

Название публикации:

Ecological Aspects of Managing the Processing of Plastic Products and Packaging Based on Improved Biotechnology

Авторы:

Larionova, AA [1]; Filatov, VV [2]; Zaitseva, NA [3]; Zhenzhebir, VN [2]; Palastina, IP [2]; Kurbatova, AI [4]; Glagoleva, LE [5]

[1] Kosygin State Univ Russia Technol Design Art, Moscow, Russia

[2] First Cossack Univ, KG Razumovsky Moscow State Univ Technol & Managem, Moscow, Russia

[3] Plekhanov Russian Univ Econ, Moscow, Russia

[4] RUDN UNIV, Peoples Friendship Univ Russia, Moscow, Russia

[5] Voronezh State Univ Engn Technol, Voronezh, Russia

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Аннотация:

The level of plastic production is growing rapidly - more than half of plastic waste and plastic products have been manufactured in the last 25 years. In the future, the situation will only worsen, and therefore scientists urge both industrialists and the authorities of all states to reconsider strategies for using and processing plastics. The uncontrolled handling of polymer wastes of consumption and production causes serious damage to the environment and forms not only the environmental, but also the economic problems of future generations, violating the fundamental principle of sustainable development. This article discusses innovative technologies for processing polymer waste consumption and production. Production and biotechnological methods for processing foam plastic, PET and some other types of plastic are considered, including the five most common production methods for handling polymer waste. The study notes that the need to return production and consumption wastes is obvious both in terms of environmental safety and economic feasibility. The authors of the article emphasize that in the conditions of the increasing role of the environmental factor, the problems of managing the processing of plastic products and packaging should be solved in a complex of economic, administrative and social mechanisms. At the same time, it should be understood that the problems of managing the processing of plastic products and packaging are very dynamic and it is necessary to conduct further research in this direction, primarily in the development and improvement of biotechnologies.

Ключевые слова:

ecology; utilization; plastic products and packaging; natural resources