

PhD candidate for Linear response of INsulators with broken SPace-Inversion or time-REversal symmetries from first principles (PID2023-152710NB-I00)

We will have an opening for a PhD candidate in our first-principles theory and simulation group here in Barcelona very soon. Deadline for applications is mid-November, with mid-January as earliest starting date. The general context revolves around materials properties that occur whenever space inversion and/or time reversal symmetry are broken, e.g. optical activity, acoustic Faraday effect, thermal Hall conductivity, etc. More detailed information is available at <https://tinyurl.com/mr2nsbfc>

Requirements:

- Master in Physics or related disciplines is mandatory.
- Basic knowledge of density-functional theory or other methodologies for the first-principles simulation of materials is desirable.
- An aptitude for scientific programming (e.g., Fortran and/or Python) is desirable.
- Proficiency in English (written and spoken) is required.

What we Offer:

- The PhD contract will have a duration of 4 years, with mid-January 2025 as earliest starting date.
- Salary range follows the guidelines of the PhD fellowships offered by the Ministry (formerly named FPI).

How to apply:

Please send your CV with a brief motivation letter to Massimiliano Stengel (mstengel@icmab.es) or Miquel Royo (mroyo@icmab.es).

What ICMAB is and why working with us:

ICMAB – CSIC is a multidisciplinary global reference centre for the cutting-edge research of functional materials for electronics, energy and health which fosters knowledge transfer and it is characterized by its internationalization and its education, inclusion and diversity policies. ICMAB-CSIC is committed to know-how transfer to productive sectors as well as to participate in educational and outreach activities. Since 2016, ICMAB -CSIC has been awarded for three consecutive periods with the Severo Ochoa Centre of Excellence distinction.

ICMAB-CSIC, with over 250 members from 47 nationalities, is a more than three decades old research institute located at the Universitat Autònoma de Barcelona (UAB) campus, surrounded by other research and technological centres and with access to many state-of-the art equipment and scientific facilities. Moreover, ICMAB-CSIC has its



own scientific services equipped with the newest scientific instrumentation and with highly specialised technical staff available to the scientific community.

ICMAB-CSIC stands out for its great training activity at the doctoral level. Training on technical, scientific and transversal skills are offered to ICMAB-CSIC personnel. Moreover, ICMAB-CSIC has coordinated 2 Marie Skłodowska-Curie COFUND doctoral training programs on advanced functional materials: DOCFAM (2017-2022) and DOCFAM+ (2023-2028). In total, 48 doctoral students have been trained (18 at the at the ICMAB).