

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

PREDOCTORAL RESEARCHER

to work on

Chemical synthesis of low-dimensional materials with optical and magnetic properties for device applications

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 Prof. Luis E. Hueso and Prof. Fèlix Casanova. The PhD student will work in the research line "Chemical design and spectroscopy study of low-dimensional materials" with Dr. Beatriz Martín-García (b.martingarcia@nanogune.eu). The group has extensive research facilities for materials development and study as well as for the fabrication and characterization of devices for optoelectronic and spintronic applications.

The candidate will be part of a multidisciplinary team and will acquire a broad knowledge in materials science, chemistry and solid-state physics. The **research project** is focused on different research themes: Chemical synthesis, Spectroscopy characterization and Optoelectronic devices. We are mostly interested in the chemical synthesis of low-dimensional materials with optoelectronic and magnetic properties (see our recent papers: *Nano Lett.* 2022, 22, 4153; *Adv. Funct. Mater.* 2022, 32, 2207988). More information can be found at <https://www.nanogune.eu/nanodevices>. The **research** will include the chemical synthesis of layered hybrid metal-halide perovskite bulk crystals and elemental low-dimensional materials, Raman (and photoluminescence) spectroscopy study of these materials, magnetic characterization and the fabrication of proof-of-concept devices.

The successful **candidate** will have a Master's in Chemistry, Materials Science, Nanotechnology or a similar field and experience in the following skills:

- 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 experience in chemical synthesis
- Previous experience in materials characterization (XRD, spectroscopy)
- Previous experience in electrical transport measurements and optoelectronic devices

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 01/09/2023 or as soon as a suitable candidate is identified for a total length of up to 36 months in the Nanodevices Group. The contract will be funded by the Horizon Europe program under Grant Agreement 101046231.

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

1. A complete CV, including contact information of at least two referees.
2. A motivation letter describing why you are interested in this position and how the research project matches your interests and academic training.

The **deadline** for applications is **31/07/2023**, which could be extended. Applications will be reviewed on a rolling basis until the position is filled.

FUNDED BY THE EUROPEAN UNION LOGO

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.