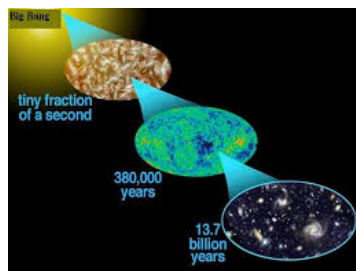


## International WORKSHOP on “Emerging trends in High Energy and Condensed matter Physics”



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### Polymer Nanocomposite Electrolyte Films For Energy Storage/Conversion devices

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The conducting polymer nanocomposite electrolytes free standing thin films are used in technologically interesting due to the wide variety of applications Such as ; batteries, solar cell , electrochemical sensors and supercapacitors etc [1-2]. The conducting polymer nanocomposite electrolytes thin films have been prepared by standard solution cast technique. The prepared free standing films were characterized by different tool of characterizations technique such as EIS, FTIR, and SEM. The basic requirement of polymer nanocomposite electrolyte films are high ionic conductivity is approx.of order  $10^{-2}$  to  $10^{-4}$  S/cm-1 .FTIR spectroscopy is an important technique for the analysis of bond formation in the polymer structure, since it provides information about the complexation of blend polymer with sodium ion and interaction in the prepared films [3-4]. The surface morphology of polymer nanocomposite electrolyte films by scanning electron microscopy (SEM). The cyclic Voltammetry of polymer nanocomposite electrolytes films were calculated by electrochemical stability window (ESW) by using an electrochemical analyzer.

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