

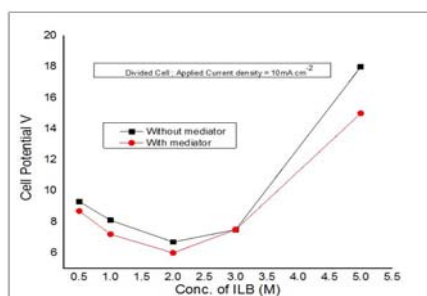
Electrochemical reduction and characterization study of mediator in ionic liquid and water mixture as electrolyte

Kannan Karunakaran, 문일식†

순천대학교

(ismoon@sunchon.ac.kr†)

Wide potential window of RTIL makes electrode dissolution that forced Galvanostatic electrolysis (GE) become impractical. To minimize the cell voltage, water + RTIL mixture can be a novel method. In the present investigation, we have conducted GE in mixture of BMIMCF₃SO₃ with water. As shown in the figure pure IL shows 18V but water mixture IL particularly 2 M shows 6V which indicates optimum water ratio suppressed the cell potential in divided Cell system.



Keywords: Ionic liquid water mixture, electrolysis, mediators, potentiometric titration.