

OPEN POSITION /VACANCY

Job Posting

BioTiNet - Early-Stage Researcher (ESR) position

Marie Curie Initial Training Network "**BioTiNet**" (FP7-PEOPLE-2010-ITN-264635) on innovative biocompatible Titanium-based structures for orthopaedics (www.biotinet.eu).

Job Title	Early-Stage Researcher (PhD student position)
Project Title	Glass-forming biocompatible Ti-based materials
Application Deadline	March 15, 2011
Expected Starting Date	May 1, 2011
Recruiting Institution	Dept. Physics; Fac. Sciences; Universitat Autònoma de Barcelona Edifici Cc; 08193 Bellaterra Spain Website: http://www.uab.cat/departament/fisica/
City, Country	Bellaterra; Cerdanyola del Vallès; Spain
Job /project/ Description	The <i>objective</i> of this project is to tailor amorphous / glassy Ti-alloys containing neither toxic nor allergic additions and to understand the correlation between chemistry, glassy structure and mechanical response (elastic & plastic behavior). The project will make use of two processing options: controlled solidification (different casting methods, cooling rates ranging between 10^3 - 10^6 °C/s) and powder metallurgy. <i>Tasks</i> : a) synthesis of glassy materials (different processing routes); b) in-depth structural characterisation (XRD, electron microscopy); c) glassy phase thermal stability and crystallization kinetics (using DSC, DTA, TGA); d) Net-shape processing - thermoplastic forming in supercooled liquid region; e) elastic and plastic deformation behavior (nanindentation, ultrasonic measurements, mechanical tests etc); f) finite element simulations of the mechanical behaviour.
Appointment	The appointment will be on a temporary basis for a maximum period of 3 years (PhD student, regular employment contract). The remuneration will be in line with the EC rules for Marie Curie grant holders (Early-Stage Researchers, ITN). http://ec.europa.eu/research/mariecurieactions/index.htm
Requirements	Degree: University Master degree in Physics, Chemistry, Engineering or Materials Sciences with high grades . Knowledge and experience in materials science (sample preparation, x-ray diffraction, thermal and microstructural characterisation, etc.), Programming skills, Advanced computer knowledge (Microsoft office, Databases, Image Editors). Other requirement: Fluent in English. Good Spanish knowledge will be an added-value. Team work ability..
Eligibility	The candidate must have no PhD and less than 4 years' research experience. The applicant must not have spent more than 12 months in the country (Spain) of the host/recruiting institution in the 3 years prior to selection.
How to Apply	Applications (in English) including: <ol style="list-style-type: none"> 1. A letter of motivation describing your interest in the position, 2. A CV, 3. A copy of your Master degree, 4. A certification of your marks. 5. Two letters of recommendation 6. A photo, should be sent by e-mail to the following addresses, quoting the project name "BioTiNet-UAB": Prof. Dr. M.D. Baró dolors.baro@uab.es ; Prof. Dr. J. Sort Jordi.sort@uab.es
Persons to Contact for Further Information	Prof. Dr. M.D. Baró dolors.baro@uab.es ; Prof. Dr. J. Sort Jordi.sort@uab.es Some background material can be found at: http://www.lmt.uab.es and www.biotinet.eu