

*ESR 2: Cross-linked hydrogels as delivery systems for enzymes.
Institute for Advanced Chemistry of Catalonia (IQAC) Spanish Council for Scientific Research (CSIC)
Barcelona, Spain. Duration: 36 months. Start: July 2014.*

PhD-fellow – Cross-linked hydrogels as delivery systems for enzymes

The Spanish Council for Scientific Research is offering is offering a PhD scholarship, commencing 1 July 2014 or soon thereafter. The application deadline is 15 May 2014.

Project description

This PhD project is part of the newly started Marie Curie Initial Training Network Biopolymer Based Food Delivery Systems (BIBAFOODS). The objectives of the present Ph.D. project are the preparation of hydrogel particles dispersed in aqueous media (microgels) based on biocompatible polymers, and to study the controlled release of active enzymes entrapped in such particles. The Research tasks will include the preparation and characterization of microgels, the control of its swelling/shrinking properties as a function of external stimuli, the incorporation of enzymes into the microgels, and the study of enzyme release and activity.

The present research project will be hosted by the Institute for advanced Chemistry of Catalonia (IQAC) in Barcelona, which belongs to the Spanish Council for Scientific Research (CSIC). The Ph.D. work will include research stays in University of Lorraine (France), University of Coimbra (Portugal), University of Alcalá (Spain) and ProDigest (Belgium). Moreover, the position will cover Ph.D. courses and training at the University of Barcelona.

Ph.D. Principal supervisor

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Job description

Your key tasks as a PhD fellow in BIBAFOODS are:

- Manage and carry out your research project
- Follow PhD courses
- Write scientific articles and your PhD thesis
- Participate in the BIBAFOODS network activities
- Participate in international congresses
- Teach and disseminate your research

Key criteria for the assessment of candidates

- A master's degree related to the subject area of the project
- Experience with one or more of the following areas:
 - Surface and colloidal science
 - Physical chemistry of biomaterials
 - Hydrogels and microgels
 - Enzymes

- The grade point average achieved
- Professional qualifications relevant to the PhD programme
- Previous publications
- Relevant work experience
- Other professional activities
- Language skills
- Interpersonal skills

Formal requirements

The position is available for a 3-year period for applicants holding a relevant master's degree. The selected applicant, for the PhD scholarship, must comply to Spanish and CSIC enrolment rules, before the CSIC can complete the employment procedure and provide the letter of employment.

Terms of employment

The position will be filled according to the rules established by the Spanish Ministry of Economy and Competitiveness and by the Spanish Council for Scientific Research.

Application Procedure

Apply by clicking 'Apply online' below.

- Applications - in English – must include:
- Cover letter, stating which PhD project you are applying for and detailing your motivation and background for applying for the specific PhD project.
- CV.
- Diploma and transcripts of records.
- Other information for consideration, e.g. list of publications (if any), peer reviewed and other
- Personal recommendations.
- A maximum of 3 relevant scientific works which the applicant wishes to be included in the assessment.