

CREATION OF IMITATION MODEL IN THE RESEARCHING OF BIOTECHNOLOGICAL PROCESSES

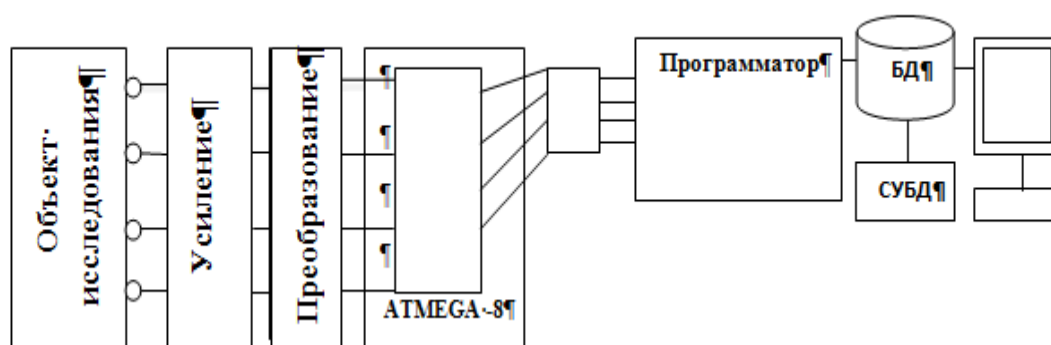
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Abstract: This article focuses on the creation of technical, software, mathematical and information support in the development of a conceptual model of expert systems in recognizing colors Recognition of biotechnological processes. Where are determined by the boundary conditions ongoing process and optimal control of biotechnological processes of drying and manufacturing of medical drugs from medicinal herbs. It is proposed to study the stages of expert model developed biotechnological process.

Keywords: converters, amplifiers, video-eye, sensors, tensor sensors, sensors, recognition systems, technical, software, information, software, Database

Purpose: The purpose of this research operation is creation of simulating model of researching biotechnological processes and definition of optimal parameters of its control.



Materials: The present work consists of:

- maintenance engineering support which consists of logical elements of computation and automation system infoware: as data base which consists of two parts:
 - first, is preliminary included reference data about color of lackmus, received agent of researching biotechnological processes;
 - second, received data by recognizing electronic element about the color of researching agent, recording to the database
- software consisting of two parts:
 - first, it is program product which will be elaborated for recognizing
 - second, program which will control all technological processes of recognizing system in the process of research;
- math support consists of the following work:
 - methods of processing of received data after spectral analysis of the agent, i.e. calibration;
 - development of new methods of analysis and calculation of researching parameters;

- calculation and definition of optimal results of research in recognizing of color of biotechnological processes

Materials: We intend methodic of optimal control of technological processes in industrial preparation of medicaments, methodic of recognizing of parameters of colors of medicinal herbs which is effective, inexpensive, convenient way and not require interference of different technical means and technologist –operator.

Researches show that collection of data about all existing medical herbs and plants in our country requires in its turn, rate of herbs, measurement and development of single data base for further definition of optimal regimes of control of technological processes, collection and drying herbs without loss of raw.

For reaching this aim it is necessary to create:

- math model of object of research which describes conducted biotechnological processes;
- simulating model of conducted biotechnological processes;
- conceptual model of research of biotechnological processes;
- develop algorithm of use of mathematic and standard methods and algorithms;
- informational supply connected with accumulation and processing of received results;
- software, recognizing systems of researched biotechnological processes;

Conclusion: In the result of researches of simulating model, of biotechnological processes the following is reached:

- Development of recommendations on conducting similar scientific-research operations in sphere of biotechnological processes;
- Definition of qualitative features such as:
- Optimal control of technological process;
- Study of stability of control of technological process;
- Calculation of reliability of control of technological process;
- Study of sensibility and crudeness of system of influence to other parameters of conducted test, etc.;
- Working out the package of applied programs oriented to recognizing of color, bio and chemical technological processes;
- Standardization of recognizing of color, bio and chemical technological processes;
- Intrusion of results of research to other spheres of biotechnological processes and use results of research in education process.

LITERATURE:

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