

The Nanoscience Cooperative Research Center, CIC nanoGUNE, located in Donostia / San Sebastian, Basque Country (Spain), is currently looking for a

Pre-doctoral Researcher

to work on

Magneto-optical characterization and control of magnetism in advanced materials

NanoGUNE is a research center devoted to conducting world-class nanoscience research for a competitive growth of the Basque Country. NanoGUNE is a member of the Basque Research and Technology Alliance (BRTA) and is recognized by the Spanish Research Agency as a María de Maeztu Unit of Excellence.

The Nanomagnetism group (<https://www.nanogune.eu/en/research/groups/nanomagnetism>) is seeking to recruit a talented, enthusiastic young scientist who is highly motivated to boost his/her research career in the area of nanoscience.

Motivation

The nano-magnetism Group at CIC nanoGUNE BRTA is conducting world-class basic and applied research in the field of magnetism and optics of nano-scale structures. The Group staff has a longstanding expertise and proven track record in fundamental and applied aspects of nano-magnetism and nano-photonics.

The **successful candidate** will be part of the Group's leading edge projects, aiming at unprecedented magneto-optical control and detection levels of magnetism.

The knowledge generated in this project is likely to break new grounds in key research areas at the frontier of science and at the interface between magnetism, optics and photonics. Besides the fundamental interest, the generated knowledge has great potential to map out a path for a future technological impact thanks to the identification of new ways to overcome the current physical limitations in the design of energy-efficient devices for information technology, including unconventional approaches (e.g., neuromorphic computers) that are intensively investigated at the present time.

Research description

The Junior Researcher will participate in the synthesis of novel metamaterials combining advanced ferromagnetic materials and noble metal nanostructures, their precise characterization with state-of-the-art and cutting-edge instruments to measure their spatio-temporal functional properties at the nanoscale and down to the sub-ps timescale.

Opportunities for Junior Researchers when joining the Nanomagnetism Group

The interdisciplinary approach of the project that combines a solid understanding of fundamental physics in nano-magnetism and nano-optics, and both basic and advanced methodologies of characterization, represents a clear opportunity for young scholars to develop into professional researchers at the cutting edge. Development of personal and transferable skills (leadership, analytical, communication, interpersonal, free thinker mindset, creativity). Prepare for excellent career options in academia, industrial R&D and beyond.

Required qualifications – Eligibility

To apply for a PhD fellowship, candidates must hold an internationally recognized Master-equivalent degree in physics, nanoscience, or engineering.

No restrictions of citizenship apply to the PhD fellowship.

A PhD degree from local University (UPV/EHU) will be granted after successful completion of the PhD research.

The **deadline** for applications is **September 15, 2026**.

The position is expected to **start after November 1, 2026**.

Application procedure

Suitable candidates should apply by completing the **form below** and attaching the following documents in a single PDF file:

- a Curriculum Vitae;
- a presentation letter with declaration of interest (max. 1 page), contact email of 1/2 potential references (alternatively 2 reference letters), a scanned copy of your university academic transcripts, a scanned copy of the Master degree, if available at the time of application a scanned copy of standardized English test results if available.

NOTES:

(i) All applicants will receive an answer after the end of the selection process; but please note that due to the large number of submissions that are expected, we cannot provide individual feedback.

(ii) Additional information about nanoGUNE's commitment towards [HR excellence in Research and Gender Equality](#) are available on our website.

(iii) We encourage you to subscribe to our [HR mailing list](#) to receive information related to nanoGUNE's open positions and open calls for different training and talent attraction programs.