JOB OFFER

Research Technician (Level 2)

Position:	**Research Technician Level 2 associated to the project: Regional PRI in the area of Intervention, Ecological Transition. PLASMMONIA. IB24127**		
Projects:	**PLASMMONIA**		
Professional category:	**Research Technician Level 2**	**Quotation group:**	
Work Center:	University of Extremadura. Cáceres Campus		
Number of places:	**1**	**Reservation percentage, if applicable:**	
Department:	**HYDROGEN AND POWER-TO-X**		
Offer date:	DOE Publication	**Deadline for submitting bids:**	**15 calendar days**, starting from the day after publication in the DOE (Official Gazette of Extremadura)
Application for participation:	**Annex I of the terms and conditions of the call for applications.**	**Application submission method for candidates:**	APPLICANTS MUST SEND ALL DOCUMENTATION FOR THE POINT 5 OF THE BASES, indicating **Ref. T2-PLASMMONIA2 (HYDROGEN AND POWER-TO-X))**
Documents to accompany the application:	The related documents in point 5 **of the Call for Proposals.** In addition to the mandatory documentation listed above, the submission of the following documents will be considered: - Cover letter (maximum 2 pages) This will be assessed during the merit-based assessment phase. - Two references through letters of recommendation. These will be assessed during the competitive examination phase.		
Contact information for submitting applications	FUNDECYT-PCTEX (Science and Technology Park Building), Research Avenue, s/n, PCTEX Building, University of Extremadura Campus – 06006 Badajoz (Spain) E-mail: ciiae.personal@fundecyt-pctex.es www.fundecyt-pctex.es www.ciiae.org		
Estimated start date:	**January 2027**	**Probation:**	**2 MONTHS**
Waiting list	Yes, according to the regulations in points 9 and 10 of the Call for Proposals		

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Conditions and requirements for applicants:	Those established in point 4 of the Call for Proposals		
Members of the selection committee:	**President: David Parra Mendoza**		
	Secretary and member: Lucía Cordón Masero		
	Secretary and member (substitute member): Cristina Cortés Gragera		
	Member: Juan Víctor Perales Rondón		
	Member: Liliana Analía Díaz		
	Member: Rodrigo García Muelas		
Tasks to be developed:	As part of the PLASMMONIA project, we are seeking to hire a Level 2 Technician with experience in some of the following areas: synthesis of materials with plasmonic properties; synthesis of catalyst supports; detailed characterization of catalytic materials and supports; study of electrocatalytic systems; electrochemical activation of small molecules such as N_2; and study of the performance of electrocatalytic cells. The main tasks to be performed by the researcher to be hired are the following: - Synthesis and characterization of Au and Cu-based plasmonic/electrocatalytic hybrid materials. - Synthesis and preparation of catalyst support - Detailed microstructural characterization of both catalytic materials and their supports. - Study of the reaction mechanism of plasmon-assisted electrochemical nitrogen reduction (PA-eNRR) and stability of materials, using techniques such as Raman, FTIR and UV/Vis. - Evaluation of the performance of plasmonic/electrocatalytic hybrid materials using electrochemical techniques with conventional electrolytic cells. - Preparation of catalytic inks and design of the electrolytic cell for the PA-eNRR. - Evaluation of the performance of an electrolytic cell by determining key performance indicators. - Supervision of final-year students. - Participate in group meetings and write progress reports on your research. - Working on the processing and analysis of results/data obtained in the development of laboratory tasks. - Actively participate in the writing of original scientific articles as first author or methods that are likely to be published in high-impact journals.		
Academic background:	Master's degree in materials science, electrochemistry, chemistry, chemical engineering, nanoscience and nanotechnology or similar. If you do not yet hold a master's degree but are enrolled in a program and awaiting the defense of your master's thesis, you must attach a certificate of enrollment. Additionally, by the date the contract is signed, you must submit a certificate confirming the defense of your master's thesis, along with payment of the fees for the issuance of the degree certificate.		
Another formation:	n/a		
Contract duration:	**Indefinite contract for scientific-technical activities (Art. 23 bis of Law 14/2011), with funding initially scheduled until 31/12/2027**		
Remuneration:	**Gross Annual Salary: BS: €27,104.44**	**Financing:**	**Regional Government of Extremadura. 85% co-financed by**

			FEDER funds

Details of the selection process:

- **Technical test:** NO
- **Language:** YES (will be assessed during the interview)
- **Job interview:** YES

Assessment: evaluable criteria and sub-criteria	**MERIT AND CURRICULAR ASSESSMENT PHASE (COMPETITION): up to 60 points**

- **Specific techniques (synthesis, characterization, analysis, calculations, electrolysis, etc.) (40 points)**
  - Theoretical knowledge and experience in the synthesis of nanoparticulate electrocatalysts.
  - Theoretical knowledge and experience in the synthesis of catalyst supports.
  - Theoretical knowledge and prior experience with various techniques for structural, microstructural, and surface characterization, such as X-ray diffraction, SEM, TEM, EDS, AFM, Raman, UV-Vis, FT-IR, and NMR, among others.
  - Theoretical knowledge and/or experience of general electrochemical characterization methods for electrolyzers and/or fuel cells.
  - Theoretical knowledge and/or experience in the evaluation of the performance of electrocatalytic materials in electrolytic cells using electrochemical techniques.
  - Theoretical knowledge and/or experience in the analysis, processing, and interpretation of experimental data using computer tools and scientific software such as Excel, Origin, MATLAB, Python, or other equivalent programs.
  - Knowledge of energy technologies, including renewable energy, hydrogen, flexibility technologies, and Power-to-X.
- **Cross-cutting skills (6 points)**
  - Participation in research projects of European, national, or regional significance. Projects addressing topics related to the position's research focus or that of the department to which the position is affiliated will be viewed favorably.
- **Publications: scientific articles (in journals indexed in Web of Science and/or Scopus), theses (doctoral and/or master's), conference presentations, reports, technical reports, technical guides, etc. (6 points)**
  - Academic publications as first author or co-author in Scopus-indexed journals will be highly valued. Likewise, presentations at national or international conferences will be highly valued.
- **To be assessed (8 points)**
  - Letter of motivation submitted along with the initial application for participation (maximum 2 pages).

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	- Participation and/or collaboration in R&D&I/business projects. - Master's thesis (manuscript of the work to be included in the application).
	INTERVIEW PHASE (COMPETITIVE EXAMINATION): up to 40 points
	• Letters of reference from two individuals with recognized experience and with whom the candidate has interacted. <u>These letters should be submitted initially with the application</u>. **(4 points)** • The candidate's interest in integrating into the organization and in performance of the advertised position. Willingness to travel and to stay away from the usual place of work will be considered an asset. **(14 points)** • Suitability of the knowledge, experience and other requirements demanded to the candidate's profile. **(14 points)** • Ability to work in a diverse and flexible academic environment, both as part of a team and independently. **(4 points)** • Communication skills in English and/or Spanish and/or Portuguese. Part of the interview must be conducted in English to assess language skills. **(4 points)**

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