CHAPTER V

DISCUSSION AND RECOMMENDATIONS

5.1 Discussion

The model developed is a coarse practical model. It can be used for on-line control of catalytic reforming process. Dehydrocyclization reactions in the model are assumed to be first order reaction. Therefore, the rate constant is independent to concentration of feedstock but it depends on temperature. The selectivity and rate constant value of hydrocracking reactions depend strongly on temperature. Therefore, the estimated value of selectivity(S_{ij}) and rate constant(K_i) from components balance can be used in the specific condition, i.e. temperature, feedstock compositons. Thus, this model is an example model for predicting the output of products in catalytic reforming process. For other conditions, the pattern of the model, as equation(26), can be done by the same procedure.

5.2 Recommendations

1. Operating data sets from the refinery should be used to verify the model and the pattern of selectivity and rate constant values for other feedstock compositions.
2. The model is to be further refined.