

## **CALL FOR APPLICATIONS: RESEARCHER**

Job/position/grant:

**Job reference**: AE2021-0239 ( 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, Industrial engineering

Job summary:

INESC TEC is accepting applications for 1 job in the Local Energy Communities

Project: Financiamento Laboratório Associado

Scientific Advisor: Ricardo Jorge Bessa

**Duration of the** from 2022-01-15 to 2023-01-14

contract:

Location: INESC TEC, Porto, Portugal

Job description:

Work Area: Local Energy Communities

**Project overview:** - Defining functional requirements for multi-energy communities (electricity and heat/cold) - Development of centralized and distributed energy management algorithms - Optimal planning of distributed energy resources for communities - Testing and validation in laboratory and real demonstration environment

**Objectives:** - Technical-economic evaluation of the implementation of local energy communities - Specification and development of new algorithms for sizing and operation of communities with renewable generation, storage and load flexibility - Application of artificial intelligence techniques for the optimization of energy communities - Testing and validation in real environment of software and hardware solutions

Academic Qualifications: Master electrical and computer engineering; industrial engineering; mechanical engineering; operations

research, other related areas

Minimum profile required: Experience in the formulation of optimization problems (operations research) for engineering areas

- Basic knowledge in energy concepts (electricity, heat/cold, etc.)

- Programming experience (Python, etc.)

**Preference factors:** - Experience in developing optimization problems for sustainable energy systems. - Experience in projects for

multi-energy communities or micro-grids. - Fluency in English (spoken and written)

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. Ricardo Jorge Bessa;

Member: Prof. José Villar;

Member: Prof. Clara Sofia Gouveia;

**Notification of results:** The results of the selection process will be sent to the interested by electronic mail.

**Application period:** From 2021-11-24 to 2021-12-10

Application submission: Electronic form filling in www.inesctec.pt in the section Work with Us



