

# SENIOR MASTER TECHNICIAN

**Position: Senior Master Technician (Prototyping)**

**Offer Date: WEB Publication**

**Project: CIIAE – Refª TMS-PROTOTIPADO (ALMACENAMIENTO ENERGÍA TÉRMICA)**

**Department: Thermal Energy Storage**

**Estimated starting date: 4<sup>th</sup> quarter 2024**

<b>Workplace:</b>	Iberian Centre for Research in Energy Storage - CIIAE is located at Campus of University of Extremadura, Cáceres, Spain.	
<b>Tasks to be developed:</b>	<p>CIIAE is structured to have various research lines distributed into departments for 1) Thermal Energy Storage, 2) Electrical Energy Storage, 3) Hydrogen &amp; Power-2-X. Prototyping is a transversal research line which gives flexibility to work with different dedicated research lines.</p> <p>Prototyping refers to being focused on turning ideas into physical objects, solving technical challenges, and integrating them into a functional device. It is a fundamental piece to validate the theoretical work that other researchers/engineers are developing on a laboratory scale. If you are excited about this concept, this job awaits you.</p> <p>As a TMS in Prototyping, you will be working closely with colleagues to develop prototypes/workstations/test-benches for the systems related to the above-mentioned research departments. You will get the opportunity to work with different energy systems, offering the possibility to implement the research concepts of prototyping.</p> <p>The selected candidate is expected to:</p> <ul style="list-style-type: none"> <li>- Exhibit an engineering profile that can effectively collaborate with the other teams.</li> <li>- Supervise team/contractor performing installation and commissioning of the prototypes.</li> <li>- Have expertise in design engineering focused on 3D CAD modelling.</li> <li>- Perform multiphysics simulations e.g. CFD, solid mechanics, etc.</li> <li>- Develop algorithms for data acquisition using LabVIEW (or similar) for measuring pressure, temperature, etc.</li> <li>- Have expertise of data analysis using tools such as MATLAB or Python.</li> </ul>	
<b>Duration of the contract and salary (per annum):</b>	Temporary Contract Initial duration: 2025 September, with the possibility of extension	Annual Gross Base Salary: 36.775,48 €
<b>Academic background required:</b>	Degree of Licenciatura (5 years) / Bachelor + Master / Integrated Master in the field of STEM (Science, Technology, Engineering, and Maths) or Ph.D. in relevant fields is preferable.	
<b>Other professional education:</b>	Valuable training/knowledge in: Design and Analysis of components to be used for applications of Hydrogen / Thermal Storage, Manufacturing Processes, Thermodynamics Analysis, Instrumentation Control Systems, Workshop Automation, and Microcontrollers / PCB Designing.	

<b>Professional experience:</b>	<ul style="list-style-type: none"> <li>• 5 years of working experience.</li> <li>• At least three years of work experience in engineering sector.</li> <li>• Experience in developing prototypes using novel ideas.</li> <li>• Designing of instruments/components assisting engineering activities. It can be related to mechanics, electrical, computer interfaces, or data acquisition.</li> <li>• Fab Lab experience is a plus.</li> </ul>	
<b>Job requirements (have to be fulfilled):</b>	Specific techniques (analytical, software, calculations, prototyping, etc.)	Additional Points for the following: <ul style="list-style-type: none"> <li>• Experience in fabrication workshop.</li> <li>• Knowledge of manufacturing process: welding equipment, lathes, milling machines, casting.</li> <li>• Experience in the manufacturing of in-house equipment.</li> <li>• Knowledge of softwares such as Matlab, Auto-Cad, Solidworks, Labview, Ansys, EES, and TRNSYS or other similar.</li> </ul>
	Participation and/or collaboration in R&D&I/business projects	Previous experience in projects will be valued.
	Languages	English is preferable.
	Cross-cutting competences	Ability to supervise and to work as a team member. Ability to perform tasks with precision, effectiveness, and by safe practices.
	Willingness to travel and stay abroad	This position requires participation in events outside of Extremadura.
	Publications: scientific articles, theses (PhD and/or Master's), presentations at conferences, technical reports, etc.	Valuable publications. Valuable experience in the preparation of reports or technical guides.
<p><b>The following attachments will score additional points to your final evaluation:</b></p> <ul style="list-style-type: none"> <li>• Motivation letter: please include a letter describing the skills you consider of value for the advertised position, as well as your expectations from this position at the CIAE.</li> <li>• Reference letters: please provide two reference letters (from employers and/or professors, together with their contact information, e-mail, and telephone number) highlighting the technical and soft skills identified by the reference in the candidate, and that are of relevance for the position.</li> <li>• Projects: please include a list of the R+D+i or industrial projects you have been involved.</li> <li>• Experience in scaling from laboratory to prototypes.</li> <li>• Experience in writing proposals for competitive calls (even if funding has not been obtained, in this case, please attach the evaluation letter).</li> <li>• Having obtained funding or competitive research contracts.</li> <li>• Demonstrated experience in supervising work teams.</li> <li>• Having supervised end-of-degree projects (TFGs), end-of-master projects (TFMs)</li> </ul>		

**JOB OFFER**

- Being the first author or the corresponding author in scientific articles
- Having completed specific training courses, relevant to the offered position
- Experience in industrial collaborations and/or previous experience working in industry.
- Patents.
- Awards, mentions, or other achievements.

Note: To facilitate the evaluation process, it is recommended to include a list or table, itemizing the merits you consider that should be evaluated for each of the requirements.

(For example: Job Requirement: Experience of working with solidworks software. Candidate Response: Brief description of experience with solidworks software reflected in scientific articles, thesis, courses, projects, etc.)

**Selection process details:**

**TECHNIQUES: Oral knowledge test** YES  **NO** X

**LANGUAGE: ORAL** YES X NO  (**Will be evaluated during the interview**)

**JOB INTERVIEW:** YES X NO

**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, with the deadline being 15 calendar days from the day following the publication in the CIAE web, and indicating the following reference **Ref<sup>a</sup> TMS-PROTOTIPADO (ALMACENAMIENTO ENERGÍA TÉRMICA)**.

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