

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

**The candidate will join a research line focusing on the spin transport and the interconversion between spin currents and charge currents in chiral nanocrystals. Phenomena that exploit the spin-orbit coupling will be studied, such as the spin Hall effect and the Rashba-Edelstein effect. The project also foresees the integration of working systems into functional nanodevices.**

**The research will include the synthesis and characterization of 1D and 2D chiral nanocrystals (Raman spectroscopy, AFM, TEM), the nanofabrication of devices using these materials (thin film deposition, electron beam lithography, etching), and magnetotransport measurements (high magnetic fields and low temperatures).**

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 **position** is offered in the Nanodevices Group, led by Casanova Fernández, Felix / Hueso Arroyo, Luis ([l.hueso@nanogune.eu](mailto:l.hueso@nanogune.eu) / [f.casanova@nanogune.eu](mailto:f.casanova@nanogune.eu)). The group counts with extensive research facilities for fabrication and characterization of devices and several active research lines spanning from nanofabrication to 2D electronics and spin transport.

The candidate will join a **research line** focusing on different research themes: Spintronics, Multifunctional devices and Advanced nanofabrication. We are mostly interested in the electronic properties of systems in reduced dimensions. More information can be found at <https://www.nanogune.eu/nanodevices>.

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The successful **candidate** will have a Master's degree in Physics or in a similar field and meet the following requirements:

- Proficiency in spoken and written English
- Self-motivated and a team player willing to coordinate the research in a particular topic.

Although not compulsory, the following points will be considered:

- Previous knowledge in spintronics.
- Nanofabrication (e-beam lithography, materials growth and characterization, etching)
- Electrical transport measurements.

**We promote** teamwork in a diverse and inclusive environment and welcome all kinds of applicants regardless of age, disability, gender, nationality, race, religion, or sexual orientation.

The position is expected to start in 01/08/2021 and for a total length of up to 36 months (01/08/2021 - 31/07/2024) in the Nanodevices Group. The contract will be funded by the

Esta convocatoria está cofinanciada por el Fondo Europeo de Desarrollo Regional (FEDER) por lo que las entidades beneficiarias deberán cumplir con las disposiciones en materia de información y publicidad establecidas en el anexo XII, apartado 2.2. del

Reglamento de Disposiciones Comunes, entre las que se encuentra aceptar aparecer en una lista pública de operaciones prevista en el artículo 115.2 del citado reglamento e informar de las ayudas recibidas en los contratos (de suministros, de servicios, laborales,...), publicaciones y otros resultados de la investigación, ponencias, equipos inventariables y actividades de difusión de resultados financiados con ellas, debiéndose mencionar al Ministerio de Ciencia, Innovación y Universidades (MCIU), a la Agencia Estatal de Investigación (AEI) y al Fondo Europeo de Desarrollo Regional (FEDER) como entidades financiadoras.

En el caso de que existan limitaciones de espacio, particularmente en publicaciones, se mencionará, al menos, la referencia del proyecto seguida de (MCIU/AEI/FEDER, UE).

Además deberán de aparecer los logos del Ministerio, AEI y Fondos FEDER.

Contratos de personal:

El contrato laboral debe vincular de forma específica a la persona contratada con la actividad subvencionada. Para ello debe constar la referencia y título del proyecto en el contrato e indicarse, en su caso, el porcentaje de dedicación.

Además, deberá mencionarse al Ministerio de Ciencia e Innovación (MCI), a la Agencia Estatal de Investigación (AEI) y al Fondo Europeo de Desarrollo Regional (FEDER) como entidades financiadoras. En el caso de que existan limitaciones de espacio, particularmente en publicaciones, se mencionará, al menos, la referencia del proyecto seguida de (MCI/AEI/FEDER, UE) y deberán de aparecer los logos del Ministerio, AEI y Fondos FEDER.

Candidates should **apply** by completing the form below and attaching the following documents:

- a. A complete CV

The **deadline** for applications is **28/06/2021**.

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.*