

AIR QUALITY MONITORING



INTRODUCTION

- Air quality monitoring refers to continuous measurement of specific air pollutants also known as “criteria air pollutants”. Obtained air pollution data together with natural background/trace gas monitoring and stationary source emission monitoring helps to define what kind of air pollution people are exposed to.

METHODS

- Ozone – ultraviolet spectroscopy. ...
- Oxides of nitrogen – chemiluminescence. ...
- Sulfur dioxide – pulsed fluorescent spectrophotometry. ...
- Carbon monoxide – infrared spectrometry. ...
- Fine particles as PM10. ...
- Fine particles as PM2.5. ...
- Ammonia – chemiluminescence. ...
- Visibility – nephelometer.

PURPOSE

- Air quality monitoring is an important tool for improving air quality, protecting public health, and ensuring compliance with regulations. It can also be used to identify pollution sources, monitor climate change, or support research and development.

BENEFITS

- Cleaner indoor air improves cognition and productivity, reduces the spread of other airborne diseases, protects against outdoor air pollutants such as smog and wildfire smoke, and decreases the number of environmental triggers for conditions like asthma and allergies

OBJECTIVE

- The main objective of these Networks is to record the concentration levels of atmospheric pollutants in order to define air quality levels and establish action plans if high levels of contamination are detected. Other objectives are: Locating contamination problem areas and understanding their space- time changes.

Thank you