

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

PRE-DOCTORAL RESEARCHER

to work on

Nanooptics

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.

During the last years, the Nanooptics group at nanoGUNE pioneered the development of scattering-type scanning near-field optical microscopy (**s-SNOM**) and Fourier transform infrared nanospectroscopy (**nano-FTIR**) [*Nature Mater.* 10, 352 (2011); *Nano Lett.* 12, 3973 (2012)], a technique that allows for imaging and spectroscopy at visible, infrared and terahertz frequencies with a resolution that is improved by a factor 100 to 1000 compared to conventional optical spectroscopies. The research performed in our group did not only set the scientific and technological foundations of s-SNOM and nano-FTIR, but also demonstrated its enormous application potential in widely different fields of science and technology, such as for nanoscale conductivity mapping in devices, nanoscale chemical identification of organic and inorganic materials, bioimaging and mapping exotic light waves in 2D and quantum materials.

We are looking for pre-doctoral researchers to further develop **s-SNOM and nano-FTIR** related technologies and methodologies, as well as for continuing our work on *nanophotonics based on 2D materials* [*Science* 359, 892 (2018); *Nature Photon.* 15, 197 (2021)] and *nanoscale characterization of chemical* [*Nature Commun.* 11, 3359 (2020)], *structural and conductivity properties of advanced materials*

Requirements:

- Candidates should hold a Degree and Master in Physics, Chemistry, Engineering, Materials Sciences or related fields.
- Experience in Scanning Probe Microscopies and/or knowledge in optics, particularly near-field and nanooptics, or nanophotonics would be appreciated.
- Proficiency in spoken and written English is compulsory.
- Availability to start as soon as possible.

We **offer** a complete PhD program (see details at [PhD Program](#)) to graduate students from all around the world who wish to start a research career at a top international research institution. More information can be found at <https://www.nanogune.eu/nanooptics>.

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.

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

- A complete CV
- A motivation letter

The **deadline** for applications is **02/11/2021**.

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.