



RENEWABLE ENERGIES CHAIR

RESEARCH SCHOLARSHIP FOR MASTER DEGREE – 1 position

February 2, 2022

A call for tenders is open for a Research Scholarship for Master, within the scope of the project HybridStorage – Hybrid Energy Battery Systems, Ref. POCI-01-0247-FEDER-048270, co-financed by national funds through the Programa Operacional Competitividade e Internacionalização, PT2020, and by the European Regional Development Fund (ERDF), under the following conditions:

Scientific area: Engineering and Environment

Admission requirements:

- _ Master of Solar Energy Engineering. This is a mandatory condition.
- _ PhD student in Mechatronics and Energy Engineering. This is a preferential condition.
- _ Scientific experience in modeling electrical energy storage systems and energy management strategies. This is a mandatory condition.
- _ Experience in characterization tests of battery and inverter technologies, with determination of performance parameters.
- _ Knowledge of mathematical simulation software (MatLab and Labview) and of control and communication with battery and sensor systems is valued.

As set forth FCT Research Scholarship Regulation No. 950/2019 of December 16, 2019, article 3 and 6, candidates for “BI” 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 Scholarship foreseen work plan is related to the activities of the HybridStorage project, in the scope of the technology demonstration of solar technologies and energy storage, and includes:

- _ Technical support in ongoing research tasks within the HybridStorage project.
- _ Analysis and production of technical documentation related to the software and algorithm under development.
- _ Development of a sizing model for hybrid battery solutions with implementation of mathematical models.
- _ Development of a management algorithm for hybrid battery systems.
- _ Support in the actions of dissemination and knowledge transfer of the project.
- _ Support in the production of project reports and possible publication of scientific results.

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 https://www.fct.pt/apoios/Minuta_Contrato_Bolsa.docx, under the Research Scholarship Statute (Law No. 40/2004 of August 18 and Decree-Law No. 123/2019 of August 28) and following the legislation and Regulation of Research Grants of the Foundation for Science and Technology, IP in force, regulation nº950/2019 of December 16, 2019, <https://www.fct.pt/apoios/bolsas/regulamento.phtml.pt> and other applicable rules.

Place of work: The work is to be developed at the facilities of the Renewable Energies Chair at the Polo da Mitra of the University of Évora, under the scientific guidance of Doctor Luis Fialho.

Duration of the scholarship: The scholarship will have a duration of 12 months, starting in March of 2022. The scholarship contract may be renewed up to the end of the financing HybridStorage project budget allocation.

Amount of monthly maintenance allowance: The amount of the scholarship corresponds to €1144.64, according to the table of scholarships awarded directly by FCT, I.P. in Portugal (<http://fct.pt/apoios/bolsas/valores>), payments being made monthly, by check or bank transfer.

Selection methods: The selection methods to be used will be the following:

Academic Qualifications: 50%

Classification: 50%

Adequacy: 50%

Curriculum Analysis: 50%

Scientific Activity: 50%

Experience in requested topics: 50%

Composition of the Selection Jury:

President – Dr Luís Fialho (Auxiliar Researcher – Renewable Energies Chair)

1st Jury member – Dr Afonso Cavaco (Researcher – Renewable Energies Chair)

2nd Jury member – Dr Diogo Canavarro (Auxiliar Researcher – Renewable Energies Chair)

1st Substitute – Dr Radia Ait El Cadi (Researcher – Renewable Energies Chair)

2nd Substitute – Dr Pedro Horta (Chairman of the Renewable Energies Chair)

Advertising/notification of results: The final results of the evaluation will be publicized, through a list sorted by final grade posted in a visible and public place at the University of Évora (Renewable Energies Chair, Polo da Mitra), and the selected candidate will be notified by 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 3 of February to 17 of February of 2022 and the results of the selection will be published by 21 of February of 2022.

Applications must be formalized, obligatorily, by sending an application letter with the following documents: **Curriculum Vitae, certificate of academic qualifications and other relevant supporting 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 Luis Fialho**

Renewable Energies Chair of the University of Évora

email: catedraer@uevora.pt