



AIR POLLUTION CONTROL USING HYBRID SYSTEM

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I declared that this thesis is the result of my own work except ideas and summaries which I have clarified their sources. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any degree.

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ABSTRACT

The environment possesses the natural self-cleansing processes such as dispersion, gravitational settling, flocculation, absorption (which involved scavenging and washout), rainout and adsorption that maintain the stability and balance of the ecosystem. These great natural mechanisms lessen the amount of pollutants from being concentrated at one place that might be hazardous to the livings that settled in a particular ecosystem.

However, the effectiveness of the mechanism is getting lower and lower, day by day, in the recent times since the amount of pollutants which are mostly produced by human activities are rapidly increasing. The overwhelming emission of exhaust gases from the industries can cause serious problems to the ecosystem where it damages the plants, reduces distance of visibility, corrodes the surfaces of buildings and increases the number of human respiratory problems.

As the solution, actions have to be made to reduce the amount of particulates and gaseous emissions by implementing control procedures and installing control mechanisms. However, since there are no technologies that can ensure total control of the pollution, low-level emissions are still released into the atmosphere inevitably and only the natural atmospheric cleansing mechanism can remove them.

TABLE OF CONTENTS

CONTENTS	PAGE
PAGE TITLE	i
ACKNOWLEDGEMENT	ii
ABSTRACT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	xi
LIST OF FIGURES	xii
LIST OF ABBREVIATIONS	xiv

CHAPTER 1

INTRODUCTION

1.1	Background of Project	1
	1.1.1 Approaches of Air Pollution Control	2
1.2	Objective of Project	5
1.3	Scope of Project	6
	1.3.1 The Contact-power Theory	7

CHAPTER 2	WET COLLECTORS	
2.1	Types of Wet Collectors	10
2.1.1	Spray Tower	10
2.1.2	Wet Cyclone Scrubber	11
2.1.3	Venturi Scrubber	13
2.2	Principles of Absorption	14
CHAPTER 3	THE PROPOSED SYSTEM FOR AIR POLLUTION CONTROL	
3.1	The System in General	15
3.2	Evaporator	17
3.3	Condenser	19
CHAPTER 4	THE SCRUBBER TOWER	
4.1	Introduction	20
4.2	Mass Transfer of the Counter-current Flow	23
4.2.1	The First Order Kinetics and Overall Efficiency	26
4.2.2	Particulate Control Efficiency	29
4.3	Materials of Construction	30
4.3.1	Materials Selected for the Scrubber Tower	32
4.3.1.1	Bricks	33
4.3.1.2	Steel	33
4.3.1.3	Stainless Steel	34
4.3.2	The Cost of the Selected Materials	36