Thematic Section: Biochemical Research.

Reference Object Identifier – ROI: jbc-02/16-46-6-19 Subsection: Biochemistry. Article based on the report at the conference "Modern problems of chemical technology of biologically active substances." D.I. Mendeleev MUCTR. 26.05.2016. Publication is available for discussion in the framework of the on-line Internet conference "Butlerov readings". http://butlerov.com/readings/ Submitted on June 17, 2016.

## **Biological characteristics in the optimization of spray** drying of halobacteria Halobacterium salinarum

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## Abstract

In this paper we developed an approach to the spray drying of halobacteria for example 353 strain Halobacterium salinarum, taking into account the destruction of thermolabile components and structures of the cell. To assess the characteristics of the drying process applied previously do not consider the biological characteristics that are important to maintain viability and, therefore, the structures of the biologically active substances (BAS) of halobacteria: maximum specific growth rate, estimate the lag phase and the content of carotenoids. Removal of metabolites from the medium during cultivation with the use of adsorbents increases the safety of the cells for a long time after drying.