

# LABORATORY TECHNICIAN

**Position offered: Electrochemistry Laboratory Technician. T.2**

**Date of offer: Web Publication**

**Project: CIIAE-REF. TL-ELEC (HIDRÓGENO Y POWER-TO-X)**

**Department: Hidrógeno y Power-to-X**

**Expected date of entry: 1<sup>st</sup> Quarter 2024**

<b>Work place:</b>	University of Extremadura. Cáceres Campus	
<b>Tasks to be developed:</b>	<ul style="list-style-type: none"> <li>- Maintain laboratory equipment (including periodic calibration tasks), ensuring its proper functioning and managing communication with suppliers and/or trouble-shooters.</li> <li>- Train, assist and provide advice and support to scientific staff (predocs, postdoctoral researchers, senior researchers, other technicians, etc.) in the management and proper use of laboratory equipment.</li> <li>- Ensure good practices that guarantee order and cleanliness in the laboratories, as well as the management of waste from electrochemical assays.</li> <li>- Create and update technical documentation and operation and/or safety protocols related to experimental equipment. Participate in the management and analysis of results.</li> <li>- Preparation and physicochemical, morphological and electrochemical characterization of electrodes, electrode/electrolyte interfaces, and cells for low and high temperature electrolysis, CO<sub>2</sub> and NO<sub>x</sub> electroreduction, and photoelectrocatalysis.</li> <li>- Organize inventory tasks necessary to control the stock of consumables (reagents, PPE, consumables, etc.).</li> <li>- Ensure uninterrupted supply of centralized gas, e.g. by controlling gas consumption and managing gas cylinder replenishment.</li> </ul>	
<b>Duration of the contract and/or total financial envelope:</b>	September 2025 with the possibility of extension	Gross Salary + S.S. contributions Technician 2: 24,500-27,100 €
<b>Academic background required:</b>	The minimum qualification required is a vocational training as a laboratory technician, specialising in laboratory analysis, chemistry, industrial chemistry or similar.	
<b>Other training:</b>	Valuable: <ul style="list-style-type: none"> <li>- Computer and/or electronics courses.</li> <li>- Knowledge of R&amp;D in the field of energy storage.</li> </ul>	
<b>Professional experience:</b>	<ul style="list-style-type: none"> <li>- Experience as a laboratory technician (including laboratory practice)</li> </ul>	
<b>Requirements for the position:</b>	Specific techniques (analytical, software, calculations, prototyping, etc.)	Experience or knowledge in handling any of the following analytical and characterisation techniques is required: <ul style="list-style-type: none"> <li>- Demonstrated experience with electroanalytical techniques; such as: voltammetry, chronoamperometry, potentiometry, electrochemical impedance measurements, among others;</li> <li>- Experience in sample preparation for electrochemical experiments; such as: cleaning treatments, cleaning and preparation of working electrodes, preparation and set-up of reference electrodes, among others;</li> <li>- Solid understanding of laboratory safety standards and hazardous waste treatment standards.</li> </ul>
	Languages	<ul style="list-style-type: none"> <li>- English</li> </ul>

	Cross-cutting competences	<ul style="list-style-type: none"> <li>- Teamwork - Communication skills - Organisational and management skills - Flexibility to adapt to the use of different IT environments.</li> <li>- Flexibility to adapt to the use of different IT environments.</li> </ul>
	Willingness to travel and stay abroad	Occasionally
<b>Valuable:</b>	<ul style="list-style-type: none"> <li>- 2 years of experience as laboratory technician.</li> <li>- Experience in construction, start-up or operation of pilot plants.</li> <li>- Experience working with membrane electrolyzers and electrolyzer test protocols.</li> <li>- Experience with solid oxide SOEC, SOFC, r-SOC and co-electrolysis.</li> <li>- Experience with CO2 and NOx electroreduction and photoelectrocatalytic cells.</li> <li>- LabView experience.</li> <li>- Experience in the use of materials characterization techniques; such as: x-ray diffraction, electron microscopy (scanning -SEM- or transmission -TEM), spectroscopy (FTIR, RAMAN, UV, XPS, EIS, etc.), chemical composition (HCNS) or magnetic resonance (NMR).</li> <li>- Experience with thermal analysis methods; such as: thermogravimetric analysis (TGA), differential thermal analysis (DTA) or calorimetry (DSC).</li> <li>- Experience with gas chromatographic techniques (GC) or liquid chromatographic techniques (HPLC) or mass spectrometry (MS).</li> <li>- Experience with dilatometric techniques.</li> <li>- Basic assembly and repair tools.</li> <li>- Computer and/or electronic skills at user level.</li> <li>- Knowledge of Spanish or Portuguese.</li> <li>- Knowledge of English to interact in the work environment or level equivalent to B2.</li> </ul>	
<b>Selection Tests:</b>  <b>TECHNIQUE: Oral knowledge test YES NO X</b>  <b>Language: ORAL YES X NO</b>  <b>JOB INTERVIEW: YES X NO</b>		

### Interested candidates:

Send all the necessary documentation included in THE RULES OF THE CALL and THE JOB OFFER, as well as THE APPLICATION FOR ADMISSION. Deadline 15 calendar days from the day after the publication on the WEB, indicating **REF. TL-ELEC (HIDRÓGENO Y POWER-TO-X)**

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