

## CALL FOR APPLICATIONS: RESEARCHER

### Job/position/grant:

<b>Job reference:</b>	AE2023-0227 ( CPES-Geral - CPES ) INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
<b>Job/position/grant:</b>	RESEARCHER
<b>City:</b>	Porto
<b>Research field:</b>	Main: ENGINEERING Sub: Computer engineering,Electrical engineering,Electronic engineering

### Job summary:

#### INESC TEC is accepting applications for 1 RESEARCHER job in the Electrical Engineering

<b>Scientific Advisor:</b>	Leonel Magalhães Carvalho
<b>Start Date:</b>	2023-07-28
<b>Location:</b>	INESC TEC, Porto, Portugal

### Job description:

**Work Area:** Electrical Engineering

**Project overview:** The work to be carried out by the researcher falls within the context of planning the expansion of electrical power systems with high integration of renewable energy production, storage, and new loads such as electric vehicles and hydrogen production. The objective is focused on the development of simulation tools for the operation of power systems, both interconnected and isolated systems, for the quantification of costs and utilization of renewable energy. The tools will be used to define optimal reinforcement plans for power systems.

**Objectives:** - Development of simulation tools based on optimization algorithms and power flow analysis; - Testing and validation in case studies; - Dissemination of results and writing of technical reports.

<b>Academic Qualifications:</b>	Bachelor or Master in electrical and computer engineering; energy systems; other related
<b>Minimum profile required:</b>	- Experience in electrical power systems and reliability assessment; - Use and parameterization of learning algorithms based on historical data (e.g. Artificial Neural Networks); - Programming skills in MATLAB and Python; - Fluency in English (spoken and written).
<b>Preference factors:</b>	- Experience in power system optimization and Sequential Monte Carlo Simulation; - Fluency in Portuguese (spoken and written).

### Funding Entity:

**Type of contract:** Uncertain term contract

The hiring shall be governed by what is stipulated in the legislation in force regarding uncertain term employment contracts and by INESC TEC norms.

<b>Selection criteria:</b>	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.
<b>Selection Jury:</b>	President of the Jury: Prof. Leonel Magalhães Carvalho; Member: Prof. Filipe Joel Soares; Member: Prof. Carlos Moreira;
<b>Notification of results:</b>	The results of the selection process will be sent to the interested by electronic mail.
<b>Application period:</b>	From 2023-06-29 to 2023-07-12
<b>Application submission:</b>	Electronic form filling in <a href="http://www.inesctec.pt">www.inesctec.pt</a> in the section <a href="#">Work with Us</a>