

POST-DOCTORAL RESEARCH POSITION IN THE SPECTROSCOPY AT THE ATOMIC SCALE GROUP

Materials Physics Center (Donostia / San Sebastián)

We are pleased to offer a postdoctoral position within the Spectroscopy at the Atomic Scale Group at CFM, working alongside Dr. Lucia Vitali. The position will begin no later than February 2024 and continue until June 2025. The project will focus on the **characterization of 2D van der Waals materials**, with the objective of designing, fabricating, characterizing, and manipulating the electronic properties of 2D moiré systems. These systems exhibit spontaneous structural and electronic modulation, making them an excellent platform for developing electronic devices, due to the easy growth of highly ordered crystals on most supporting substrates. To achieve our objectives, we will use cutting-edge scanning tunneling microscopy and spectroscopy techniques to correlate atomic-resolved structures with their electronic properties. In addition, we plan to manipulate the electronic structure using an atomic-sharp moveable electrostatic gate. This project will be developed in collaboration with Dr. Dario Bercioux at DIPC, Dr. Daniele Passerone at EMPA, and Prof. Talat Rahman at University Central Florida, who will provide theoretical support to the experimental results.

We are seeking candidates who hold a Ph.D. degree in Physics or Physical Chemistry, with a preference for those with expertise in scanning tunneling microscopy/spectroscopy in ultrahigh vacuum and at cryogenic temperatures, as well as a background in Surface Science experimental techniques.

The positions is 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 for this postdoctoral position will be of 35.650,44 euros before taxes.

If you are interested in this opportunity, please submit your resume, cover letter, and any relevant publications or research experience to jobs.cfm@ehu.eus before **the 10th of February**, with the subject label "Postdoc CFM- Spectroscopy at the atomic scale."

The selection of the candidates will be considering the following criteria:

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| 1- An updated Curriculum Vitae, including a list of publications. | (50%) |
| 2- A presentation letter with a declaration of interest (max. 1 page). | (20%) |
| 3- Two reference letters and/or contact email of two potential referees. | (10%) |
| 4 – Interview (only of candidates that reached minimal punctuation of 50) | (20%) |

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, indicating the right they wish to exercise. You can obtain further information on our website: <https://www.bercmpc.org/index.php/en/privacy-policy>

