

CHAIR OF RENEWABLE ENERGIES

Research Grant for a Bachelor's Degree - 1 vacancy

14 of September of 2023

A call for tenders is open for one Scholarship for a Bachelor's Degree, enrolled in a Master Degree within the scope of the project **ATE** - Aliança para a Transição Energética (Reference C644914747-00000023), financed by national funds through the "Agendas Mobilizadoras para a Inovação Empresarial" through the "Programa Recuperação e Resiliência (PRR)", under the following conditions:

Scientific Domain: Engineering sciences and technologies

Scientific area: Electrical, electronic and computer engineering, Mechanical engineering, Other engineering sciences and technologies

Scholarship topic: Integration of high-capacity electrical storage systems based on the Carnot Battery concept into the power grid

Admission requirements:

- Knowledge of the operation and regulation of the electricity generation sector and the electricity transmission network;
- Knowledge of electricity production and storage technologies based on renewable sources;
- Preferably experience with models and/or modeling software for the electricity system: generation and transmission;
- Preferably knowledge of different remuneration models for generation and network services.

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:

- Develop modeling of the electro-producing system (production and transport) based on predefined software (ARTELYS Crystal Supergrid);
- Collaborating in the definition of different production and consumption scenarios;
- Assessing the impact on the system of introducing different levels of additional storage capacity based on Carnot batteries;
- Collaborating on the impact analysis of different remuneration models for large-capacity electricity storage services.

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 [former.fct.pt/apoios/Minuta_Contrato_Bolsa.docx](https://www.fct.pt/apoios/Minuta_Contrato_Bolsa.docx), 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: <https://files.dre.pt/2s/2019/12/241000000/0009100105.pdf> and other applicable rules.

Place of work: The work will be developed at Renewable Energies Chair at the Polo da Mitra of the University of Évora, under the scientific guidance of the Doctor Pedro Horta.

Duration of the scholarship(s): The scholarship will have a duration of 12 months, starting on October of 2023. The scholarship contract may be renewed up 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 (https://www.fct.pt/wp-content/uploads/2023/02/Tabela-de-Valores-SMM_2023.pdf), payments being made monthly, by check or bank transfer.

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

- curriculum evaluation (100%)

If considered necessary by the jury, for further clarification or tie-breaking purposes, the first two may be called for a selection interview.

If an interview is used, the evaluation will be as follows:

- curriculum evaluation (85%)
- interview (15%)

Composition of the Selection Jury:

President - Pedro Horta (Coordinating Researcher - Renewable Energy Chair)
1st Jury Member - Luís Fialho (Senior Researcher - Renewable Energy Chair)
2nd Jury Member - Radia Ait El Cadi (Researcher - Renewable Energy Chair)
1st Substitute - Diogo Canavarro (Assistant Researcher - Renewable Energy Chair)
2nd Substitute - Afonso Cavaco (Researcher - Renewable Energy Chair)

Advertising/notification of results: The final results of the evaluation will be publicized, through an ordered list by final grade obtained posted in a visible and public place at the University of Évora Renewable Energies Chair at the Polo da Mitra, being the candidate (a) approved notified 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 20th of September of 2023 to 4th of October of 2023 and the results of the selection will be published by 9 of October of 2023.

Applications must be formalized, obligatorily, by sending an application letter with the following documents: Curriculum Vitae, certificate of qualifications, reference or recommendation letters and other supporting documents considered relevant.

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:

Renewable Energies Chair at the University of Évora

e-mail: catedraer@uevora.pt

Subject: Application for a CER Graduate Scholarship