

POLYMER ELECTROLYTES BASED ON PVP-PBA GEL

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**POLYMER ELECTROLYTES BASED ON PVC - PEMA BLEND**

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## ABSTRACT

In this work, polymer electrolytes composed of the blend of Poly (vinyl chloride) (PVC)/ poly (ethyl methacrylate) (PEMA) +  $\text{LiCF}_3\text{SO}_3$  + EC was prepared where Polyvinyl chloride (PVC-PEMA) was used as the polymer host with Lithium triflate ( $\text{LiCF}_3\text{SO}_3$ ) as the doping salt and ethylene carbonate (EC) as the plasticizer to prepare plasticized/gel solid polymer electrolyte films. The ionic conductivity of all these samples were measured by impedance spectroscopy. The optimum percentage of EC that could enhance the conductivity of the salted samples was determined.