
CHARACTERISTICS OF THE JOB

- Job location: Tractivus SL, Barcelona
- Research group: R&D
- Expected start date: May 2020
- Temporal Position: The position is for 8 months.

JOB PURPOSE / PROJECT DESCRIPTION

Project: QuirofAM “Research in AM/P3D in the health care industry for the improvement of the surgical practice” is a Ris3Cat project (COMRDI16-1-0011-08) with a duration of 3 years (2018-2021).

The RIS3CAT community and it has been granted with funds for the development of the QuirofAM project in collaboration with other entities of the Community such as other SMEs, large companies, research centers and universities of the Catalan innovation system. The past 15th of May took place the kick-off at Leitat's headquarters.

The main objective of the QuirofAM consist on the development of new materials, manufacturing process and post-process techniques to create 3D printed devices with innovative properties to be implanted in the human body and avoid post-implantation problems and interact with the surrounding tissues and structures

KEY RESPONSIBILITIES:

- The researcher will conduct experiments with coatings and medical devices in Tractivus' laboratories and its partners.
- The tasks of the project involve:
 - Development tests for the evaluation of antibacterial properties of coatings.
 - Characterization of the antibacterial / bacteriophobic properties of bioactive surfaces (microbiological cultures)
 - Characterization of the biocompatibility of bioactive coatings.
 - Stability study of bioactive coatings and packaging.
 - Identification of key factors in the manufacturing process of coatings on medical devices.
 - Design of quality system under ISO 13485
 - Scaling and industrialization of a coating process of medical devices.
 - Writing scientific reports and scientific papers.

EXPERIENCE, KNOWLEDGE, SKILLS & SELECTION CRITERIA

Must Have – Required:

- **Experience:** Bachelor's degree (preferably Master) in Chemical Engineering, Environmental Engineering, Biotechnology, Nanoscience, Water Technology, Environmental Science, Chemistry, or similar. PhD will be positively evaluated.
- **Knowledge:** The researcher must be proficient in oral and written English; knowledge of the Spanish and Catalan languages is also positively evaluated.

Desirable:

- **Skills:** Any of the following past research experiences will be judged favorably in the selection process:
 - experience in laboratory.
 - activities, knowledge/experience of microbiological cultures (antibacterial properties).
 - previous experience in analytical and organic chemistry.
 - previous experience in quality systems.
 - ability to work independently and as a member of a team; she/he must be creative, flexible, and eager to learn and to expand his /her scientific network.
 - driving license will be positively evaluated.

WORKING CONDITIONS & ENTITLEMENTS

- **Working conditions:** Employed in compliance with Spanish legislation and regulations. Employees receive the benefits of the Spanish Social Security system covering sickness, maternity/paternity leaves and injuries at work.
- **International Environment:** The opportunity to join a prestigious international research institution and become a member of a young and growing research group.
- **Continuous training** in a high-quality environment.

HOW TO APPLY & SELECTION PROCESS

Documentation to be submitted

- Photocopy of the titles of their studies
- Curriculum Vitae
- Letter of interest for the position
- A minimum of 1 recommendation letter

Candidates must send CV and requested documents, by email to info@tractivus.com indicating ref. "Researcher_QuirofAM" in the subject of the email.

The deadline to submit the required documentation is May 6th, 2020.

Selection process:

- **Pre-selection:** will be based on **CV, experience, skills and motivation letter**.
- **Interviews:** Short-listed candidates will be interviewed.
- **Offered Position:** Job Offer will be sent to the successful candidate after the interview.