



“Gheorghe Asachi” Technical University of Iasi, Romania



CHARACTERISTICS OF DOUBLE JET IMOBILIZED MEMBRANE

Mihaela Emanuela Crăciun, Mihaela Mihai, Gheorghe Nechifor*

*University Politehnica of Bucharest, Faculty of Applied Chemistry and Materials Science,
1, Polizu Street, 011061, 1st district, Bucharest, Romania*

Abstract

This paper presents an experimentally study of the anionic iodide separation from a mixture with immobilized liquid membrane. The experiments were carried out in a double jet installation. In order to intensify the transfer of iodide ions from the source phase to the receiving phase, the both phases are dispersed as droplets in the membrane and the hydrodynamic parameters of the dispersed phases are measured with the photographic method. The photos of the droplets were taken with a CCD – camera. Measuring the droplets' diameters, arias, volumes and shape factors by image processing software; one obtains the hydrodynamic parameters' size distribution. This method is time consuming but the droplets can be visualized and the kinetics of the process can be monitored. The results reveal the favorable operating conditions for separation.

Key words: dispersed systems, hydrodynamic parameters, iodide separation, liquid membranes

* Author to whom all correspondence should be addressed: e-mail: g_nechifor@chim.upb.ro