

**THERMAL CATALYTIC
DEGRADATION OF VOLATILE
HYDROCARBONS IN GAS PHASE**

SHANTHA KUMARA WATAKETIYA

Dissertation submitted in partial fulfillment of the
requirement for the degree of
M.Sc. in Analytical Chemistry

December 2005

533555

Abstract

Air pollution control is becoming more and more important as these pollutants are harmful to human, animal and plant life. Further, they can also cause extensive damage to properties.

Catalytic conversion of pollutants was attracted the attention of many researchers as a means of pollution control. Metals like platinum used as a catalyst in automobile catalytic converters are very expensive. Therefore, synthesis and characterization of new catalysts has been an important area of research as the reserves of noble metals are limited.

Nickel is widely used as a catalyst in Organic Chemistry. The objective of this study is to investigate the activity of supported nickel catalysts for the oxidation of halogen containing organics.