

## ACTUAL METHODOLOGICAL PROBLEMS OF INTERDISCIPLINARY RESEARCH IN THE FIELD OF BIONANOROBOTICS

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*An analysis of the problems of developing the elemental base of bionanorobotics (BNR) and solving the problems of virtual prototyping of BNR-systems has revealed an urgent problem of managing the process of interdisciplinary integration of technological schemes as information structures. As a possible way to solve it, a phased scheme for the search for possibilities of creating a management structure and coordination of interdisciplinary research and the synthesis of interdisciplinary concepts of technology integration is proposed. A methodology has been developed for working with interdisciplinary data, including methods, tools and techniques for processing and analyzing information data in a single transdisciplinary research scheme for BNR, which can significantly increase the efficiency of processing scientific and technical information. Further use of the proposed solutions allows us to develop a methodology for working with data from technological schemes of convergent areas of nanotechnology for structuring information about objects, theories, methods and subject of research, methods for modeling information structures and categorization of elements of technological schemes of BNR.*

**Keywords:** bionanorobototechnology, nanodevices, bionanotechnology, bionanosystems, methodology, interdisciplinarity, technology integration, methodology for processing and analysis of scientific and technical information, modeling, technological schemes, virtual prototyping.

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