

## Abstract

Due to a major increase in pollution day by day so it is required to predict pollution of the next date, next months, next year. Using some previous air related data. Air pollution is rapidly increasing due to various human activities, and it is the introduction into the atmosphere of chemicals, particulates, or biological materials that cause loss of human lives, and it also harms the natural environment. Indeed, air pollution is one of the important environmental Problems in metropolitan and industrial cities. So, it's very important to predict pollution and avoid these problems.

Air pollution prediction using data mining is one of the most interesting and challenging tasks. Many systems are designed to support air pollution data storing, inventory management and generation of simple statistics. Some systems use decision support systems, but they are largely limited. They can answer simple queries like "What is the maximum limit of air pollution", "which area has a maximum pollution" However, they cannot answer complex queries like "Predict next month air pollution count.", "Given me, tomorrows pollution details" this type of prediction techniques are used in this system.

Key Words: Air quality prediction, SO<sub>2</sub>, NO<sub>2</sub>, Ozone, RSPM, Model Generation, Multilayer Perceptron (MLP), Artificial Neural Network (ANN), Linear Regression.

## INTRODUCTION

Air pollution is rapidly increasing due to various human activities, and the occurrence of particulates, chemicals or biological resources into the environment that cause unexpected, humans' death, or disease, damage source of revenue, or spoil the natural environment. In reality, pollution content in the air is most vital environmental problems in developed and urban cities. So, it's very important to predict pollution and avoid these problems. Air pollution calculation is one amongst the demanding tasks and we give the prediction techniques used to give next day, next month air pollution count to avoid the problems.

The environment is affected in terms of global climate change and adverse effects on plants and ecosystems due to urbanization in recent years. Vehicles are a significant source of emissions into the atmosphere. The commonly occurred air pollutants are CO, NO, NO<sub>2</sub>, PM 10, O<sub>3</sub>, SO<sub>2</sub> and several organic compounds. These air pollutants cause hazardous effects on the ecological system of a human being such as a disease, discomfort or death to humans, damage to other living organisms like food harvest, or spoil the natural environment. Hence there is need to monitor air pollution. Many decision support systems are designed for monitoring the data but they are largely limited.