

Post doc position

Low Temperature Laboratory of the Universidad Autónoma de Madrid

Scanning tunneling microscopy and spectroscopy at very low temperatures and high magnetic fields

Candidates please send CV including the names of three referees, before 25 May 2013 to
hermann.suderow@uam.es

Description of the position

The objective is to perform scanning tunneling microscopy and spectroscopy (STM/S) measurements under high magnetic fields.

The candidate will be responsible to :

- (i) Carry over STM/S experiments at dilution refrigerator temperatures and high magnetic fields in running set-ups of the host group.
- (ii) Co-direct two PhD thesis.
- (iii) Collaborate with sample fabrication and nanostructuring groups.
- (iv) Develop and implement new computational data acquisition methods.
- (v) Work with theory groups to interpret measurements.
- (vi) Effectively work within the team and communicate with scientific and technical staff.
- (vii) Participate actively in the development of new home made instrumentation.
- (viii) Present results in international scientific meetings.

We offer :

- (i) A highly motivated group with large technical possibilities for personal development.
- (ii) Collaborations with sample fabrication groups in Zaragoza, Grenoble, Ames, Leuven and Kanpur.
- (iii) Collaborations with theoretical groups in Madrid and abroad.
- (iv) Participation in ongoing projects of the host group. Leadership in proposals for new calls.
- (v) Integration in an international Campus with seminar activity.
- (vi) Well equipped scientific support facilities through associations to the Materials Science Institute of the Spanish Research Council (ICMM-CSIC), and the "International Campus of Excellence" of the UAM+CSIC.
- (vii) Excellent and friendly environment, close to the city of Madrid, ideal for personal development.

Candidate

We are searching for a highly motivated individual who should have a PhD in low temperature physics and at least one successful post doc. The candidate should be skilled in the use of cryogenic apparatus and high magnetic fields, be strongly motivated and able to demonstrate excellent communication skills and the strong personal objective of starting new independent research line.

Essential skills and experience :

- International experience in a low temperature laboratory.
- Publications in peer-reviewed journals, in particular the Physical Review, Nature and other high impact factor journals.

Desirable skills and experience :

- Experience in developing new original apparatus in a low temperature and high magnetic field environment.

This position is linked to project FIS2011-23488 of the MINECO, and is available from 1 July 2013 until 31 December 2014. A successful candidate is expected to be able to start a new independent research activity at medium term in the host institution, and apply at all available calls for continued career development. The host group will provide instrumental and personnel arrangements to facilitate this task.

Salary will at a similar level to "Ramón y Cajal" or "Juan de la Cierva" postdoctoral positions of MINECO, depending on the qualification of the candidate.

For more information, write hermann.suderow@uam.es.