

POSTDOC POSITION AVAILABLE IN BIOPOLYSURF MARIE CURIE RESEARCH TRAINING NETWORK

A postdoctoral position is available in the Biomaterials, Biomechanics and Tissue Engineering (BiBiTE) Research Group of the Biomedical Engineering Research Centre (CREB) of the Universitat Politècnica de Catalunya (Barcelona, Spain). The CREB has a team of highly qualified researchers with proven professional experience. It carries out important basic and applied research work and technology transfer aimed at sector involved in biomedical innovation, such as the business and hospital sectors, acting as an instrument in activating the science, technological and business sectors. BiBiTE has an extensive experience in the development of novel biomaterials and the use of biomaterials in tissue engineering.

A short description of the position is given below.

Polymer-functionalization of inorganic biomaterials for bone tissue engineering

The aim of the project is to functionalize the inorganic biomaterials that are developed in the BiBiTE Research Group of the CREB, such as, titanium, shape-memory alloys, cements and/or biodegradable composites, with biopolymers and/or synthetic polymers to provide them with specific functions that enhance their bioactive behaviour as bone tissue-engineering scaffolds.

The polymers must be synthesised or selected according to:

- 1.- their ability to be covalent or non-covalent bonded to the inorganic materials to get functional coatings on the metallic and/or composite surfaces.
- 2.- their ability to be incorporated into the precursor substances of the cements and to expose their expected functional properties after setting.

The project also includes the exhaustive characterization of the functionalised products, mainly focused on the surface physical, chemical, and topographical characterization as well as the functional interaction between the synthetic and the biologic material. Among others, some advanced characterization techniques will be used, e.g. quartz crystal microbalance with monitoring of dissipation, time-of-flight secondary ion mass spectroscopy, etc.

The ideal candidate should preferably be a **polymer chemist**, a **polymer engineer**, or a **bioengineer**.

Candidates should be eligible according with the requisites set by the EU for Marie Curie Research Training Networks (http://europa.eu.int/comm/research/fp6/mariecurie-actions/action/stage_en.html).

Useful information at: BioPolySurf-RTN webpage (<http://www.biopolysurf.net>)
CREB webpage (<http://www.creb.upc.es>)

Applicants should send a CV with a letter of interest not later than February the 24th, 2006 to:

Prof. Josep Planell

Director of Biomedical Engineering Research Centre (CREB)

Barcelona, Spain

E-mail: josep.a.planell@upc.edu; teresa.sanchis@upc.edu