

## 1 Research Grant Announcement (M/F)

Call open for applications for a research grant within the framework of project “HyGreen&LowEmissions - Tackling Climate Change Impacts: the role of Green Hydrogen production, storage and use, together with low emissions energy systems”, with the reference NORTE-01-0145-FEDER-000077, co-financed by the European Regional Development Fund (FEDER), through the North Portugal Regional Operational Programme (NORTE2020), under the PORTUGAL 2020 Partnership Agreement, under the following conditions:

**Scientific Area:** Chemical Engineering or related areas

**Admission requirements:** Candidates who cumulatively meet the following two requirements may apply for this grant:

**Requirement 1:**

- Hold a master’s degree in Chemical Engineering or related field.

*If the degree has been awarded by a foreign higher education institution, it must comply with the provisions of the Decree-Law no. 66/2018, of august 16th, and any formalities established there must be fulfilled until the time of signing the contract.*

**And**

**Requirement 2:**

- Be a student enrolled in a doctoral program in the area of Chemical Engineering, a requirement to be duly proven at the time of signing the contract.

or

- To be enrolled in a non-academic degree course integrated in the educational project of a higher education institution, developed in association or cooperation with one or more R&D units a requirement to be duly proven at the time of signing the contract.

*Note: In the case of masters who are enrolled in non-academic degree courses, the scholarship can only be awarded to those who do not exceed, with this scholarship contract, including possible renewals, an accumulated period of two years in that typology of the scholarship, followed or interpolated.*

**Activity Outline:** The work plan is included in Activity 2 CO<sub>2</sub> capture, Sub-activity 2.1 CO<sub>2</sub> capture for biofuel production by microalgae. It is intended to make CFD studies of heat and mass transfer in oscillatory reactors for the production of microalgae.

**Legislation and regulations:** Law Nº. 40/2004, of 18th August, in its current wording (Statutes of Scientific Research Fellow) and Regulation of Research Grants of Fundação para a Ciência e a

Cofinanciado por:

Tecnologia, in force ( <https://www.fct.pt/apoios/bolsas/regulamento.phtml.pt>) and Regulation of Research Grants of University of Porto, in force.

**Work place:** The work will be developed at LSRE-LCM, at the Department of Chemical Engineering of the Faculty of Engineering of the University of Porto (FEUP), under the scientific supervision of Doctor Ricardo Santos and Doctor Margarida Brito.

**Grant duration:** Initial duration of 6 months, with the predicted starting date in September 2022, on an exclusive basis eventually renewable but never exceeding the project's conclusion date.

If the recruitment procedures do not allow the grant to last for a minimum of 3 consecutive months, in accordance with paragraph 3 of article 6 of the Research Grant Regulations of the Foundation for Science and Technology, I.P. , the scholarship will not be awarded.

The eventual renewal of the scholarship will be carried out as determined in article 6 of the Research Grants Regulation of the Foundation for Science and Technology, I.P.

**Stipend:** The monthly amount of the grant varies between 1,144.64 euros, according to the table of values of the grants awarded directly by FCT, I.P. in Portugal, and 1,300.00 euros, depending on the profile and previous experience of the candidate in the project area.

If the amount to be paid exceeds 1,144.64 euros, the remaining amount will be provided by FEUP funds, not coming from the funding.

The payment will be made by bank transfer.

**Selection procedure:** A curricular evaluation will be carried out, followed by an interview.

The curricular evaluation will be based on the merit of the candidate, in which the following factors will be considered:

- a) Academic education: Master degree in Chemical Engineering (5 points); Other Master degrees – 2 points;
- b) Degree's final classification: up to 15 values - 3 points; 16 values – 4 points; equal or greater than 17 values – 5 points

This rating is determined as follows:

- In the case of Integrated Master: final classification of the Integrated Master.
  - In the case of an n-year Bachelor degree + 2 years Master:  $n/(n + 2) \times$  Bachelor degree's classification +  $2/(n + 2) \times$  Master's classification.
- c) Research experience in CFD simulation of oscillatory reactors – 5 points; in areas related to the project – 3 points; outside the project's area – 1 point;

Candidates who obtain a score equal to or greater than 10 points in the curriculum evaluation will be accepted for the interview, which will be classified up to 5 points. During the interview, topics related to the candidate's work plan and experience and CV will be discussed.

If the minimum score of 15 points is not reached by any of the candidates, the scholarship will not be awarded.

**Composition of the Selection Jury:**

President: Professor Alexandra Maria Pinheiro da Silva Ferreira Rodrigues

1<sup>st</sup> effective member: Doctor Ricardo Jorge Nogueira dos Santos

2<sup>nd</sup> effective member: Doctor António Manuel Azevedo Ferreira

1<sup>st</sup> supplementary member: Professor Cláudia Sofia Gomes da Silva

2<sup>nd</sup> supplementary member: Professor Alexandre Filipe Porfírio Ferreira

**Form of advertising/notification of results:** The results of the evaluation will be announced via email, to the email address indicated in the application process.

**Deadline for applications and form of presentation of the applications:** The call is open from 04/07/2022 to 31/7/2022 (until 23h59m, GMT time).

Applications must be formalized by email to [rsantos@fe.up.pt](mailto:rsantos@fe.up.pt) and to [recursoshumanos@fe.up.pt](mailto:recursoshumanos@fe.up.pt), stating the project's reference in the subject (**FEUP\_HyGreen\_BI SA 2**) and including the following documents:

- Motivation letter (in English)
- Copy of certificates evidencing academic degree (referring the course average – of each cycle or integrated cycle and classifications of the curricular units),
- Detailed Curriculum Vitae (in English or Portuguese)
- Declaration on honor that the candidate fulfills the requirement contained in article 6 of the Regulation for Research Grants of the Foundation for Science and Technology, I.P. (model below, for student enrolled in a non-academic degree course integrated in the educational project of a higher education institution, developed in association or cooperation with one or more R&D units),
- Other documents considered relevant by the applicant.

In order to guarantee the reading of all documents, the preferred recording format is the Portable Document Format (.pdf).

Declaration on honour

I, \_\_\_\_\_ (identification of the scholarship holder), holder of the Citizen Card / Visa / Residence Permit  
no. \_\_\_\_\_, valid until \_\_\_\_\_, declare under honour to be in the conditions of no. 5 of article 6º of the  
Research Grants from FCT, I.P. - Regulation No. 950/2019, of 16 December.

Oporto, \_\_/\_\_/\_\_

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(scholarship holder's signatures)