

Igor Alexeevich Krylov– the founder of scientific school in integrated biomass processing industrial microorganisms the 70th anniversary of birth

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Abstract

The basic biographical information about the Igor Alexeevich Krylov as one of the founders of the biotechnology Department was given. The description of teaching and research activities of the I.A. Krylov was presented. Lists of discipline for specialists, biotechnologists, prepared by I.A. Krylov: "General biotechnology", "Technology of protein and biologically active substances", "Integrated processing of the biomass of industrial microorganisms". The main directions of scientific activities relating to the processing of industrial strains of yeast and bacteria getting protein products and nucleotide nature were listed. Specify the contribution of I. A. Krylov in the development of the formal-kinetic approach to the description of processes of extraction of biopolymers from microbial biomass and their hydrolysis to low molecular weight products was described. The most significant achievements obtained over the last decade in the field of processing of microbial and biological raw materials, which include: the development of technology of complex processing of whey; receive hydrolytic enzymes from the pancreas of cattle; the purified fraction of soy isoflavones; coagulation waste production of bone meal, of processing of obtaining protein and lipid fraction; obtaining hydrolysates the carbohydrate and protein nature with desired functional properties on the basis of soy and pea flour for the food industry were listed. On the basis of theoretical provisions developed by I.A. Krylov the assessment of the possibility of applying protein and carbohydrate hydrolysates of plant, animal and microbial origin as components of a nutrient medium for cultivation of industrial strains of yeast.

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