

TITLE OF THE GRANT: Development of the infrastructure laboratory for investigating the structure of complex biomolecules

THEME: 04-4-1121-2015/2020

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LABORATORY IN JINR: Frank Laboratory of Neutron Physics (FLNP)

PARTNERS IN ROMANIA: Faculty of Physics, University of Bucharest (FFUB)

RESPONSIBLE PERSONS: Lect. dr. Marcela-Elisabeta Barbinta-Patrascu (FFUB), Senior Researcher dr. Yulia Gorshkova (FLNP)

OBJECTIVES:

- implementation and development of innovative “green” nanotechnological strategies in order to develop novel hybrid bionanocomposites as Drug Delivery Systems (DDS) to transport active therapeutics into the living systems.

ESTIMATED RESULTS:

The main results expected from this investigation are:

- preparation of biohybrid materials, by “green” methods
- complex characterization of bionanocomposites
- evaluation of bio-activities of the obtained materials (antioxidant activity, antimicrobial activity)