

CALL FOR APPLICATIONS: RESEARCHER

Job/position/grant:

Job reference:	AE2022-0134 (Plurianual_LA - CPES)
	INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
Job/position/grant:	RESEARCHER
City:	Porto
Research field:	Main: ENGINEERING
	Sub: Electrical engineering

Job summary:

INESC TEC is accepting applications for 1 job in the Power Electronics		
Project:	Financiamento Laboratório Associado	
Scientific Advisor:	Nayara Brandão de Freitas	
Duration of the	from 2022-06-01 to 2023-05-31, eventually renewable.	
contract:		
Location:	INESC TEC, Porto, Portugal	

Job description:

Work Area: Power Electronics

Project overview: - Technical and staff coordination of the smart grids and electric vehicles laboratory of INESC TEC - Specification of high-performance power conversion systems according to the state of the art - Design and specification of power electronics solutions for different applications - Integration and laboratory and experimental validation of theoretical concepts such as intelligent management and control algorithms to support autonomous and interconnected operation of power systems - Production, test and validation of technological solutions developed in R&D projects.

Objectives: Manage the ongoing activities of the laboratory and support the development of experimental solutions - Identify opportunities for practical development and demonstration - Define functional and technical requirements for the implementation of practical solutions - Manage human and material resources in the execution of projects - Ensure interaction with various institutional partners.

Academic Qualifications:	Bachelor or Master electrical and computer engineering; electronics; power electronics; energy systems; other related
Minimum profile required:	 Experience in the specification, design and implementation of power electronics systems, in algorithms for management and control of energy resources (e.g.: MPPT and battery management), and in the design and development of printed circuit boards.
	- Experience in performing tests on devices and systems (e.g.: electronic converters) in laboratory environment and in the field, as well as in the use of test equipment (e.g.: power/power analysis, efficiency and electromagnetic compatibility, thermography)
Preference factors:	Experience in laboratory management and in the execution of practical activities in the context of projects - Experience in simulation tools (e.g., MATLAB/Simulink) and real-time controller programming for power conversion systems (e.g., Texas Instruments C2000) - Knowledge of industrial standards and protocols - Fluency in English (written and spoken)

Funding Entity:	funded by National Funds through FCT - Portuguese Foundation for Science and Technology, I.P., project
	(reference LA/P/0063/2020
Type of contract:	fixed-term contract
The hiring shall be governed by what is stipulated in the legislation in force regarding fixed-term employment contracts and by INESC TEC	
norms.	

Selection criteria:	The selection of the candidates will be based on the following criteria, in descending order of consideration:
	a) Relevant Curriculum in the concerned field of this tender
	b) Proven experience.
Selection Jury:	President of the Jury: Prof. Nayara Brandão de Freitas;
	Member: Prof. David Emanuel Rua;
	Member: Prof. Rui Esteves Araujo;
Notification of results:	The results of the selection process will be sent to the interested by electronic mail.
Application period:	From 2022-04-13 to 2022-05-13
Application submission:	Electronic form filling in www.inesctec.pt in the section Work with Us





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