

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

Self-healing strategies for protective coatings in built stone heritage

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.

This **project** focuses on the development of innovative self-healing strategies for protective coatings designed to enhance the durability and resilience of built stone heritage. Self-healing materials have the ability to repair damage autonomously or with minimal external intervention, extending the lifespan of protective layers and reducing maintenance needs.

The **student** will explore advanced materials and deposition techniques, such as atomic layer deposition (ALD) and hybrid organic-inorganic coatings, to create sustainable and adaptive solutions for heritage conservation. The project combines fundamental research with practical applications, addressing the challenges posed by environmental degradation and the need for long-term, low-maintenance preservation strategies.

Supervisor: **Aranzazu Sierra** (a.sierra@nanogune.eu)

The student will join the **Nanomaterials Group**, led by **Prof. Mato Knez** (m.knez@nanogune.eu). More information can be found at: <https://www.nanogune.eu/en/research/groups/nanomaterials>

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.

