



Open PhD position

We have a PhD position focused on biocatalysis, available at the Institute of Synthetic Chemistry and Homogeneous Catalysis (ISQCH), Spain. This opportunity will be supervised by Dr. Susana Velasco and is financially supported by the European Research Council through the project PIEZOZYMES. The main goal of this PhD role involves developing and creating biocatalytic tools that integrate enzymes and piezoelectric materials. These tools are intended for their application in complex biosynthetic pathways.

PhD offer

- **Duration:** 4 years
- **Location:** Universidad de Zaragoza, Spain
- **Involvement:** Participating in a dynamic European research project in an international collaborative environment led by Dr. Susana Velasco (ORCID 0000-0001-9478-6750, @Susanita_feliz, <https://cientificasinnovadoras.fecyt.es>).
- **Training:** Acquire skills in innovative methodologies spanning biocatalysis, molecular biology, analytical techniques and bioinformatics.
- **Skill development and experience:** Gain proficiency in designing groundbreaking biocatalytic tools.
- **Affiliation:** Join the ISQCH institute, which is a mixed research center created to address the new challenges in catalysis and synthetic chemistry.

Candidate profile

- **Required Education Level:** Candidates should have a Master's degree in Biotechnology, Biochemistry, Molecular Biology, Chemistry, or a related discipline.
- **Desired Abilities and Qualifications:** We are seeking a candidate with a solid background in biocatalysis, protein chemistry, protein engineering, molecular biology, nanobiotechnology, chemical biology, or relevant equivalent experience.
- **Valued experience:** Although not obligatory, prior experience working with electrochemistry, protein characterization, analytical methods (HPLC, GC, NMR) or bioinformatics are regarded favorably.
- **Personal Attributes:** The potential candidate is expected to have interest in multidisciplinary work, and the capacity to work in an international environment. Exceptional interpersonal skills are key attributes.
- **Proficiency in Language:** Fluency in written and spoken English is a requisite skill.

PhD Duties

- Design cascade biotransformations facilitated by piezoenzymatic biocatalysts.
- Genetic engineering encompassing cloning, expression, purification and characterization of novel enzymes.
- Engaging in the synthesis of new substrates and benchmark compounds.
- Development of innovative analytical methodologies.

Applying instructions

For those interested in applying, please send your application including a motivation letter, curriculum vitae, via e-mail to svelasco@unizar.es

