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SEARCH FOR METHODS AND STUDY OF THE POSSIBILITIES OF USING MODERN TECHNOLOGIES OF VIRTUAL PROTOTYPING AND DESIGN OF BIOENGINEERING SYSTEMS IN THE DESIGN OF BIONANODEVICES AND SYSTEMS OF BIONANOROBOTICS

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With appearance of multicellular engineering living systems (M-CELS), the goals and objectives of molecular production have changed. The problem of searching for methods and possibilities of using modern technologies of virtual prototyping and designing of bioengineering systems in the design of bionanodevices and systems of bionanorobotics has become urgent. The article presents proposals for the development of bionanorobotics by integrating basic universal technological cycle and a scalable pipeline for the design of reconfigurable organisms.

Keywords: bionanorobotics, bioengineering systems, M-CELS, scalable pipeline, reconfigurable organisms, computer designed organisms, assembler, fabricator, evolutionary modeling, virtual prototyping, physical prototyping.

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