

Marie Skłodowska-Curie Actions (MSCA) European Fellowships

Applications are invited for a postdoctoral research position in experimental physics to study *Magnetic 2D metal-organic frameworks*. This project aims at exploring emerging magnetic and topological phenomena in novel 2D MOFs. These will be synthesized following coordination chemistry, based on the surface-assisted self-assembly of the metal and organic components. The intrinsic properties of the 2D MOFs will be explored by synthesizing them on weakly interacting metals. In a second step, 2D MOFs will be interfaced with inorganic topological insulators with the aim of tailoring electronic and magnetic interactions between the two materials (see "[Molecular Approach for Engineering Interfacial Interactions in Magnetic/ Topological Insulator Heterostructures](#)", M. Gonzalez et al. ACS Nano, just accepted).

The candidate will synthesize the nanomaterials in ultra-high vacuum conditions and characterize them by combining scanning tunnelling microscopy and spectroscopy (STM/STS), X-ray and angle-resolved photoelectron spectroscopy (XPS/ARPES), and X-ray absorption spectroscopy and magnetic circular dichroism (XAS/XMCD).

Solid background in condensed matter physics and low dimensional electronic and magnetic phenomena, and experience in one or more of the above-mentioned techniques is required. Candidates must also possess good command of oral and written English. Interested candidates will be requested to apply to a Marie Skłodowska-Curie Actions European Fellowship (MSCA-EF). This Fellowship funds a 2 year position with a competitive salary.

Interested applicants may request further information and send their CV and a brief statement of interests to Prof. Aitor Mugarza at the e-mail addresses given below.

Contact info:

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