



Post-doctoral Research Fellowship

Location	Salary	Deadline for applications
Lisbon/Portugal	1741€/month	10 October 2023

Position summary

Applications are open for one Post-Doctoral Research Fellowship, within the framework of the project IMPACTIVE (Innovative Mechanochemical Processes to synthesize Active pharmaceutical ingredients), financed by the European program Horizon.

Context

We are looking for a Post-Doc who wants to contribute to successfully apply Quality-by-Design (DoE) concepts and design of experiments (DoE) to the mechanochemical synthesis of new pharmaceutical cocrystals. The structural characterization of the compounds will be carried out by a combination of techniques, with major emphasis in powder and single crystal X-ray diffraction. Further characterization of the properties of the compounds includes solubility and stability studies to define the Design Space of the mechanochemical process.

Main tasks

- To use experimental design to define the design space of mechanochemical processes to design pharmaceutical cocrystals.
- To synthesize pharmaceutical cocrystals by ball milling.
- To characterize the pharmaceutical cocrystals using several techniques with emphasis on crystallography methods.

Research activities

The work will be developed at Centro de Química Estrutural/Institute of Molecular Sciences and Laboratório Associado para a Química Verde (LAQV-REQUIMTE), of Instituto Superior Técnico and NOVA School of Science and Technology, respectively, under the scientific supervision of Doctors Vânia André, Clara Gomes and Mafalda Sarraguça and Professor M. Teresa Duarte.





Qualifications and candidate profile

- to hold a PhD degree obtained in the 3 years previously to the beginning of the fellowship;
- to have carried out the research work that led to the PhD degree in a different entity from the host institution of the fellowship;
- Not to exceed, with this fellowship contract, including the possible renovations, an accumulated period of 3 years in this type of fellowship, continuously or with interruptions;
- Not to have previously held a post-doctoral fellowship from IST-ID.

Remuneration

According to the values for Research Fellowships awarded by FCT in Portugal (https://www.fct.pt/wp-content/uploads/2023/02/Tabela-de-Valores-SMM_2023.pdf), the amount of the monthly maintenance allowance is 1741€, being the payment method an option of the Fellow by Wire Transfer/Check.

Starting date

The research fellowship will have the duration of 30 months. It's expected to begin in November 2023 and may be eventually renewed up to the maximum of 36 months.

How to apply

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form –Fellowship application (<https://ist-id.pt/concursos/bolsas/>); ii) Curriculum Vitae; iii) academic degree certificate; iv) motivation letter; v) declaration on honour that the applicant does not exceed with this contract an accumulated period of three years in this type of fellowship, continuously or with interruptions, within the technological and scientific system, and that the research work that led to the PhD degree was carried out in a different entity from the host institution of the fellowship.

Applications must be submitted to the emails: vaniandre@tecnico.ulisboa.pt and clara.gomes@fct.unl.pt

