

Abstract

This graduation thesis is engaged in searching for solubilisation systems for potentially photodynamically active substances. The effort was focused on finding of systems with the smallest particles, transparent or modestly opalescent with the acceptable cytotoxicity. Three systems satisfying the requirements for transparency (and so the particle size) were found but only two systems were used further for the solubilization of the photosensitizers, the third one did not conform to the cytotoxicity tests. Another aim was to find, whether the photosensitizers, while solubilized using the selected systems, will not precipitate and will not be aggregated and therefore they would be usable in cell culture tests. Both the systems complying with the cytotoxicity tests proved to be usable. Photosensitizers emulsified in them did not embody the aggregation or precipitation of the system. Finally measurements of the particles size of the systems with emulsified photosensitizers were performed.