

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

MASTER STUDENT
to work on
El responsable es Beatriz Martín García

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 / 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>.

The aim of the **project** is to - Project: CIC052011003 - GV_IKERBASQUE_Start Up_CIC05_Hueso

- Introduction: The significant growth, development, and evolution of technologies such as optoelectronics and spintronics have been always accompanied by the access to materials with targeted and extraordinary properties. Among these materials, 2D materials such as graphene, transition metal chalcogenides, metal phosphorus trichalcogenides or hybrid metal-halide perovskites have attracted the attention due to their extraordinary electronic, optic, and magnetic properties and the possibility of control them by fine tuning the composition, crystal structure and dimensionality.

- Work Plan: In this project, we will focus on micro-Raman spectroscopy as a non-destructive and powerful tool for gaining insight into phase transitions, crystal structure or molecules arrangement and how they change with the composition, structure, and dimensionality of the 2D materials. For this purpose, we will use single crystals and flakes of 2D materials as material platform. In this project, the Master student will be responsible for the design and preparation of the 2D materials by exfoliation and stamping on substrates. The student will be also involved in the Raman spectroscopy measurements (including low temperature tests), data analysis, and drafting of results. We offer an international and competitive environment, state-of-the-art equipment (including a class 100 cleanroom for nanofabrication capabilities), and the possibility of performing research at the highest level..

The successful **candidate** will have a .

Additionally, the candidate should demonstrate experience in the following skills:

Although not compulsory, the following points will be considered:

- **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 01/10/2021 and for a total length of up to 10 months (01/10/2021 - 31/07/2022) in the Nanodevices Group. The contract will be funded by the .

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

- a. A complete CV
- b. A cover letter and at least two reference letters grouped in a single PDF file

The **deadline** for applications is **30/06/2021**.

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.*