

## POST-DOCTORAL RESEARCH POSITION IN THE THEORY OF NANOPHOTONICS GROUP

### Materials Physics Center (Donostia / San Sebastián)

The **Theory of Nanophotonics Group** at CFM is offering a postdoctoral position (18 months) starting in October 2023 to work with Prof. Javier Aizpurua, in collaboration with Dr. Rubén Esteban, in the theoretical description of the optomechanical response of molecular systems. The candidate will investigate the quantum interactions between molecular vibrations and plasmonic excitations at optical frequencies in metallic nanostructures, to better understand the capabilities and challenges introduced by the optical manipulation of the molecular states for quantum technologies.

The positions will be funded by MCIN and by the European Union NextGenerationEU/PRTR-C17.11, as well as by IKUR Strategy under the collaboration agreement between Ikerbasque Foundation and DIPC on behalf of the Department of Education of the Basque Government.

The selected candidate will be hired by the Research Association MPC - Materials Physics Center. The salary will be of 35.650,44 euros (postdoc) during the first year before taxes.

The Theory of Nanophotonics Group at the Center of Materials Physics addresses the optical response of nanoscale systems. Current research topics in the group include the study of molecular spectroscopy enhanced by cavities, ultrafast electron dynamics in plasmonic junctions, and molecular optomechanics. For more information, visit our web: <http://cfm.ehu.es/nanophotonics>

Candidates must hold a PhD degree in Physics, preferably in the field of condensed matter physics and related. Expertise in second quantization treatments within cavity-QED will be highly appreciated for this particular position, as well as background in molecular spectroscopy.

Suitable candidates can apply for this position sending by email to [jobs.cfm@ehu.eus](mailto:jobs.cfm@ehu.eus) the following information **before 22<sup>th</sup> of September of 2023** with the subject label "**Postdoc CFM-QuantumLight**":

- 1- An updated Curriculum Vitae, including a list of publications. ([50]%)
- 2- A presentation letter with declaration of interests (max. 1 page). ([25]%)
- 3- Two reference letters and/or contact email of two potential referees. ([25]%)

General enquiries or questions about this position should be submitted by email to: [jobs.cfm@ehu.eus](mailto:jobs.cfm@ehu.eus) with the subject label "**Postdoc CFM-QuantumLight**".

ASOCIACION DE INVESTIGACION MPC, as the data controller, informs you that your data is collected for the following purposes: Management of the employees and of the data of the candidates for the positions offered by the center and publication of the data of the names and surnames selected and of the persons on the waiting list on the Association's website. The legal basis for the processing is the consent of the data subject. Your data will not be passed on to third parties unless legally obliged to do so. Any person has the right to request access, rectification, deletion, limitation of processing, opposition or the right to portability of their personal data by writing to us at our office address, or by sending an e-mail to [mpc@ehu.eus](mailto:mpc@ehu.eus), indicating the right they wish to exercise. You can obtain further information on our website: <https://www.bercmpc.org/index.php/en/privacy-policy>