

PRINCIPAL RESEARCHER in SUSTAINABLE SOLAR CONVERSION TECHNOLOGIES

LEITAT is a private non-profit entity specialized in generating value from innovation and technological development. Founded in 1906, it complies with the highest quality standards and management systems in the execution of ambitious R&D projects with big industrial companies and SMEs. We collaborate with more than 45 countries and develop more than 200 projects in the fields of biotechnology, health, advanced materials, industrial chemistry, renewable energies and new production processes

Job Description:

We are looking for a coalified candidate to incorporate as Principal Investigator in the area of “Solar Conversion Technologies”, which is an R&D area in Leitat dedicated to the development and implementation of innovative sustainable technologies for the efficient use of solar energy. Research activities are focused on the:

- development and characterization of advanced solar conversion materials and devices and optimization of their performances (e.g. engineered nanostructured photo-electrodes, stable electrolytes, optimization of the device ‘architecture, etc).
- design of new components and prototypes integrating advanced solar energy conversion technologies (e.g. integrated photovoltaic elements, either traditional or based on semitransparent materials, smart windows, advanced control & monitoring systems, etc) complying with international standards for buildings and infrastructures
- definition of appropriate measurement and validation protocols for the assessment of their performances both at component/device level (e.g. BIPV and smart window) and integrated system/infrastructure level (e.g. whole building façade).

Most of these activities are carried out in cooperation with prestigious research centers (both at national and international level) and various industrial partners. The selected candidate will have access to a technological platform endowed with a wide spectrum of design, fabrication and characterization facilities and intensively collaborate with technicians and engineers of the “Advanced Engineering” area.

Main tasks:

- To define the overall research strategy and coordinate her/his team’s research activities ensuring the fulfilment of targets and timelines.
- To identify and manage funding opportunities (private/public) in order to ensure the research activities and projects achieve their goals.
- To interact with LEITAT’s international partners (both in industry and academia sectors) in the frame of challenging European projects.
- To implement a wide spectrum of dissemination activities, as well as publications of scientific articles, presentations at technical conferences, organization of international workshops, etc.

Education:

- Master in Renewable Energies / Physics / Materials Chemistry / Electric or Electronic Engineering
- PhD degree (or 4 years research experience after the obtention of the MSC)

Experience:

- 4 years research experience (e.g. as post-doc researcher) in solar conversion technologies (e.g. photovoltaics, photo/electrochromism, solar heat conversion, photo-electrochemical systems in general)
- Experience in design, fabrication and characterization of advanced materials and devices for energy conversion (e.g. electrochemical energy storage, photovoltaic or photo-electrochemical conversion systems, etc)
- Experience in design and modelling of energy conversion systems (e.g design and calculation of a the KPIs of a PV system)
- Experience in redaction of technical proposals and reports for European Projects
- A good number of scientific publications and oral presentation to international conferences

Competencies and abilities:

Work in multidisciplinary teams
Efficient use of time and resources
Flexibility and positive attitude
Professionalism, resilience, integrity, positivity, and honesty.
Organized, proactive.
Strong analytical and creative skills.
Leadership and managing skills.

Languages:

Fluent English
Good Spanish (optional)

Software:

High command of MS Office (Word, Excel, Teams, Outlook).

Location:

Terrassa

*Please attach your cover letter.

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