

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

POST DOCTORAL RESEARCHER

to work on

ENSEMBLE3 is a Centre of Excellence for Nanophotonics, Advanced Materials and novel crystal growth-based technologies located in Warsaw (Poland). The centre was created jointly with the Lukaszewicz Institute of Microelectronics and Photonics, the University of Warsaw (Poland), the Karlsruhe Institute of Technology (Germany), the Sapienza University of Rome (Italy) and CIC Nanogune, within the framework of the ENSEMBLE3 Teaming Phase 2 project (H2020-WIDESPREAD 2018-2020, grant no. 857543).

The ENSEMBLE3 Centre aims on the development of novel material technologies and advanced materials with unique electromagnetic properties, with potential applications in fields such as photonics and optoelectronics, among others.

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 Nanooptics Group, led by Goikoetxea Larruskain, Monika / Hillenbrand, Rainer (r.hillenbrand@nanogune.eu). The Nanooptics Group performs experimental and theoretical research in Nanooptics and Nanophotonics, covering both fundamental and applied aspects. Essentially, we develop near-field nanoscopy (scattering-type scanning near-field optical microscopy, s-SNOM) and infrared nanospectroscopy (Fourier transform infrared nanospectroscopy, nano-FTIR), and apply these novel analytical tools in different areas of science and technology. Both techniques offer a wavelength-independent spatial resolution of about 10 to 20 nm spatial resolution at visible, infrared and terahertz frequencies, thus beating the conventional resolution (diffraction) limit by a factor of up to 1000..

The candidate will join a **research line** focusing on the instrumental developments, plasmonics and phononics, IR nanospectroscopy as well as the nanooptics theory. More information can be found at <https://www.nanogune.eu/nanooptics>.

The aim of the **project** is to The successful candidate will collaborate closely with the scientist of the center and the other partners of the project, in the identification and managing of new research paths leading to new solutions and joint research projects. Further, the candidate will help in the organization of the training program offered by Nanogune for ENSEMBLE3 members and will help in the teaching of s-SNOM related sessions..

The successful **candidate** will have a The ideal candidate should have a PhD in Physics, Engineering, Chemistry, Material Sciences or similar and experience in the following skills:

- Solid background in optics and nanophotonics.
- Creativity, critical thinking, organizational skills, proactive approach to perform tasks and reach objectives
- Strong ability to work in a team and social competence.
- Proficiency in spoken and written English is compulsory.

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

Although not compulsory, the following points will be considered:

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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 15/12/2021 and for a total length of up to 12 months (15/12/2021 - 31/12/2022) in the Nanooptics 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 **22/11/2021**.

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.