

For implementing the project entitled "Mimicking living matter mechanisms by five-dimensional chemistry Approaches" financing contract no. **PN-III-P4-ID-PCCF-2016-0050**, "P. Poni" Institute of Macromolecular Chemistry, Romanian Academy announces one PhD position opening, part time, within the framework of this project.

Description

The Institute of Macromolecular Chemistry "P. Poni", Romanian Academy welcomes applications for a highly motivated PhD student with expertise in medicinal chemistry and related subjects. The project will focus on the develop a strategy to synthesize and test (macro)molecular entities of dynamic (re)organizing type, able to act as nanoplatfroms of biologic and biomedical relevance. This programme will join a novel and emerging field of bio-medical applications thus, offering opportunity for multidisciplinary training, new discovery and excellent career development. In this context, some enzyme involving systems will be considered in the attempts to emulate real biological/pharmacological environments, like those that valorize the inhibition of carbonic anhydrases. Potentially, inhibitors of cancer-associated carbonic anhydrases will represent the applications of the developed nanoplatfroms. Key tasks in this position include development of efficient strategies for synthesis of inhibitors of carbonic anhydrases and conduct stopped-flow experiments to evaluate enzyme systems efficacy. Basic knowledge in molecular biology and crystallographic experience represents a strong advantage. Applicants must have a solid knowledge/experience in organic and medicinal chemistry and a consolidate knowledge of stopped-flow instrument. The applicant should be able to independently design and execute multistep synthetic sequences, be able to perform data/result analysis and interpretation. The candidate should be high motivated, excellent interpersonal and collaboration skills, independence, skills in efficient project planning and execution and should have fundamental skills in scientific writing.

- Excellent oral and written communication skills in English

PhD researcher

Domain: Biochemistry, medicinal chemistry.

Nr of positions available : 1

Research Fields: Synthesis of carbonic anhydrase inhibitors, biological assay and protein crystallographic study.

Career Stage: MsC in Chemistry or Medicinal Chemistry

Candidates should send their applications (cover letter, cv, list of publications) to Dr. Anca Petrovici (petrovici.anca@icmpp.ro)

Deadline for applications: 15.03.2019

Expected start of the fellowship: 01.04.2019