

2nd International Conference and Exhibition on Biowaivers & Biosimilars

September 23-25, 2013 Hilton Raleigh-Durham Airport at RTP, NC, USA

Biodeterioration and application of microbial poly (3-hydroxybutyrate)

G. E. Zaikov¹, M. I. Artsis¹, A. P. Bonartsev², A. L. Iordanskii¹ and G. A. Bonartseva²
'General Institute of Chemical Physics, Russian Academy of Sciences, Russia
²A. N. Bach's Institute of Biochemistry, Russian Academy of Sciences, Russia
³Faculty of Biology, Moscow State University, Russia

This review is designed to be a comprehensive source for biodegradable polymer: poly(3-hydroxybutyrate) research, including fundamental structure/property relationships and biodegradation kinetics for samples of different geometry. In addition to presenting the scientific framework for the advances in PHB research, this review focuses on applications of PHB in biomedicine and environment with a discussion on commercial applications and health/safety concerns for biodegradable materials.

chembio@sky.chph.ras.ru