



## Salt splitting process application

Yasemin Oztekin<sup>a,b\*</sup>, Neriman Karadayi<sup>c</sup>, Zafer Yazicigil<sup>a</sup>

<sup>a</sup>Department of Chemistry, Faculty of Science, Selcuk University, 42075, Konya, Turkey  
Tel. +90 332 2232738; email: yoztekin@gmail.com

<sup>b</sup>Vilnius University, Faculty of Chemistry, Centre of Nanotechnology and Material Science – NanoTechnas, Vilnius, Lithuania

<sup>c</sup>Department of Statistics, Faculty of Science, Selcuk University, 42075, Konya, Turkey

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### ABSTRACT

The recovery of bases from solutions containing metallic salts were achieved in three compartment cells separated with commercial ion exchange membranes (IEMs) as anion exchange membrane (AEM) and cation exchange membrane (CEM). In the experiments, an equimolar quantity of acid, base and different salts of metal solutions were used as the anolyte and the catholyte solutions and the solution in the middle chamber of the cell, respectively. Effects of current, the type of ion-exchange membranes, the nature and the concentrations of the solutions on the recovery of bases were investigated. The results of the experiments were analyzed with the statistical package for social sciences (SPSS) program. The results obtained show that electrohydrolysis seems to be an applicable method for the recovery of bases from waste water at suitable conditions.

*Keywords:* Industrial wastes; Salt splitting; Regeneration of bases; Ion-exchange membranes

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\* Corresponding author.