

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

ULTRATHIN WATER LAYERS

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.

Most surfaces in our environment are covered by one or more molecular layers of water. This concerns not only solid surfaces, but also biomolecular surfaces such as skin, membranes of bacteria, or viruses. Although these water layers are crucial for biological processes, they are very rarely investigated, especially not on the nanoscale. For viruses, the hydration is purely based on physical processes and parameters (temperature, humidity), but decisive for transmission.

In this **project**, we will work with “real-life surfaces” (polymers, metals), and follow the fate of harmless model viruses. The methods will be expanded to nanoscale imaging techniques, namely Atomic Force Microscopy (AFM) and Scanning Transmission Electron Microscopy (STEM) in water vapour. At sufficiently low temperatures, we expect supercooled water or ice – here, we will venture into unexplored territory.

The **position** is offered in the **Self-Assembly Group**, led by **Alexander Bittner** (a.bittner@nanogune.eu). More information can be found at <https://www.nanogune.eu/en/research>.

The position is expected to start in **01/09/2025** and for a total length of **up to 10 months** (01/09/2025 - 30/06/2026).

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

- a. A complete CV
- b. Academic Record and Cover Letter grouped in a single PDF file.

The **deadline** for applications is **22/06/2025**.

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.*