

## Nanotechnology Group

# Predoctoral Research Position in Nanoelectronics and 2D-materials

### NOVEL ROUTES FOR ENHANCING THERMOELECTRIC PERFORMANCE IN GRAPHENE AND TOPOLOGICAL INSULATORS

The applicant will develop novel routes to unravel experimentally the thermoelectric properties on graphene-based structures and topological insulators. The applicant will perform the fabrication of devices in a clean room environment as well as the magnetotransport measurements in the mK regime and in the GHz to THz range. Please contact Dr. Mario Amado ([mario.amado@usal.es](mailto:mario.amado@usal.es)) or Dr. Enrique Diez ([enrisa@usal.es](mailto:enrisa@usal.es)) for further details

1. Application must be received before the internal deadline: **November 28<sup>th</sup> 2018**.
2. The applicant must hold a Masters Degree in Physics, or Materials Science.
3. The applicant should preferably be a citizen of a EEAS/EU country or possess a visa/ permit to work in Spain.
4. Although not mandatory, experience in Nanotechnology research on graphene and in a clean-room environment will be valued. In particular, experience in some of these techniques will be appreciated: low-temperature characterization, Micro Raman spectroscopy, RIE/ICP, electron beam lithography and electron beam deposition

### Duration

Duration of the contract is **4 years** or 3+1 Postdoctoral Research Associate if applicable commencing on or about mid-2019.

### Salary and Training

The predoctoral fellowship will be funded with a maximum **gross salary of 18500 € per annum** while the PDRA 4th year will receive a maximum gross salary of **25000 € per annum**

In addition, selected candidates will receive internal funds to develop their own research tasks including travel allowance for meetings and conferences. Furthermore, candidates will have access to a wide offer of training activities in nanotechnologies, semiconductor characterization and low-temperature technologies such as seminars, specific training sessions, etc. They will be provided with the required conditions to develop their research projects with autonomy and within a stimulating environment.

The predoctoral work will be performed in the premises of the Nanotechnology group (<http://nanotech.usal.es/>) at the University of Salamanca, Spain.