

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

Machine learning-assisted Multispectroscopy

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 [Nanoengineering Group](#), led by Prof. Andreas Seifert (a.seifert@nanogune.eu). The Nanoengineering Group focuses on research at the interface between fundamental nanoscience and applied engineering, particularly in the area of photonic medical diagnostics, environmental issues, and food control. By combining nanotechnology and photonic approaches, we bridge the gap between physical sciences and industrial as well as clinical applications to finally gain added value for novel biomedical methods, devices, and instrumentation. The acceleration of technology transfer is the driving motor for our research activities.

The candidate will join a **research line** focusing primarily on the detection of microplastics in the food chain and environment but will also be involved in projects related to medical diagnostics. More information can be found at <https://www.nanogune.eu/nanoengineering>

The aim of the research **project** includes the detection, classification and quantification of micro and nanoparticles of habitual plastic materials, primarily in typical food products of the Basque Country.

Working plan of the project is:

- Preparation of standard reference samples and systematic planning of measurement series
- Preparation of real food and biosamples for spectroscopic measurements

- Carrying out Raman, SERS, and FTIR measurements
- Multi-parametric data analysis, as for example multivariate analysis methods or deep learning

The successful **candidate** will have a PhD in Physics, Chemistry, Material Science, or related Engineering field and experience in the following skills:

- Spectroscopy
- Optics
- Photonics
- Multivariate analysis
- Handling of biosamples

Although not compulsory, the following points will be considered:

- Profound knowledge in optics/photonics/spectroscopy
- Interdisciplinary working style
- Self-motivated and a team player willing to coordinate the research in a particular topic. Proficiency in spoken and written English.

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 on 01/03/2022 and for a total length of up to 10 months (01/03/2022 - 31/12/2022) in the Nanoengineering Group.

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

- A complete CV, motivation letter, certificates and 2 reference contacts, all grouped in a single PDF file.

The **deadline** for applications is **24/02/2022**.

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.