Full Paper *Registration Code of Publication:* 12-29-3-106 *Thematic Section:* Physicochemical Research. *Subsection:* Chemistry of Cellulose.

Publication is available for discussion in the framework of the on-line Internet conference "Butlerov readings".

http://butlerov.com/readings/ Contributed: March 21, 2012

The fine cellulose structure changes in the process of isothermal destruction

© Tatiana V. Smotrina

Department of Physics. Mari State Technical University. Lenin St., 3. Yoshkar-Ola, 424000. Mari El Republic. Russia. Phone: +7 (8362) 68-68-04. E-mail: tatyana-smotrina@yandex.ru

Keywords: cellulose, thermal destruction, IR-spectroscopy, NMR relaxation

Abstract

The changes of chemical and supramolecular structure of cellulose caused by high-temperature treatment in the beginning of thermodestruction were investigated. The mechanism of initial destruction stage was suggested. The correlation between data obtained by techniques of IR-spectroscopy and NMR relaxation was shown.