

CALL FOR GRANT APPLICATIONS (AE2023-0502)

INESC TEC is now accepting grant applications to award 1 Post Doctoral Research Grant (BIPD) on the scope iSTENTORE with reference 101096787 funded by the European Commission under the Horizon Europe program for the period 2021-2027.

1. GRANT DESCRIPTION

Type of grant: Post Doctoral Research Grant (BIPD)

General scientific area: ENGINEERING, MATHEMATICS

Scientific subarea: Electrical engineering, Applied mathematics

Area of Work: Power Systems - Autonomous power systems and large scale renewables integration

Grant duration: 12 months, starting on 2024-01-17, with the possibility of being renewed until the end of the project.

Scientific advisor: Carlos Moreira

Workplace: INESC TEC, Porto, Portugal

Maintenance stipend: € 1741,00, [according to the table of monthly maintenance stipend for FCT grants](#), paid via bank transfer. Grant holders may be awarded potential supplements, according to a quarterly evaluation process (Articles 19, 21 and 22 of the [Regulations for Grants of INESC TEC](#) and Annex II), up to a maximum limit of 50% of the monthly maintenance stipend.

INESC TEC supports costs with registration, enrolment or tuition fees, during the grant duration, under the terms established in the internal document: "[Payment of Tuition fees to grant holders](#)".

The grant holder will benefit from health insurance, supported by INESC TEC.

2. OBJECTIVES:

- Leading activities on the development of applications for managing energy storage systems in isolated networks;
- Analysis of static and dynamic behavior of isolated systems;
- Development of applications to support the operation of isolated systems;

3. BRIEF PRESENTATION OF THE WORK PROGRAMME AND TRAINING:

- Development of advanced simulation models for isolated power grids with energy storage and renewables;
- Development of advanced power system economic dispatching for autonomous power grids, including security constraints.
- Creation of supporting documentation.
- write the grant activity report.

4. REQUIRED PROFILE:

Admission requirements:

PhD degree in Electric Power systems or applied mathematics

The PhD degree must have been obtained within the three years prior to the date of submission of the application and the research work leading to the award must have been carried out at a host entity other than INESC TEC.

Preference factors:

- Proven experience in steady state and dynamic analysis of electrical systems;
- Proven experience in PSS/E or DigSillient Power Factory;
- Proven experience in modeling low carbon power grids
- Fluency in English and Portuguese (written and spoken).

Minimum requirements:

- Advanced user in Matlab and Simulink
- Programming skills (Python, C, C++, etc.).

5. EVALUATION OF APPLICATIONS AND SELECTION PROCESS:

Selection criteria and corresponding valuation: the first phase comprises the Academic Evaluation (AC), based on the criteria referred to in Article 12 of the [Regulations for Grants of INESC TEC](#), while the second phase comprehends the Individual Interview (EI). All factors are evaluated on a scale of 0 to 100, taking into account the applicants' merit, suitability and conformity with the preference factors.

The weight of the AC factors are as follows: Academic Qualifications (FA, 50%), Scientific Publications (PC, 10%), Experience (EX, 30%) and Motivation Letter (CM, 10%).

Candidates who score less than 50 points in the AC average will be considered excluded on absolute merit. The top five candidates approved on absolute merit will be qualified for the individual interview. The Final Grade (CF) is obtained by the weighted average of AC (90%) and EI (10%).

The Selection Jury is composed of the following members:

- President of the Jury: Carlos Moreira
- Full member: Filipe Joel Soares
- Full member: Leonel Magalhães Carvalho
- Substitute member: Ricardo Jorge Bessa

Release of results and prior hearing: the results of the selection process, as well as the terms and procedures for prior hearing, will be released to the applicants by email, under the terms referred to in Article 13 of the Regulations for Studentships and Fellowships of INESC TEC.

6. FORMALISATION OF APPLICATIONS:

Application Documents:

1. Motivation letter;
2. Curriculum Vitae (must include the list of previous fellowships, their type, beginning and end dates, funding entities and host institutions);
3. Certificate or diploma degree;
4. Documental evidence to support the country of residence, residence permit or other legally equivalent document, in cases where the applicant is a foreigner or non-resident in Portugal - valid until the beginning of the grant.
5. Other supporting documents relevant to the final assessment.

Failure to deliver the required documents within the 90-day period after the date of the notice of the conditional awarding of the grant implies its cancellation.

Application period: From 2023-12-14 to 2023-12-28

Submission of applications: the application will be formalised by submitting the form available in the *Work With Us* section of INESC TEC website.

7. BINDING LEGISLATION AND REGULATION

The hiring process shall comply with the current legislation regarding the Research Grant Holder Statute, approved by Law no. 40/2004 of August 18, in its current wording, as well as by the [Regulations for Grants of INESC TEC](#) and for [FCT Grants Regulation in force](#).

For more information, please check the [Regulations for Grants of INESC TEC](#) and relevant annexes at www.inesctec.pt/bolsas



Funded by the
European Union