



PhD Position – Santiago Grisolia Program:

Closing Date: 31 May 2023

Research Group Energy and Advanced Materials

The main focus of the team is the investigation and modeling of fundamental electrical mechanisms of different semiconductors and electronic devices. The team combines synthesis of new materials and devices with theoretical/numerical tools to develop insights into the electronic processes.

The contracted person will work on a project where halide perovskite materials will be integrated into **an artificial retina** for efficient and low energy consumption computing. The researcher will formulate the semiconducting materials and will fabricate the memory devices for brain inspired computation. The researcher will also electrically characterize the system using advanced characterization methods like impedance spectroscopy and time resolved methods.

Eligibility criteria (mandatory)

- Graduated and/or Master degree (depending on number of hours of degree) in Chemistry Materials science, Physics, Engineering or related fields.
- The candidate must be a **citizen** from a country **outside the European Union**.
- The candidate must be enrolled in a PhD program from the University Jaume I at the time of starting the contract.

Desired Technical Requirements

- Knowledge in preparation of electronic materials and devices.
- Basic electrical characterization of electronic devices and memory (memristors).
- Knowledge of electrical and optical characterization of electronic devices.
- Knowledge of signal conditioning and treatment electrical.
- Knowledge in programming to allow the user to design electrical measurements (Labview or other software to control the electric equipment)
- Basic knowledge in optical and/or electrical spectroscopy.
- Advanced knowledge of English language.

Application procedure:

Candidates should send the following documents to aguerrer@uji.es, as soon as possible.

- Motivation letter.
- Brief CV (including academic record summary)
- Name and email of one referee that supports your application.

Job conditions:

Location: Universitat Jaume I, Institute of Advanced Materials (INAM), Castelló, Spain

Duration: up to 4 years, participation in PhD program is mandatory.

Starting date: 15 of September 2023

Working hours: 37,5/ week (full time)

Initial Salary : ~22.300 €/year (gross salary) as per the Santiago Grisolia call.

Interview: Date to be confirmed

Website: <http://www.inam.uji.es/users/antonio-guerrero>

Email: aguerrer@uji.es