CHAPTER V

CONCLUSIONS

The promoters (Sn) function in the regeneration procedure can be stated from the cyclic regeneration and partial regeneration tests. Two promoter functions are suggested. A coke migration function that provides the vacant metal sites and a structural promoter function were shown to be stabilized according to TPO and propane conversion result. The textural promoter function, induced Pt electron state, was changed. The propylene selectivity decreases drastically from the loss of Pt active sites due to the loss of initial Cl^- over several cycles required to redisperse the Pt crystallites during regeneration.

In the regeneration procedure, the promoter (Sn) shows significant effects on the catalyst regeneration after the coke deposited on the metal sites is completely burnt off. According to the structure promoter function and O_2 spillover over that needs to burn coke on the alumina support, higher loading of Sn causes the slow burning coke deposited on the support sites to be more easily removed.