

1 Research Grant Announcement (M/F)

Call open for applications for a research grant within the framework of project BiCat4Energy “Carbon-based noble metal-free bifunctional electrocatalyst for renewable energy production: Improving the Unitized Regenerative Fuel Cell” (PTDC/EQU-EQU/1707/2020), funded by national funds (PIDDAC) through FCT/MCTES, under the following conditions:

Scientific Area: Chemical Engineering and related areas

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

Requirement 1:

- Be a student enrolled in a doctoral program in the area of Chemical and Biological 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, 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.

and

Requirement 2:

- 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.

Activity Outline: The work plan deals with the following BiCat4Energy Project activities: synthesis and characterization of electrocatalysts, catalytic performance evaluation in the oxidation/reduction reactions of the fuel cell; support on the molecular simulation studies (DFT), prototype evaluation, and, dissemination activities of the project.

Legislation and regulations: Law N.º. 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

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

Work place: The work will be developed at the Department of Chemical Engineering of the Faculty of Engineering of the University of Porto (FEUP), under the scientific supervision of Professor Manuel Fernando Ribeiro Pereira, Doctor Raquel Pinto Rocha and Doctor Rui Sérgio da Silva Ribeiro.

Grant duration: Initial duration of **6 months**, with the predicted starting date in **september 2021**, on an exclusive basis eventually renewable but never exceeding the project duration.

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 grant stipend amounts to 1.104,64€ according to the table of values of the grants awarded directly by FCT, I.P. in the Country (<https://www.fct.pt/apoios/bolsas/valores>). 1,354.64 euros depending on the profile and previous experience of the candidate within the project area. In the case the amount exceeds 1,104.64 euros, the difference will be supported by FEUP own funds, not from project funds.

The payment will be made by bank transfer.

Selection procedure:

The curriculum of the candidates will be evaluated based on the merit of the candidate:

- a) Academic training (Master in Chemical Engineering – 5 points; Master in Chemistry – 3 points; Others Masters – 1 points)
- b) Degree's final classification: 10 to 12 values – 0 points; 13 values – 1 point; 14 values – 3 points; 15 values – 4 points; equal or higher than 16 values – 5 points

Degree's final classification:

- In case of Integrated Master: final classification of Integrated Master.
- In case of Bachelor (n years) + Master 2 years: $n/(n + 2) \times$ Bachelor's classification + $2/(n + 2) \times$ Master's classification.

- c) Research Experience in the project area – 5 points; in related areas – 1 points; Other areas – 0 point.

The two better candidates with a score equal to or higher than 9 points in the curricular evaluation will be admitted for the interview. The interview will have a maximum score of 5 points. In the interview, topics related to the candidate's work plan, experience, motivation and CV will be discussed.

If the minimum score of 13 points is not reached by any of the candidates, the scholarship will not be awarded.

Selection Jury:

President: Professor Manuel Fernando Ribeiro Pereira

Effective member: Doctor Raquel Pinto Rocha

Effective member: Doctor Rui Sérgio da Silva Ribeiro

Supplementary member: Doctor Olívia Salomé Pinto Soares

Supplementary member: Professor José Luís Figueiredo

Advertisement of final decision: The results of the evaluation will be released to the candidates by 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 09-09-2021 to 22-09-2021 (until 23h59m, GMT time).

Applications must be formalized by email to fpereira@fe.up.pt and to recursoshumanos@fe.up.pt clearly stating the reference **FEUP-BiCat4Energy-Mestre** and including the following pdf documents: Motivation letter, Copy of certificates evidencing academic degree (referring the classification of each separated or integrated degree), detailed Curriculum Vitae; 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 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) and other documents considered relevant by the applicant.

In order to assure that all documents can be read, the preferred saving 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, IP - Regulation No. 950/2019, of 16 December.

Oporto, __/__/__

Signature

(scholarship holder)

