

Synthesis and characterization of nanocatalysts for biomedical applications

Job Summary

We are pleased to announce an opening for a postdoctoral researcher to join the CAT-BIOMED project under the supervision of Dr. Susana Carregal within the multidisciplinary Molecular and Functional Biomarkers group at CIC biomaGUNE. The successful candidate will develop a library of nanomaterials designed as advanced contrast agents for molecular imaging and catalysts for key intracellular processes with therapeutic purposes. These innovative nanomaterials will be comprehensively characterized using cutting-edge nanotechnology techniques, and their potential applications will be evaluated across various models. Key responsibilities include characterizing nanomaterials using advanced nanotechnology methods, evaluating nano-bio interactions with biological barriers, screening potential applications using advanced in vitro models, and collaborating with our expert team to explore preclinical model applications.

The postdoctoral position will be directed by Dr. Susana Carregal Romero from the Molecular and Functional Biomarkers Laboratory of CIC biomaGUNE in San Sebastian. Our laboratory focuses on developing theranostic materials and molecular imaging contrast agents for studying and treating pulmonary diseases.

We seek a motivated individual who enjoys working in a highly interdisciplinary environment, involving nanotechnology, material science, physics, chemistry, biochemistry, and biotechnology. The goal is to design, prepare, and characterize novel theranostic nanomaterials and study their interactions at the cellular (in vitro) and whole-body (in vivo) levels. A central part of this project will involve developing nanomaterials based on iron oxide and calcium carbonate.

We are looking for an active researcher capable of conducting independent research, preparing scientific manuscripts, and being part of an interdisciplinary team that requires strong team-building skills and close interaction with peers.

Education Level:

We seek a Ph.D. in physics, chemistry, materials engineering, or a similar field.

Skills:

Required skills:

- Experience in nanoparticle synthesis and characterization
- Experience in catalysis and in magnetic properties
- Skilled in scientific manuscript writing

Skills positively considered:

- Experience on x-ray absorption spectroscopy
- Skilled in statistical analysis and data processing

Duration:

Full time contract in the framework of assigned functions in the project development.

Envisaged Job Starting Date: October 2024

Application Deadline: 2024-09-15

Project Funding:

- CAT-BIOMED - CNS2023-143944 - (Spanish Research Agency - AEI)

How to apply: [Check the full details at webpage](#)

Informal Inquiries: Informal requests for additional information can be sent to *Susana Carregal Romero* at scarregal@cicbiomagune.es or at .

Applications sent directly to the emails listed above **will be NOT be accepted**

Equal opportunities Policy: CIC biomaGUNE is proud to be an equal opportunity employer and applicants will receive consideration for employment without regard to: age, color, disability, gender, national origin, race, religion, sexual orientation, gender identity, or any other classification protected by European, national, or local law.

Open Transparent and Merit Based Recruitment Policy:

[You can check here CIC biomaGUNE OTM-R Policy](#)

About CIC biomaGUNE

CIC biomaGUNE, located in the Science and Technology Park of Gipuzkoa (Donostia-San Sebastián), is a leading research center in the area of bionanomaterials, molecular imaging and regenerative medicine and counts with more than 160 people from 24 countries. The activity of CIC biomaGUNE is conducted by a team of 11 international and dynamic research groups, supported by flexible and efficient management teams and a unique research infrastructure including the Molecular Imaging Facility, one of the biggest preclinical imaging research infrastructures in Europe.

CIC biomaGUNE maintains a vibrant weekly scientific seminar program by visiting leading scientists. Additional training in soft skills and technologies covered by the CIC biomaGUNE technical platforms is offered to researchers within the in-house training program.

CIC biomaGUNE is committed to developing an HR Strategy for Researchers, designed to bring the practices and procedures in line with the principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (Charter and Code).

Please check out the Human Resources Strategy for Researchers - [HRS4R at CIC biomaGUNE](#).