The Spintronics for Advanced Devices (SPINAD) group at University Jaume I in Castellon, Spain, is seeking candidates to pursue an experimental PhD in Antiferromagnetic Spintronic Devices. The position is part of the CIDEGENT grant **Emerging Spintronic Device Concepts for Neuromorphic Computing**, which will be conducted at the Institute of Advanced Materials-UJI. The proposed research sits at the edge between material science, physics, and engineering and will focus on the ultrafast dynamics of antiferromagnetic materials and their interfacial effects to manipulate their magnetic state by the application of electrical signals, either current or voltage. The fundamental results obtained during the PhD will be used to design electrical devices with cutting-edge properties for memory, high frequency (from microwaves to terahertz) and computing applications.

The position is for a duration of 4 years, and the salary is commensurate to PhD level. The ideal candidate profile would be student with a degree and master's in Physics, Chemistry, Material Science or Electrical Engineering, with special attention of candidates with background in Spintronics. Candidates with other degrees and good qualifications will also be considered. The tasks and skills the candidate will develop during the PhD are:

- Material deposition by physical vapor deposition techniques, e.g. sputtering, chemical synthesis and thermal evaporation.
- Electrical characterization using probe stations, both DC and AC.
- Microwave device characterization: VNA, spectrum analyzer.
- Synchrotron measurements.
- Material characterization: TEM, SEM, X-ray diffraction…
- Magnetic measurement techniques: MOKE, VSM, SQUID.
- Programing: C, C++, MATLAB, Mathematica.

The Universitat Jaume I offers an excellent research environment located in a modern and dynamic campus near the Mediterranean Sea. The Spintronic for Advanced Devices Lab is a young team part of the Institute of Advanced Materials (INAM), which aim is implement and develop the future devices that will form part of the new electronic circuits and computing systems.

If you are interested in our group, please send your application, including a motivation letter, CV, and one or two recommendation letters to victor.lopez@uji.es. You can find more information about us at: http://www.inam.uji.es/research-groups/rg12-spintronics-advanced-devices-lab and https://sites.google.com/view/spinadlab/home?authuser=0 .