CALL FOR APPLICATIONS

Job:

Job reference:	AE2019-0274 (POCITYF - CPES)
	INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
Position:	Investigação (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:	A POsitive Energy CITY Transformation Framework
Scientific Advisor:	Rui Esteves Araujo
Duration Grant:	from 2020-02-01 to 2021-01-31 (12) eventually renewable until the project conclusion or budget.
Location:	INESC TEC, Porto, Portugal

Job description:

Work Area: Sustainable energy systems

Project overview: POCITYF implement novel and innovative solutions for Évora city regarding the energy management and optimization for buildings, smart inverter solutions for PV and storage integration, smart bidirectional chargers to support V2G applications. The research fellow will develop innovative tolerant control and fault diagnosis techniques for smart inverter solutions and control systems and join a team referenced internationally for its high expertise in smart grids.

Objectives: The tasks involve the study and develop. of algorithms for tolerant control and fault diagnosis. Specifically: Conceptualize, develop and implement innovative algorithms for passive fault detection & identification, active fault detection & identification, both over networks with delays. Promote the practical implementation of the algorithms and comparison of different methods. Publish papers in international conferences and journals

Academic Qualifications:	Master degree in Electrical Engineering or similar
Minimum Profile required:	Advance knowledge in control systems and fault-diagnosis system Advance knowledge in tools for numerical simulations and in programming (e.g., matlab/Simulink, C, Python) Fluent in English
Preference factors:	Exp.with control systems and power electronics related problems. Exp. with tools for numerical simulation and dynamic stability studies.
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.

Project duration:	2019-10-01 a 2024-09-30
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 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 .

Selection Jury:	President of the Jury: Prof. Rui Esteves Araujo; Member: Prof. Ricardo Jorge Bessa; Member: Prof. Clara Sofia Gouveia;
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 2019-11-20 to 2020-01-10
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.