Abstract

The bachelor thesis is focused on method of postpolymerisation modification of two poly(ethylene oxid-b-1,2-butadiene-b-ethylene oxide) amphiphilic block copolymer samples with high content of 1,2-isomer units in inner polybutadiene block by thiolene click. The implemented modification agent was 1-thio-β-D-glucose tetraacetate.

The thesis is further focused on methods of copolymer sample characterization before and after modification reaction. Structure and degree of functionalization of vinylic units in polybutadiene block after modification was determined by nuclear magnetic resonance spectroscopy. The dimensions of prepared polymeric particles were studied by static and dynamic light scattering methods.

Keywords: ABA triblock copolymers, self-assembly, click reaction, NMR spectroscopy, light scattering