

ABSTRACT

EFFECT OF CERAMIC MEMBRANE MODIFICATION AS SEPERATOR FOR THE PERFORMANCE OF CONTINIOUS FLOW PHOTOVOLTAIC IN KI/KI₃ SYSTEM

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Expriment of ceramic membrane modification effect as seperator for performance of continious flow photofoltaic cell in KI/KI₃ system has been done. The goal of this expriment was observasing the effect of TiO₂ modified membrane by sol gel method for current, voltage and stability. The result showed that KI optimum concentration was 0,6 N, KI (in KI₃) 0,025 N, and cell stability was 19 days, while the value of the parameters of the photovoltaic cell out put derived from the curve of current versus voltage relationship (I-V) were the short circuit current 0,47 mA, maximum current 0,27 mA, open circuit voltage 132,6 mV, maximum voltage 59,6 mV, maximum power 2,71 x10⁻² Watt/m², fill factor 0,258, and efficiency 0,85%.

Keyword : *Photovoltaic Cells , electrolyte solution of KI , ceramic membranes*