

## CHAPTER V



### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Conclusions

The following conclusions are drawn from this study

1. Nickel, chromium, ferric, molybdenum and manganese in oxide form can be used as active metal for removal of mercury compounds from liquid hydrocarbon.
2. Removal of mercuric chloride and diphenylmercury increases with increasing of operating temperature for all types of adsorbent.
3. Removal of both diphenylmercury and mercuric chloride mercury depends on type of mercury compound. In this study, mercuric chloride can be removed more effectively than diphenylmercury by nickel oxide adsorbent whereas diphenylmercury can be removed more effectively than mercuric chloride by the others adsorbents.

#### 5.2 Recommendations

Recommendations for future studies and research are as follows;

1. Combination of an active metal in-group of nickel, chromium, ferric, molybdenum and manganese should be taken to determine efficiency of removal process.
2. Improvement to continuous process, adsorption isotherm and rate of adsorption should be studied.
3. Other types of mercury compound should be used as model type to determine adsorption behavior for an active metal in-group of nickel, chromium, ferric, molybdenum and manganese.