

## Formulario EOI - EXPRESIONES DE INTERÉS

### Contact Person / Scientist in charge (Datos del IP del grupo de investigación o responsable científico)

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### Department / Institute / centre (Datos del departamento donde estaría ubicado el investigador a contratar)

Name:	Research Group in Sustainable and Renewable Electrical Technologies (PAIDI-TEP023), Department of Electrical Engineering
Address:	Higher Technical School of Engineering of Algeciras, Avda. Ramón Puyol, s/n, 11202 Algeciras (Cádiz), Spain

### Project Description(max. 1800 caracteres)

The Research Group in Sustainable and Renewable Electrical Technologies (PAIDI-TEP023) has extensive research experience, endorsed by publications, PhD theses and research projects /contracts, and advanced equipment for the development of electrical, electronics and control technologies in the following research lines:

- Smart cities/smart grids/micro-grids with renewable energy and energy storage
- Isolated and grid-connected photovoltaic systems
- Control and operation of wind turbines and wind farms, with energy storage, hydrogen production systems, and/or FACTS devices
- Green hydrogen systems (fuel cell and/or electrolyser) for electric transport, for production of electric energy or hydrogen
- Hybrid electric traction systems for transport, and electric vehicle charging stations
- Integrated energy systems with electricity, hydrogen and gas vectors
- Electronic power converters applied to renewable energies, energy storage systems, electric vehicles, etc.
- Intelligent control systems (fuzzy logic, predictive control, etc.) for energy control and management

We are looking for one or two highly-motivated experienced researchers interested in applying for an EU MSCA Postdoctoral Fellowship (MSCA-PF), who wish to work in some of our research lines, being of special interest the collaboration in research activities related with the design and control of microgrid clusters with renewable energy, energy storage systems, green hydrogen and electric vehicles, of multi-energy microgrids with electricity, hydrogen and gas vectors, and/or of smart energy in smart cities.

The Fellow/s will join an interdisciplinary team where they will work closely with other members on research and academic activities, including the participation in research projects, publications, seminars, supervision of Ph.D. and Master theses. Furthermore, they will have the opportunity to work together with national and international research groups with which the research group collaborates. Researchers with a good scientific background are encouraged to contact us. The research group will work with the selected candidates in the preparation of their candidature in order to submit a successful application to this competitive programme.

### Research Area (select)

	Chemistry (CHE)
	Social Sciences and Humanities(SOC)
	Economic Sciences (ECO)
X	Information Science and Engineering (ENG)
	Environmetal Sciences and Gelogy (ENV)
	Life Scientes (LIF)
	Mathematics (MAT)
	Physics (PHY)

### Applications: documents to be submitted and deadlines

Examples: Expression of interest, CV

Candidates should have a PhD in Electrical Engineering, Electronic Engineering or related fields, background in electrical, electronics and/or control technologies for smart cities, smart grids and/or renewable energy, English fluency, good interpersonal and communication skills, scientific creativity and originality, problem-solving skills, autonomy and initiative, and comply with the call eligibility criteria.

If you are interested in applying for MSCA-PF, please **submit by email** to [luis.fernandez@uca.es](mailto:luis.fernandez@uca.es) (no later than **15th of June 2023**) the following documents:

1. CV (including complete contact details and list of publications, projects, etc., and describing academic achievements and research expertise, focusing on those aspects relevant in the context of the project).
2. Motivation letter (including information concerning your research and career interests and goals, project idea aligned with our research lines and how the candidate will contribute with his/her expertise in the project, and your interests in this call).
3. Contact information of three referees.