"ANALYSIS OF AIR POLLUTION IN BANGALORE CITY USING ARTIFICIAL NEURAL NETWORK"

(Sponsored by Karnataka State Council for Science and Technology)

A Project Report Submitted To

VISHVESHWARAIAH TECHNOLOGICAL UNIVERSITY, BELGAUM

IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THEAWARD OF THE DEGREE OF

BACHELOR OF ENGINEERING

IN

MECHANICAL ENGINEERING

FOR THE ACADEMIC YEAR 2008-09

SUBMITTED BY

VINAY.S.H	**(1RE05ME426)**
SHARATH KUMAR.S.P	**(1RE06ME410)**
YETHINDRA .R	**(1RE05ME042)**
SRINIVAS MURTY.T	**(1RE05ME052)**

UNDER THE GUIDANCE OF

Mr.L.R.JAGADEESH, M.TECH
ASST.PROFESSOR
DEPARTMENT OF MECHANICAL ENGG

DEPARTMENT OF MECHANICAL ENGINEERING

REVA INSTITUTE OF TECHNOLOGY AND MANAGEMENT,

KATTIGENAHALLI, YELAHANKA,

BENGALURU-64

SYNOPSIS

Air Pollution is one of the biggest global problems of the new era. The major air pollution is from vehicles, industries and many other pollutants on the earth. Air pollution occurs in the city due to the vehicles and industries.

Bangalore is one of the metropolitan cities and recognized as the silicon valley of Asia.Banglaore attracts people from different parts of the world due to its climate and weather. Therefore year by year the pollution increases due to more vehicles entering the road.

It is very difficult to measure the exact amount of pollution due to the different categories of vehicles. Therefore an attempt has been made to find the amount of pollution releasing from different categories of vehicles. Details about the number of vehicles categorized are obtained from different Regional transport offices (RTO's) of Bangalore city. The details of pollutants are obtained from Karnataka state pollution control board (K.S.P.C.B).

The amounts of pollutants are calculated by equations and alaysed by ANN method.

ANN is Simulation tool which can be used for multi data analysis. This involves selection of a model, training and simulation, therefore network model has selected and trained and analyzed for different categories of vehicles and their pollutants. The ANN results are compared with calculated value. From the analysis it is found that two wheelers contributing more towards the amount of pollution emitted compare to other category of vehicles. Carbon monoxide is the major pollutant which is released by vehicles. Pollutants are responsible for global warming and health problems. Therefore immediate action is necessary to reduce the pollution.