



Preparation of biodegradable semi-permeable membranes as 3D scaffolds for cell cultures

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ABSTRACT

Results of the preparation of semi-permeable membranes made of biodegradable polymers membranes were presented. Among known polyesters, polylactide was selected for research. The membranes were obtained using wet phase inversion method. The influence of polyvinylpyrrolidone and polymeric nano-non-wovens as pores precursors on the structure of obtained membranes was analysed. It was shown, that utilisation of polymeric nano-non-wovens enabled preparation of semi-permeable membranes, which could be used as wide-pore 3D-type cellular scaffolds.

Keywords: Biodegradable polymers membranes; Biodegradable polyesters; Porous three-dimensional scaffolds; Inversion phase method

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