

**INSTITUTO DE NANOCIENCIA DE ARAGÓN (INA-LMA)
UNIVERSIDAD DE ZARAGOZA**

We offer:

A high level senior researcher position in solid state physics specialist in Energy Electron Loss Spectroscopy and Transmission Electron Microscopy.

Required skills:

- PhD Degree in physics, chemistry, engineering, or related discipline.
- At least 6 years postdoctoral expertise in EELS spectroscopy (experimental + modeling)
- At least two years spent in an high level laboratory of international competence
- Several papers in international reviews or patentees.
- High level in oral and written English language.
- Ability and interest to pursue new challenging and interdisciplinary problems.
- Team management

Other valuable skills:

- Experience in other Transmission Electron Microscopy techniques (particularly in electron Tomography)
- Experience in materials characterization.
- Experience in writing proposals (national and EC)
- Teaching capabilities

Contract:

A permanent contract will be negotiated depending of the quality of the candidate.

Tasks:

- The candidate will develop and lead the research activities in the field of Energy Electron Loss Spectroscopy within INA-LMA related to the research topics in Nanosciences and Nanotechnology of the INA.
- Together with the INA researchers he will have to maintain the capabilities of the instrumental TEM park at the highest level. The INA/LMA equipment is:
 1. A first Titan Cube 80 – 300 (2009) fitted with:
 - a image Cs corrector
 - a Lorentz lens
 - a biprism
 - a GIF - Tridiem
 2. A second Titan 80 - 300 (2009) fitted with :
 - the new X-FEG gun
 - a monochromator,
 - a Cs probe corrector,
 - HAADF detector
 - a Lorentz lens
 - a biprism
 - a GIF – Tridiem
 - an EDX
 - a Tomography set-up
 3. Tecnai F30 (2008), FEG, 300 kV, HREM, STEM, GIF, EDX, Lorentz microscopy, Tomography

4. A Tecnai T20 (2008), LaB6, 200kV
 5. Two FIB dual Beam (FEL) : Nova nanolab 2007 – Helios (2009)
- The candidate would have to write and deposit scientific projects both to the Spanish and Aragon governments and to the EC to support the EELS activities and develop the INA / LMA capabilities
 - The candidate will have to develop collaborations with national and international laboratories to bring the INA/LMA at the highest level in the field of Electron Microscopy.

Submission of applications: Before of 15 December, 2009

Please send the CV, documentation and brief description of your research experience to: ina@unizar.es

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