

Postdoctoral position in the area of molecular electronics.

The researcher will be able to join to a pioneer, dynamic and active group from the Department of NanoScience and Organic Materials (**NANOMOL**, www.icmab.es/nanomol) that belongs to the Materials Science Institute of Barcelona (ICMAB-CSIC) located at the UAB (Universitat Autònoma de Barcelona) research park.

Nanomol is a research group with wide expertise and recognized excellence in the synthesis, processing and study of molecular and polymeric materials with chemical, electronic, magnetic and biomedical properties. We continuously generate new knowledge in our basic and applied research projects regarding the micro and nano-structuring of molecular materials. As a group, we are actively involved in implementing nanotechnology and sustainable and economically efficient technologies for preparing advanced functional molecular materials. Molecular electronics is one of our research lines and our work is mainly devoted to the preparation of molecular switches, molecular wires and spintronics and molecular rectifiers in solution and also when they are immobilised on surfaces through self-assembled monolayers (SAMs). (Chem. Sci., 2012, DOI: 10.1039/C2SC21134C; Nature Chemistry 2011, 3, 359; Nanoletters 2011, 11, 4382; J. Amer. Chem. Soc. 2011, 133, 13556).

We offer a Postdoc contract to perform research in the emerging scientific discipline of molecular spintronics. The main tasks will be the design, synthesis and characterization of novel functional organic molecules for being integrated as active components in molecular spintronics-materials. It will also imply the preparation and characterization of hybrid materials mainly self-assembled monolayers on carbon-based substrates (graphite and/or graphene). The work will be embedded in an OPEN-FET European project.

The fellow must hold an international recognized PhD degree (or equivalent) in Chemistry or Materials Science. The ideal candidate should have a strong background in organic synthesis as well as in material sciences. Experience in surface science will be positively evaluated. An interdisciplinary outlook is desired and will be encouraged. The successful candidates will work in an international environment and might travel to other European countries to develop the project.

Contract starting date: 1st January 2014 (The contract will be for one year extendable to two)

For further information contact:

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How to apply

Submit the following application documents to ncrivillers@icmab.es and nanomol@icmab.es:

- Detailed CV including a list of publications
- Motivation Letter
- List of three references with contact details

Closing date for application: 30 November, 2013