



CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The carbon foams were prepared by using Poly(p-eda) as an organic precursor and AZD as a blowing agent. From the DSC results, it was found that AZD also acted as a curing agent due to the shift of exothermic peaks to lower temperature. The organic foams was more thermal stability and % char of yield than Poly(p-eda). Nitrogen adsorption-desorption isotherm of carbon foam at 1.00°C/min showed characteristic of microporous absorbent and was the highest surface area at 410 m²/g. This result associated with the pore size distribution graph which showed pore diameter at 15 nm. Although the heating rate was more effect on macropore, it was effect rarely on micropore from two pore size distribution graphs. Therefore, the heating rate of 1.00°C/min and 20 wt% of AZD were appropriate for organic and carbon foam preparation.

This carbon foam should be measured conductivity, resistance of electricity and characterized by XRD for determining of phase of carbon.