

Vitoria-Gasteiz, 16th April 2024

Job Title: Postdoctoral Researcher for QEETOF Project

The **Microfluidics Cluster UPV/EHU** is looking for a Postdoctoral Researcher to work in the project QEETOF: Quantum-based optical fiber device for drug development. This project is funded by the “*Ministerio de Ciencia e Innovación*” under the call *Proof of Concept 2023*.

The Microfluidics Cluster UPV/EHU, is a multidisciplinary research group focused on the development of Lab-on-a-chip technology combining microfluidics, functional materials, surface engineering and chemical and biological systems: <https://www.ehu.eus/en/web/microfluidics>. It is based on the Alava campus (Vitoria-Gasteiz) of the University of the Basque Country.

Job description: The aim of QEETOF (Quantum Electron Energy Transfer Optical Fiber) is to develop a novel photonic device that utilizes quantum and nano-technology to measure various parameters within ADMET (Absorption, Distribution, Metabolism, Excretion, and Toxicity) studies. QEETOF aims to provide a single standardized device capable of efficiently measuring absorption changes at the nano-spectroscopic scale, using optical fiber technology and the principle of quantum electron energy transfer. This device is intended to offer breakthrough cost-effectiveness and versatility in measuring a wide range of analytes, from metal ions to chemical compounds and proteins, using customized optical fiber probes.

This project is lead by Ikerbasque Prof. Lourdes Basabe, and will be carry out in collaboration with Assoc. Prof. Fernando Benito, Ikerbasque Prof. Joel Villatoro and Assoc. Prof. Conchi Alonso, within the University of the Basque Country.

Responsibilities: Design and synthesis of chemical sensors based on metal nanoparticles. Surface chemistry and immobilization of nanomaterials on optical fibers. Physicochemical characterization of the sensing systems. Generation of documents, reports and manuscripts for publication in scientific journals and international conferences. Supervision and training of younger researchers.

Requirements: PhD in Chemistry, Biochemistry or similar. Experience in organic or organometallic chemistry, synthesis and spectroscopic instrumental techniques.

Desirable: Experience in bioconjugation and design of biomolecular chemical optical sensors. English and Basque. Equivalence of the PhD granted by a Spanish University.

How to Apply: Please submit your resume and a cover letter with the name and contact details of two referees, by e-mail to: lourdes.basabe@ehu.eus

Open until filled

Microfluidics Cluster UPV/EHU

Lascaray Research Center
Universidad del País Vasco UPV/EHU
University of the Basque Country UPV/EHU, Spain

Avda. Miguel de Unamuno n 3
01006 Vitoria-Gasteiz (España)
<https://www.ehu.eus/en/web/microfluidics/home>
+34 945 014538