Full Paper	Thematic Section: Physico-Chemical Research.
Registration Code of Publication: 13-33-3-138	Subsection: Polymer Biomaterials.

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

http://butlerov.com/readings/ Contributed: February 28, 2013.

Molecular mobility of chitosan-based hydrogel components

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Keywords: chitosan, hydrogels, nuclear magnetic relaxation, molecular mobility.

Abstract

The processes of spin-lattice and spin-spin relaxation of the proton magnetized water in chitosan-based hydrogels synthesized on varying pH-factor and concentration of crosslinking agent were investigated by the method of nuclear magnetic relaxation. The correlation between hydrogel structure and mobility of the retained water was shown. The character of structure changes of dried hydrogels during their reswelling in water steam was analyzed. The correlation between sorption data and NMR data was shown.

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