

TITLE

Preparation and characterization of scaffolds for tissue engineering applications

DESCRIPTION

The candidate will be involved in the design and preparation of porous platforms based on natural and/or synthetic polymers to be used as temporary scaffolds for the in vitro regeneration of natural tissues. Different polymer processing technologies will be considered, including phase separation, salt leaching and electrospinning. In order to optimize the ultimate scaffold properties, the candidate should provide to investigate structural and functional features in terms of morphology (i.e., via SEM, TEM, optical microscopy), degradation (i.e., via FTIR, DSC, TGA) and mechanical properties (by dynamometric tests and atomic force microscopy).

SELECTION CRITERIA

Eligibility Criteria

- Academic degree: Applicants shall have a master degree in the field of **Engineering, Chemical sciences, Biology or Biotechnology**, corresponding to the second level of studies.
- Mobility rule: There will be no nationality restrictions. Applicants can be from any Country. However, according to the mobility rule, at the time of the application deadline researchers should not have resided or carried out their main activity (work, studies, etc.) in Italy for more than 12 months in the 3 years immediately prior to the reference date. Compulsory national service and/or short stays such as holidays will not be taken into account.
- Research experience: Applicants shall, at the time of the application deadline, be in the first four years (full-time equivalent research experience) of their research careers and not yet awarded a doctoral degree.

Full-Time Equivalent (FTE) Research Experience will be determined from the date when a researcher obtained the degree which would formally entitle him or her to embark on a doctorate, either in the country in which the degree was obtained or in Italy, irrespective of whether or not a doctorate is or was ever envisaged.

Evaluation Criteria

Step 1 -Evaluation of documentation provided by the candidate: a) Academic record and training b) Research activities c) CV/motivation letter; d) Level of English; e) Reference letters.

Step 2 - Interview: a) Scientific knowledge in the field of interest; b) Research experience in the field of interest c), Motivation; d) English proficiency.