

## **CALL FOR APPLICATIONS**

Job:

Job reference: AE2017-0269 (iMAN - CESE)

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

**Position:** Post-Doc Grants (BPD)

City: Porto

Research field: Main: ENGINEERING

Sub: Industrial engineering

Job summary:

INESC TEC is accepting applications to award 1 Postdoctoral Grant

Project: iMAN - Intelligence for advanced Manufacturing systems (NORTE-01-0145-FEDER-000020)

Scientific Advisor: Alexandra Sofia Marques

**Duration Grant:** from 2017-11-08 to 2018-06-30 (8) . 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: Production and Distribution planning and scheduling

**Project overview:** Real-time decision-making requires the integration of the planning, scheduling, and control levels in order to achieve highly competitive operations. The main goal of this project is to develop simulation-optimization methods to integrate and coordinate, in real-time, the planning, scheduling and control decision-making under the framework of the implementation of Industry 4.0 concepts and technologies.

**Objectives:** Develop new simulation-optimization methods for planning and scheduling production and distribution. Assess the impact of the implementation of Industry 4.0 concepts and technologies in Production and Distribution planning and scheduling.

Academic Qualifications: PhD in Engineering and Industrial Management, Computer Science or similar

Minimum Profile required: Skills in optimization modelling and simulation of discrete-events; motivation towards research projects;

Proficiency in English.

Experience in writing scientific articles. Strong communication skills.

Preference factors: Competences in optimization models (CPLEX or GUROBI) and/or discrete-event simulation models (SIMIO or

ANYLOGIC); expertise in production and logistics planning.

**Monthly Grant:** €1495,00 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

arant.

**Project duration:** 2015-07-01 a 2018-06-30

**Funding Entity:** CCDRN, funded by the European Regional Development Fund (ERDF) through the Northern Regional

Operational Program (NORTE 2020)

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: 70% curriculum evaluation (30% CV, 25% scientific domains and 15% Expertise) and 30% interview.

**Selection Jury:** President of the Jury: Prof. Américo Azevedo;

Permanent Member: Prof. Alexandra Sofia Marques; Substitute Member: Prof. Jorge Pinho de Sousa;

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 2017-10-17 to 2017-10-30

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.





