## SYNTHESIS AND CHARACTERIZATION OF MODIFIED POLYMER AS POLYMER ELECTROLYTE

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#### ABSTRACT

## SYNTHESIS AND CHARACTERIZATION OF MODIFIED POLYMER AS POLYMER ELECTROLYTE

An investigation on the synthesis of the new polymeric electrolyte is carried out. The effects of different percentage of lithium salt toward the polymer as the host in the polymer electrolyte are observed. This study revealed that the addition of 40% of lithium salt increase the amorphous characteristic of the polymer electrolyte, the thermal stability up to 390°C and the ionic conductivity of the polymer electrolyte up to  $3.00 \times 10^4$  S cm<sup>-1</sup>. This study also revealed that the addition of lithium salt cause broadness to the spectrum of C-O-C functional group and the main polymer chain in the polymer used.