

## **CALL FOR APPLICATIONS**

Job:

Job reference: AE2017-0192 (InteGrid - CPES)

INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência

Position: Research Grants (BI)

City: Porto

Research field: Main: ENGINEERING

Sub: Electrical engineering

Job summary:

INESC TEC is accepting applications to award 1 Research Grant for MSC.

Project: Demonstration of INTElligent grid technologies for renewables INTEgration and INTEractive consumer participation

enabling INTEroperable market solutions and INTErconnected stakeholders

Scientific Advisor: André Guimarães Madureira

**Duration Grant:** from 2017-09-01 to 2018-08-31 (12). The grant may be renewed for additional periods up to the maximum duration

of the project or the duration of the grant for which the candidate was selected. It can also be renewed due to another project provided that it is entirely or partly related to the work area in the call and that it contributes to the

ongoing training.

Location: INESC TEC, Porto, Portugal

Job description:

Work Area: Power Systems

**Project overview:** The work to be developed is part of the InteGrid project that aims at demonstrating how Distribution System Operators (DSOs) may enable all stakeholders to actively participate in the energy market and distribution grid management. It also aims at demonstrating scalable and replicable solutions in an integrated environment that enables DSOs to plan and operate the network with a high share of distributed energy resources in a stable, secure and economic way.

**Objectives:** Development of advanced algorithms for control and management of distribution network operation with distributed energy resources (e.g. voltage control) Implementation of the abovementioned algorithms in tools to support DSOs operation in real distribution networks Test of the abovementioned tools through simulation, in a laboratory environment and in a real live demo in different operating conditions Writing of reports and scientific papers

Academic Qualifications: Master Degree in Electrical Engineering or equivalent.

Minimum Profile required: Background in electric power systems (integration of distributed resources in distribution networks, steady

state simulation of LV networks with renewable generation)

Fluency in English

Preference factors: Knowledge of programming languages (C and/or Python) Experience in developing studies on the

steady-state behaviour of electric power systems Fluency in Portuguese (spoken and written)

**Monthly Grant:** €980,00 (MSC) according to the Stipends values of the grants awarded directly by the FCT, paid by bank

transfer. The grant holder may also benefit from additional incomes in the sequence of a quarterly evaluation process (Clauses 12 and 13 of INESC TEC Grants Regulation and Annex II), up to a maximum of 50% of the

monthly grant.

**Project duration:** 2017-01-01 a 2020-06-30

Funding Entity: CE

The grant contract shall be submitted to the legislation concerning the Research Grant Holder Statute, approved by Law n 40/2004, dated 18 August, amended and republished by Decree-Law No. 202/2012 of 27 August and amended by Decree-Law No. 233/2012 of 29 October and by Law No. 12/2013, of January 29, and Decree-Law No. 89/2013 of July 9 as well as by INESC TEC Grant Regulation, approved by FCT - Fundação para a Ciência e a Tecnologia (Science and Technology Foundation) in 12 January 2011 and FCT current Grant Regulation.

Additional information about INESC TEC Grants Regulation and relating annexes may be found at www.inesctec.pt/grants

**Selection Criteria:** Curriculum evaluation based on the criteria referred to in Clause 7º INESC TEC Grants Regulation and will include individual interviews in the final stage of the selection process, with its valuation: 90% curriculum evaluation (40% CV, 30% scientific domains and 20% Expertise) and 10% interview.

Selection Jury: President of the Jury: Prof. André Guimarães Madureira;

Permanent Member: Prof. Ricardo Jorge Bessa;

Substitute Member: Prof. Manuel Matos;

Notification of results: The results of the selection process will be disseminated to interested parties by mail, as referred to in Clause

8 of INESC TEC Grants Regulation.

Application period: From 2017-07-26 to 2017-08-28

Application submission: Fill in the electronic form in the section Work with Us at www.inesctec.pt, attaching the Curriculum Vitae,

certificate of qualifications and other supporting documents relevant to the final assessment.