CHAPTER IV

CONCLUSIONS

From the results and discussion given in chapter III, the conclusions of this research are

1. In case of nylon 6,6, the variation of impact strength was caused by change in the amount of crystallinity of the reprocessing. the small amount of degradation did not affect the tensile strength and the flexural strength. The mechanical strength were not significantly chnaged before the fifth pass of reprocessing.

2. The degradation of POM show a strongly change in melt viscosity because of thermal instability at high temperature and the impact strength trended to increase which was affected by the decrease in molecular weight.

3. The reprocessing of PEI affected on the rheological and mechanical properties by decreasing the mechanical strength. The reduction of the viscosity of PEI after reprocessing can indicate the degradation of the material.

4. The reprocessed engineering plastics can be used to produce a wide range of products as far as the impact strength properties of the required products is not critically concerned. To reduce the consumption of virgin materials is one of the solutions for plastic waste problems.