COVER PAGE

TITLE PAGE (no heading) – reserve for cover page

ABSTRACT

ACKNOWLEDGEMENT

DECLARATION

PREFACE

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

**INTRODUCTION**

**Penang Industrial Area**

**Prai Industrial Area**

**Industrial Pollution**

**Sources of Coastal Pollution**

**Wastewater Treatment**

**Physico-Chemical Treatment of Mixed Effluent**

**Biological Treatment**

**Microspopic and Inhibition Study**

**Objective of Study**

**LITERATURE REVIEW**

**Literature Review**

**Sources of Particulate Matter**

**Motor Vehicles**

**Wind Speed**

**Temperature and Sunlight**

**Relative Humidity**

**Regression Models**

**Multiple Linear Regressions**

**Robust Regression**

**Quantile Regression**

**Hybrid Model**

**Principal Component Analysis**

**METHODOLOGY**

**Introduction**

**Study Area**

**Monitoring Record Acquisitions**

**Parameters Selection**

**Monitoring Record Screening**

**Descriptive Statistics**

**Box and Whisker Plot**

**One Way Analyses of Variance**

**Monitoring Record Management**

**Regression Models**

**Multiple Linear Regression Models**

**Robust Regression Models**

**Quantile Regression Models**

**Artificial Neural Network Models**

**Feedforward Models**

**General Regression Neural Network**

**RESULTS AND DISCUSSION**

**Introduction**

**Characteristic of Monitoring Record**

**Descriptive Statistics**

**Box and Whisker Plot**

**One Way Analyses of Variance (ANOVA)**

**Regression Models**

**Multiple Linear Regression Model**

**Robust Regression Models**

**Quantile Regression Models**

**CONCLUSIONS AND FUTURE WORKS**

**Conclusion**

**Limitation and Future Work**

REFERENCES

LIST OF PUBLICATIONS AND PAPERS PRESENTED

APPENDIX