

CALL FOR APPLICATIONS: RESEARCHER

Job/position/grant:

Job reference:	AE2022-0415 (RN21 - CPES) INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
Job/position/grant:	RESEARCHER
City:	Porto
Research field:	Main: ENGINEERING Sub:

Job summary:

INESC TEC is accepting applications for 1 RESEARCHER job in the ENGINEERING - Decarbonization Industrial Sector	
Project:	Projeto integrado Resina Natural 21
Scientific Advisor:	Zenaida Mourão
Start Date:	2023-02-01
Location:	INESC TEC, Porto, Portugal

Job description:

Work Area: ENGINEERING - Decarbonization Industrial Sector
Project overview: The Integrated Project RN21 - Innovation in the Natural Resin Sector to Strengthen the National Bioeconomy is based on three main guiding principles: to cover the entire production value chain of Natural Resin (NR), from the forest to the end consumer, with a special focus on markets and new products; to respond to the main needs and opportunities identified by the sector's agents and contribute to the objectives of the PRR, specifically the component C12 - Sustainable Bioeconomy. One of the objectives of the project is to contribute to the identification of measures for a decarbonization of the processes and an improvement in the sustainability of the use of energy and water resources - in line with the principles of circular economy, for the industries in this sector. In RN21, INESC TEC is responsible for the implementation of measure "II1.M3A - Transition to renewables and efficient use of water and energy", which will characterize the current use of energy and water in the sector, identify the potential for improving energy efficiency and water use, options for integration of local renewables, good practices in the sector in this area and carry out a study and produce roadmap on best practices in the sustainable use of resources in order to minimize environmental impacts and increase efficiency.
Objectives: The objectives of this work include: (1) Characterisation and mapping of the current use of energy and water in the industries that comprise the sector - including from 1st and 2nd transformation; (2) Energy diagnosis and identification of opportunities to improve efficiency in the use of resources (energy and water); (3) Identification of opportunities to integrate local renewable resources and for decarbonisation of the sector; and (4) Preparation of the roadmap on best practices for the sustainable use of resources and potential measures for carbon neutrality in the sector.

Academic Qualifications:	Master's degree in Mechanical or Environmental Engineering, or similar.
Minimum profile required:	Knowledge of energy system characterisation from primary resources to end uses, Experience of energy flow mapping of industrial and/or thermal processes, or similar, Experience with calculations of environmental impacts at GHG emissions level, Knowledge of technological options for energy efficiency improvement and industry decarbonisation)
Preference factors:	Experience in carrying out diagnoses and/or energy audits at an industrial level; Knowledge of circular economy; Fluency in English and Portuguese (written and spoken);

Funding Entity:	RN21 funded by IAPMEI with reference Investimento TC - C12 - i01 - Bioeconomia Sustentável N.º 02/C12-i01/2021 Co-financed by Component 12 - Promotion of Sustainable Bioeconomy, integrated in the Climate Transition Dimension of the Recovery and Resilience Plan within the scope of the Recovery and Resilience Mechanism (MRR) of the European Union (EU), framed in the Next Generation EU, for the period 2021 - 2026.
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.

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. Zenaida Mourão; Member: Prof. David Emanuel Rua; Member: Prof. Ricardo Jorge Bessa;
Notification of results:	The results of the selection process will be sent to the interested by electronic mail.
Application period:	From 2022-12-14 to 2023-01-14
Application submission:	Electronic form filling in www.inesctec.pt in the section Work with Us