

OFERTA DE CONTRATO PREDOCTORAL

Para la realización de una TESIS DOCTORAL – Programa F.P.I.

Proyecto:

Catálisis y disolventes para procesos de biorrefinería sostenibles, **CATSOLBIOR**

(Referencia **CTQ2014-52367-R**), Programa Estatal de Investigación, Desarrollo e Innovación Orientada a los Retos de la Sociedad

Lugar de realización:

Grupo de Catálisis Heterogénea en Síntesis Orgánicas Selectivas ([CHESO](#))
Instituto de Síntesis Química y Catálisis Homogénea ([ISQCH](#)), Zaragoza
Instituto Mixto de Investigación CSIC-Universidad de Zaragoza

Persona de contacto:

José I. García Laureiro (ji.garcia@csic.es / jig@unizar.es), ISQCH
(<http://www.isqch.unizar-csic.es/ISQCHportal/directorio.do?id=79>)

Abstract:

The rational use of renewable raw materials from biomass through biorefinery chemical processes should lead to the development of a more sustainable economy, less dependent of fossil fuels, contributing to the decrease of the CO₂ and other greenhouse gases emissions. Catalysis plays a key role in these biorefinery processes.

This project fits for the challenge “Climate Action and Resource Efficiency in the use of Raw Materials”. Starting from the previous experience of the research group in the use of heterogeneous and supported catalysis applied to organic reactions, including those concerning fatty acid esters, as well as in the design, synthesis and application of green solvents derived from glycerol, this project intends to address some typical biorefinery processes from the sustainability viewpoint, both through the use of easily available renewable raw materials (vegetable oils and lignocellulosic materials) and through the use of cheap, robust, easily to obtain, handle and separate catalysts, solvents and reagents, as much as possible harmless and environmentally respectful. The main objectives of the project are: 1) Use of glycerol as source of biosolvents and other chemicals of interest, 2) Valorization of fatty acids through catalytic transformations in the chain, and 3) Valorization of lignin through selective dissolution and catalytic oxidative depolymerization processes. The subject of the doctoral thesis will focus on at least one of these topics. The group counts on different contracts and collaborations with industries working in the biorefinery sector (Solutex, Abengoa), which will allow the Ph D student to have a direct contact with the interests and approaches of the productive sector, as well as with technology transfer issues.

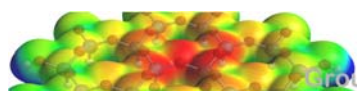
Requisitos y condiciones del contrato:

Requisitos de los candidatos:

Estar en disposición de estar matriculado o admitido en un programa de Doctorado, para el curso 2015/2016, en la fecha en la que se formalice del contrato (información completa en [BOE-A-2015-6508](#)).

Fecha límite para presentar la solicitud: **29 de junio de 2015 a las 15:00 h**

Condiciones del contrato: Máximo **4 años de duración**, con un mínimo de **16.422 euros brutos anuales**



Group of HETEROGENEOUS CATALYSIS in Selective Organic Synthesis