

## Doctoral Position in Biomaterials for Advanced Metallic Biomaterials and Functionalization

Biomaterials, Biomechanics and Tissue Engineering Group  
Universitat Politècnica de Catalunya (UPC)

### The project

The main objective of this PhD research project is to develop novel dual-action coatings on the metallic implant surface with osteoinductive and antibacterial properties for bone applications. The working hypothesis is that we can enhance implants biointegration under compromised clinical scenarios, such as bacterial infections and/or osteoporosis, by tailoring the implant surface with the adequate cell-specific signals and by controlling the mechanical behavior. The position is offered by the [Biomaterials, Biomechanics and Tissue Engineering Group \(BBT\)](#) at the Universitat Politècnica de Catalunya (UPC), in the new [campus Diagonal-Besos \(EEBE\)](#). The candidate will join a multidisciplinary and highly motivated and competent team.

### The candidate

- Bachelor of biomedical engineering, materials and / or chemistry
- Good academic record
- Good communication skills and fluency in spoken and written English
- Proactive, dynamic and outstanding organizational skills are required

### Duration and Remuneration

FPI grant of the Ministerio de Ciencia, Innovación y Universidades (4 years, renewable every year)

### Application

To apply, please submit:

- A cover letter that includes your motivation, your relevant experience and your interests
  - A CV/resume
- to Prof. José M<sup>a</sup> Manero ([jose.maria.manero@upc.edu](mailto:jose.maria.manero@upc.edu))

### Contact

Further information about the position can be obtained from Prof. José M<sup>a</sup> Manero ([jose.maria.manero@upc.edu](mailto:jose.maria.manero@upc.edu)) and/or Ms. Noelia Aparicio ([noelia.aparicio@upc.edu](mailto:noelia.aparicio@upc.edu))