RENEWABLE ENERGIES CHAIR

RESEARCH SCHOLARSHIP FOR MASTER DEGREE – 1 POSITION

11 of February of 2022

A call for tenders is open for one Scholarship for **Master Degree**, within the scope of the project **EUROPATMOS** - European Parabolic Trough with Molten Salt, Ref. ERA-NET COFUND, GA N°838311, funded by European Union's Horizon 2020 Research and Innovation Programme, under the following conditions:

Scientific area: Thermodynamics and Energy Engineering.

Admission requirements:

- Master degree in Renewable Energies Engineering, Mechanical Engineering, Physics or other Engineering field addressing Thermodynamics and thermal conversion and/or thermal energy storage equipment and systems;
- Registration on a doctoral program covering the mentioned scientific areas,
- Scientific experience in research activities in the field of high temperature application of Solar Concentration technologies; in Thermal Energy Storage (TES) systems based in phase change materials (PCM) for Concentrated Solar Power (CSP) applications and in thermodynamic cycles,
- Experience in the modelling and simulation of thermal systems with TES for CSP applications,
- Preferably with previous experience in the commissioning and operation of thermal systems,

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 work plan foreseen for the Scholarship is related to the activities of the EUROPATMOS project in the scope of operation, testing and technological demonstration of process control concept for a molten salt parabolic trough field includes:

- Plant operation monitoring and identification of the operations modes,
- Physical control system test of the molten salt loop,
- Support in equipment installation and update of plant documentation and respective safety procedures,

- Operation and maintenance of molten salt parabolic trough plants in standard and emergency situations. In particular, the O&M processes, filling and drainage of the system or individual components, repair of leakages, and loop maintenance.
- Performance of technical tests and evaluation of results,
- 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, 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://www.fct.pt/apoios/bolsas/regulamento.phtml.pt and other applicable rules.

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

Duration of the scholarship: The scholarship will have a duration of 12 months, starting on April of 2022. The scholarship contract may be renewed until the end of the financing project's 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: 45%
- Classification: 50%
- Adequacy: 50%

Curriculum Analysis: 45%
- Scientific Activity: 50%
- Experience in requested topics: 50%

Interview: 10%
- Motivation: 50%
- Projects: 50%

Composition of the Selection Jury:
- Diogo Canavarro (Auxiliary Researcher - Renewable Energies Chair - University of Évora): President
- Radia Ait El Cadi (Researcher - Renewable Energies Chair - University of Évora) 1st Member
- Afonso Cavaco (Researcher - Renewable Energies Chair - University of Évora) 2nd Member
- Luís Fialho (Auxiliary Researcher - Renewable Energies Chair - University of Évora) 1º Substitute
- Pedro Horta (Holder - Renewable Energies Chair - University of Évora) 2º Substitute

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 February 14 to February 28 of 2022 and the results of the selection will be published by 1th March of 2022. Applications must be formalized, obligatorily, by sending an application letter with the following documents:
Curriculum Vitae, certificate of academic qualifications 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 enrolment 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/reconhecimento?plid=374

Applications must be sent by email to:

Doctor Diogo Canavarro
Renewable Energies Chair of the University of Évora

Email: **catedraer@uevora.pt**

Co-financed by:

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Energias Renováveis e Eficiência Energética