





POSTDOCTORAL POSITION IN THE FIELD OF NANOMEDICINE

The role

The "Supramolecular Chemistry" Group is looking for a young postdoctoral researcher to work in the field of nanomedicine. The contract will be within the framework of the National project "Supramolecular polymers targeting complex tumour microenvironment: validation by advanced microscopy techniques (STROMATARGET)". With an integrative approach of cancer, STROMATARGET aims to develop nanomedicines with better translation into the clinic. Nanomaterials for co-targeting prostate cancer cells and cancer associated stromal cells and responsive to tumour microenvironment acidic pH will be designed and synthesized. Supramolecular fibers with co-targeting ligands (cancer & stroma) will be formulated and tested in a tumour-microenvironment (TME)-on-a-chip platform. Advanced microscopy techniques (super resolution microscopy, electron microscopy, confocal microscopy) will be used to characterize the nanomaterials and their interaction in the complex TME.

What do we look for?

Qualifications

PhD in Chemistry/Nanotechnology/Biochemistry/Pharmacy or related.

Professional experience

Experience in organic synthesis.

Previous experience in cell culture.

Previous experience in the development of lab-on-a-chip/organ-on-a-chip devices will be considered a plus.

Previous experience in imaging techniques (e.g., confocal microcopy or life imaging) will be considered a plus.

Experience in data analysis with specialized software (Matlab, Python or similar) will be considered a plus.





Competences

Communication, Teamwork and collaboration, Commitment, Proactivity, Commitment, Integrity, Critical and Analytical thinking.

High level of English

Working conditions

- Contract duration: Full open-ended contract linked to projects
- Estimated annual gross salary: Salary will commensurate with qualifications and experience
- Target start date: as soon as possible

We offer the possibility to integrate oneself in a dynamic research group and to obtain a multidisciplinary formation in the chemistry and nanomedicine fields.

The institute

The Institute for Advanced Chemistry of Catalonia (IQAC) is one of the research centers of the Spanish National Research Council (CSIC). The Institute is located in Barcelona and it was created in 2007 with the mission to perform research of excellence in Chemical Sciences with the broad goal of improving the quality of life. The general strategy to achieve this mission involves the application of chemical approaches to address and solve societal challenges, mainly those related to human health, the sustainability of chemical processes and products, and the needs for novel materials for different applications. Since its establishment, IQAC has been in a permanent attitude to transfer its knowledge and technology results to the industrial sector.

The research developed at IQAC is organized around two main nodes: **Biological Chemistry** and **Nanobiotechnology** and it is facilitated by a number of Key Enabling Technologies. Considering the objectives pursued, many of the investigations carried out by the Research Groups at IQAC lie at the intersection between nodes.

In addition, our Institute holds a set of scientific and technical facilities run by highly qualified scientists and technical personnel with a solid background and long lasting expertise. These facilities are available not only to IQAC research groups, but also to potential users from both academia and private institutions. In any case, the technical services from IQAC are always wide open to attend any inquiry and to offer their best efforts to find adequate responses to specific needs.

How to apply?

Those interested may email their **CV** and **motivation letter** to **Dr. Sílvia Pujals** (<u>silvia.pujals@iqac.csic.es</u>), adding "Postdoc STROMATARGET" to the email subject. Letter/s of references are recommended.

Deadline: 20/02/2023