**Abstract**

KMnPO4 has prepared as a unique supercapacitor material because of the extensive electrochemical properties of LiMnPO4, which is proved as a one of the best cathode materials1. The compound was synthesized via combustion synthesis using potassium acetate, manganese acetate and ammonium dihydrogen phosphate as precursors with a fuel of citric acid. Structural, surface morphology were studied by XRD, FTIR and TEM analysis and the sample encompass the structure of triclinic having the space group of P(2). The electrochemical properties were observed using cyclic voltammetry, galvanostatic charge-discharge cycling and electrochemical impedance spectroscopy in a three electrode system at a potential range from -0.6 to 0.6 V vs Hg/HgO. The variation in the electrochemical performance of the sample was studied in three different electrolytes such as 1M LiOH, 1M KOH and 1M NaOH. The result shows that KMnPO4 exhibits higher capacitance of 335 F/g at a scan rate of 2mVs-1 for 1M NaOH. This material shows good specific capacity; replace with all the available Li based Manganese pseudocapacitors which are already proved their recital.