

**POLYSULPHONE AND POLYETHERSULPHONE HOLLOW FIBER
MEMBRANES WITH DEVELOPED INNER SURFACE AS MATERIAL
FOR BIO-MEDICAL APPLICATIONS**

Andrzej Chwojnowski, Cezary Wojciechowski, Konrad Dudziński, Ewa Łukowska

*Institute of Biocybernetics and Biomedical Engineering, Polish Academy of Sciences,
Warsaw, Poland*

Abstract

A method of obtaining hollow fibers with developed internal surface has been elaborated. As materials were selected synthetic polymers, namely polysulphone Udel P-1700 and polyethersulphone Ultrason E2020P. This method enables the obtaining of such membranes by means of a spinneret with smooth walls and the installation for spinning hollow fibers. A mechanism of the formation of corrugations on the membrane internal surface has been proposed. The effect of spinning parameters on membrane formation has been described. An explanation of the reasons of formation of defects on the external skin layer has been proposed.

Keywords: Polysulphone membranes, polyethersulphone membranes, hollow fiber membrane