UNIUNEA EUROPEANĂ

Instrumente Structurale 2014-2020

Infra SupraChem Lab

Center for Advanced Research in Supramolecular Chemistry

PETRU PONI INSTITUTE OF MACROMOLECULAR CHEMISTRY

- ***MySMIS code***: **108983**
- ***Financing contract***: **no. 339/390015 / 25.02.2021**
- ***Axis 1*** **Research, technological development and innovation (RDI) in support of economic competitiveness and business development**
- ***Action: 1.1.3*** **Creating synergies with the RDI actions of the European Union's HORIZON 2020 framework program and other international RDI programs; Project type: CHAIRS**
- ***Competition code***: **POC-A.1-A.1.1.3-H-2016**
- ***Beneficiary***: **"Petru Poni" Institute of Macromolecular Chemistry**
- ***Project duration***: **28 months**
- ***Total value***: **21,993,436.57 lei**
- ***The value of the total eligible non-reimbursable financing***: **19,993,436.57 lei**

GENERAL OBJECTIVE

of the Infra SupraChem Lab project is to create an advanced infrastructure to serve the supramolecular chemistry working group of SupraChem Lab, a group created within the Horizon 2020 Project WIDESPREAD 2-2014: ERA Chairs (667387) - SupraChem Lab Laboratory of Supramolecular Chemistry for Adaptive Delivery Systems ERA Chair initiative.

RESEARCH AREAS

Through the Infra SupraChem Lab project, ICMPP wants to develop the following areas of research with high practical applicability that will be addressed in the newly created infrastructure:

- **Advanced materials for transporting water and specific ions;**
- **Materials for transport and target release of active ingredients;**
- **Advanced gas storage materials (hydrogen, methane, carbon dioxide);**
- **Development of sensors and biosensors with advanced sensitivity.**

These new systems are in a continuous development, having a real perspective of applicability, with a strong impact in the different industries and medicine

DEPARTMENTS

The proposed investment consists in the establishment of a new R&D center, Infra SupraChem Lab, organized in 3 departments:

A. Operational department

- **A.1. Chemical synthesis laboratory**
- **A.2. Physico-chemical characterization laboratory**
- **A.3. Laboratory study special properties and possible applications**

B. Data processing department

C. Projects and technology transfer department

- **C.1. Horizon 2020 project support center**
- **C.2. Technology transfer office**

PERFORMANCE INDICATORS

Preset	
CO24 - Research, innovation: Number of new researchers in the beneficiary entities	**2**
Additional	
New created jobs, other than for researchers (no.)	**2**
Number of researchers working in enhanced research infrastructures (ENIs)	**11**
Patent applications resulting from the project (no.)	**1**
Newly created / modernized CD laboratories by project (no.)	**6**
R&D equipment worth over 100,000 Euros purchased per project (no.)	**6**

RESULT INDICATORS

Preset	
Projects submitted to the EU Horizon 2020 Framework Program or other EU research programs (no.)	**4**
Additional	
Scientific publications resulting from the project (number of articles)	**4**
Number of public-private co-publications	**4**

EXPECTED RESULTS

The concrete result of this project is the creation of a modern research center equipped with state-of-the-art equipment that will host the newly created SupraChem Lab team that performs research activities in the field of supramolecular chemistry in order to create value-added materials.

- **Modernization / consolidation / rehabilitation of buildings**
- **Equipping laboratories with state-of-the-art equipment**