









crossroads of several scientific areas: tele-communications, electrical engineering, medicine, biology and others. Due to this fact, experts of these areas were involved in the project.

Implement of research project requires from participants to look at the object of study from a different angle, which leads to appearance of the new problems in different fields of science, that earlier did not get into the field of researchers view. The main tasks that should be solved on the way to implement the system of Biodriver, include the following:

- development of a universal basic model of artificial nanomachines and its further use to create sensors and actuators;
- development of the body gateway;
- development of the effective ways to transmit information from the artificial nanomachines to the body gateway;
- a study of the data transfer between the body gateway and the Computing Centre;
- an analysis of the system security against the external Biodriver intentional and unintentional impacts;
- development of the algorithms for error protection during data transfer between the Biodriver system elements;
- development of the routing protocols in networks of the nanomachines;
- a search for effective ways to power the nanomachines and the body gateway;
- a study of the impact of prolonged high-frequency radiation (THz) on the living cells;
- a feasibility study of nanonetworks to improve methods of collecting information about the state of the organism.

According to some of these problems interim results are obtained, which will be presented in the subsequent publications.

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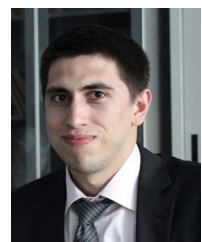
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