

Open PhD position (FPI)

Pulsed Plasmonic Catalysis

Centro de Física de Materiales (CSIC-UPV/EHU), Donostia/San Sebastián, Spain

PhD Advisor: Marek Grzelczak

Expected start: January 2024

Center for Materials Physics offers a fully-funded PhD position (4 years) starting in January 2024 to work in the context of a research project titled *Data-Driven Approach for Accelerating Pulsed Plasmonic Catalysis* (Grant: PID2022-141017OB-I00).

Project Overview: The project focuses on implementing a data-driven approach to accelerate the experimental workflow of optimization of plasmonic catalysis, covering the entire values chain from synthesis of nanocrystals, their structural characterization, and evaluation of photocatalytic performance. We aim to maximize the efficiency of photoregeneration of coenzyme molecules on plasmonic photocatalysts under flow by using closed-loop experimentation.

Requirements for the position: The offered position requires experience in nanochemistry and basic knowledge of machine learning and programming skills in Python. Candidates should hold a Master's degree (or equivalent) in one of the following fields: Chemistry, Engineering, Physics, Nanotechnology, or Material Science. Excellent written and verbal communication skills in English are a must

Host Group: The selected candidate will join an interdisciplinary and multinational research group, Nanomaterials and Spectroscopy / ColSysChem (<https://colsyschem.github.io>), at CFM and will enroll in the Doctoral Programme at the University of Basque Country.

Interested candidates can apply for this position sending by email to colsyschem@gmail.com the following information **before September 30th, 2023** with the subject "**PhD-PREST**":

- 1- An updated Curriculum Vitae
- 2- A presentation letter with declaration of interests.
- 3- Academic transcripts of your Bachelor and Master degrees

After initial evaluation, shortlisted candidates will be interviewed online.

