

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

**Infrared (nano)spectroscopy for label-free diagnostics**

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.

With this **project** we seek to apply our IR nanospectroscopy technology to visualize the fine structure of cells and tissue sections and to identify the changes in chemical composition when cancer occurs. We also engage in optical modeling of IR spectroscopy to provide a framework for better understanding the recorded spectral data and improve image quality.

The following **activities** are foreseen, which can be tailored to the interests of the student: (i) do imaging work on cell sections to provide new insights on the structure of cells (ii) do optical calculation to understand of IR spectroscopy of cells work (iii) design and validate future lab-on-chip sensors for highly sensitive IR spectroscopy.

Supervisor: **Martin Schnell** ([m.schnell@nanogune.eu](mailto:m.schnell@nanogune.eu))

The student will join the **Nanooptics Group**, led by **Prof. Rainer Hillenbrand** ([r.hillenbrand@nanogune.eu](mailto:r.hillenbrand@nanogune.eu))

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

- a. A complete CV
- b. A cover letter

The **deadline** for applications is **13/03/2025**.

*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.*

