

JOB OFFER

PhD Researcher

Position: PhD researcher on solid-liquid Phase Change Materials (PCM) for thermal energy storage

Offer date: WEB publication

Project: CIIAE -Refª PD- PCM S-L (ALMACENAMIENTO DE ENERGÍA TÉRMICA)

Department: Thermal Energy Storage

Estimated starting date: First quarter of 2024

Workplace:	University of Extremadura. Cáceres campus.	
Tasks to be developed:	<p>The storage based on PCM uses phase transitions to storage latent heat, usually from solid to liquid phase. In some cases, these materials need to be modified to improve the storage efficiency and stability.</p> <p>Likewise, determining the interaction of the PCMs with the components of the storage system (e.g., storage tanks, pipes, etc.) is essential to achieve a sustainable and effective application.</p> <p>Selected candidate is expected to perform the following tasks:</p> <ul style="list-style-type: none"> - In collaboration with the responsible scientists, will carry out the development, characterization and scale-up of new PCMs. - Development of the procedure for encapsulating (micro & nano) of PCMs - Performance of corrosion studies - Study of the interaction between the PCMs and its containers (e.g., storage tanks, pipes, etc.) - Development of heat transfer devices highly flexible and efficient - Writing of scientific publications and presentation of results at international conferences. <p>The candidate is expected to acquire the title of PhD, through the reading of its research work in front of a court in a public session.</p>	
Duration of the contract and salary (per annum):	Fixed-term contract. End: September 2025. Possibility of extension.	Gross Salary: 19065, 34 €
Academic background required:	<p>Graduate degree in Physics, Chemistry, Chemical engineering, Environmental Sciences or similar</p> <p>To meet the requirements to access into a PhD program</p> <p>Note: Candidates about to finish the master (or equivalent degree that guarantee access to the PhD program) can submit the application. The grade certificate will be required by the time of signing the contract.</p>	
Other education:	<p>Valuable master's degree in:</p> <ul style="list-style-type: none"> -Chemical engineering -Materials Science -Materials for Energy storage and conversion -Environmental chemistry -Solar Energy 	
Professional experience:	-Not required	

JOB OFFER

Job requirements (have to be fulfilled):	Specific techniques (analytical, software, calculations, prototyping, etc.)	Office tools.
	Participation and/or collaboration in R&D&I/business projects	Not required
	Languages	English. Valuable: Spanish and Portuguese.
	Cross-cutting competences	<ul style="list-style-type: none"> - Communications skills. - Ability to work in a team
	Willingness to travel and stay abroad	This position requires occasional participation in events outside of Extremadura
	Publications: scientific articles (in journals indexed in Web of Science and/or Scopus), theses (PhD and/or Master's), presentations at conferences, reports, technical reports, technical guides, etc.	Not required.
To be evaluated (adds points to the final evaluation)		
<ul style="list-style-type: none"> - Reference letters: please provide two reference letters (for example of professors with their contact details). highlighting the technical and soft skills identified by the reference in your profile, and that are of relevance for the position. - Motivation letter: please include a letter describing the skills you consider of value for the position - Experience in laboratory activities - Experience in DSC & TGA - Experience in organic and/or inorganic syntheses of new materials - Research projects: please include a list of the R+D+i projects you have been involved in. - Scientific publications / participation in scientific meetings - Awards, mentions or other achievements <p>Note: To facilitate the evaluation process, <u>it is recommended</u> to include a list or table, itemizing the merits you consider that should be evaluated for each of the requirements (Ex: Requirement: Experience in surface area measurements. Candidate: brief description of experience in surface area reflected in scientific articles, end-of-master project, end-of-degree project, courses, projects, etc.)</p>		
TECHNIQUES: Oral knowledge test YES <input type="checkbox"/> NO X		
LANGUAGE: ORAL YES X NO <input type="checkbox"/> It will be evaluated during the interview.		
JOB INTERVIEW: YES X NO <input type="checkbox"/>		

JOB OFFER

Interested candidates

Please, send all the documents requested by the terms and conditions of the call for proposals, together with all the documents requested by this job offer, and the Application Form. Deadline is 15 calendar days from the day following the publication in the CIAE web, and indicating the following reference: **Refª PD-PCM S-L (ALMACENAMIENTO DE ENERGÍA TÉRMICA)** to:

FUNDECYT-PCTEX (Edificio Parque Científico Tecnológico), Avda. de la Investigación, s/n – Edificio PCTEX, Campus de la Universidad de Extremadura - 06006 Badajoz (Spain)

Email: ciae.personal@fundecyt-pctex.es

Phone number: +34 924 014 594

www.fundecyt-pctex.es

www.ciae.org