

CALL FOR APPLICATIONS

Job:

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| Job reference: | AE2019-0291 (INESC TEC LA - 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 .

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| Project: | INESC TEC-UID/EEA/50014 |
| Scientific Advisor: | Leonel Magalhães Carvalho |
| Duration Grant: | from 2020-01-01 to 2020-06-30 (6) eventually renewable. |
| Location: | INESC TEC, Porto, Portugal |

Job description:

Work Area: Reactive power coordination at the TSO/DSO boundary

Project overview: This research work consists on the development and improvement of an innovative optimization tools based on stochastic methodologies for managing the distribution network taking into account the coordination between the DSO and the TSO. The tool main goal is to empower the DSO with appropriate levers to preventively mitigate and solve congestion and voltage problems while keeping the power factor in the primary substation at pre-defined levels.

Objectives: - Conceptualization, development, implementation and demonstration of models for the operation and management of the distribution network, accounting for TSO/DSO coordination and the uncertainty related to renewable energy sources available at distribution level - Implementation of such methodologies in open-source software

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| Academic Qualifications: | Integrated Master in Electrical Engineering or equivalent |
| Minimum Profile required: | Background on stochastic optimization and probability; Solid programming skills Python and/or MATLAB. |
| Preference factors: | Experience in the application of numerical methods to electric power systems problems Experience in using optimization and power flow computation tools |
| Monthly Grant: | €989,70 (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. |

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| Project duration: | - |
| Funding Entity: | Funded by National Funds through FCT - Portuguese Foundation for Science and Technology, I.P., in the scope of the project UID/EEA/50014 |

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 7 [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. Only those candidates who obtain at least 70% in the curricular evaluation (CV + Scientific Domain + Experience) will be called for the interview.

Selection Jury: President of the Jury: Prof. Leonel Magalhães Carvalho;
Member: Prof. Tiago André Soares;
Member: Prof. Bernardo Silva;

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 2019-11-18 to 2019-11-29

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.