Scholarship Statute (Law No. 40/2004 of August 18 and Decree-Law No. 123/2019 of August 28) and in accordance with the legislation and Regulation of Research Grants of the Foundation for Science and Technology, IP in force, regulation nº950/2019 of December 16, 2019: <a href="https://files.dre.pt/2s/2019/12/241000000/0009100105.pdf">https://files.dre.pt/2s/2019/12/241000000/0009100105.pdf</a> and other applicable rules.

**Place of work**: The work will be developed at HERCULES Laboratory of the University of Évora, under the scientific guidance of the Doctor Cátia Salvador and the Professor Ana Teresa Caldeira.

**Duration of the scholarship:** The scholarship will have a duration of 6 months, starting on September of 2023. The scholarship contract may be renewed up to a maximum of 12 months or until the end of the funding project's budget allocation.

Amount of monthly maintenance allowance: The amount of the scholarship corresponds to €930.98, according to the table of scholarships awarded directly by FCT, I.P. in Portugal (<a href="https://www.fct.pt/wp-content/uploads/2023/02/Tabela-de-Valores-SMM 2023.pdf">https://www.fct.pt/wp-content/uploads/2023/02/Tabela-de-Valores-SMM 2023.pdf</a>), payments being made monthly, by check or bank transfer.

**Selection methods**: The selection will be made through curricular evaluation, based on the following percentage weighting:

- a) Experience as described in "Admission requirements" (maximum 60 points);
- b) Adequacy of the scientific area of specialization (maximum 20 points);
- c) Scientific production (scientific articles, oral or panel communications presented at national and international conferences) (maximum 20 points);

The selection board may decide to interview the candidates to better access some of the evaluation criteria or in case of a tie. In this case, the interview will correspond to 40% and the total evaluation obtained in the sum of evaluation criteria a, b and c will correspond to 60%.

## **Composition of the Selection Jury:**

President: Doutora Cátia Sofia Clemente Salvador 1º Vowel – Prof. Doutora Ana Teresa Caldeira 2º Vowel – Prof. Doutora Maria do Rosário Martins 1º Substitute – Prof. Doutor António Candeias 2º Substitute – Prof. Doutora Ana Zélia Miller

**Advertising/notification of results:** The final results of the evaluation will be publicized, through an ordered list by final grade obtained and posted in a visible and public place of the HERCULES Laboratory, Palácio do Vimioso, Évora. All the candidates will be notified of the final results of the evaluation through email.

To ensure the right of prior hearing of interested parties, the Final Classification project will be announced by any written means to all interested parties.

After communicating the provisional list of the results of the evaluation, candidates have a period of 10 working days to express their opinion in a preliminary hearing of interested parties.

**Application deadline and submission of applications**: The tender is open from 14 of August of 2023 to 4 of September of 2023 and the results of the selection will be published by 14 of September of 2023.

Applications must be formalized, obligatorily, by sending an application letter with the following documents: copy of the identification card, Curriculum Vitae, certificate of qualifications of Degree and Master, motivation letter, reference or recommendation letters and other relevant documents.

For the purposes of application, the evidence may be replaced by a declaration of honor signed by the candidate, but the failure to demonstrate that evidence, in the contracting phase, possession of the required degree on the deadline for application or the non-presentation of proof of enrollment in the study cycle or non-degree course, for scholarships with this component, imply the cancellation of the candidate's application.

Academic degrees obtained in foreign countries require registration by a Portuguese Institution in accordance with Decree-Law no. 66/2018, of August 16 and Ordinance No. 33/2019, of January 25th.

The presentation of the certificate is mandatory for the signing of the contract. More information can be obtained at: https://www.dges.gov.pt/pt/pagina/recognition?plid=374

Applications must be sent by email to:

Doctor Cátia Salvador Laboratório HERCULES da Universidade de Évora e-mail: cscs@uevora.pt

