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EFFECTIVE METHOD USED TO CONTROL AIR POLLUTION

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A B S T R A C T

Delhi has been ranked the most polluted city in the world. The air quality has been reported to be far above the safe limits. Our project aims to bring forth insights into the aspects that affect the quality of the air. We have used Eco-steps Laboratory Proprietary Chemical Sensor, India Spend Air Quality Index Monitoring System, and Airveda Air Quality Monitor throughout the project. In order to calibrate the India Spend sensors, we synced their values with the Eco Steps sensor and the Airveda sensor. Using the regression models, we have come up with functions to accurately produce the India Spend sensor values for PM 2.5 and PM 10. Air pollution can be manmade or occur naturally. Pollution is injurious to health and its prevention places an economic burden on the citizen. Air pollution has been a menace in recent years posing serious threats to environmental and social wellbeing. Road transport has become by far the major source of environmental pollution. Suggestions for future adopted technologies for air pollution control adopted under Indian criterion is also suggested. . The most demanding thing would be this system wilve treal-timeime data and will show the quality of the air based on the standard air quality. The system will give the user the indication of the air quality and based on given parameters it will let the user know how much the environmental air is polluted or safe. This system will do everything on behalf humansman in such a way that for a smart city when people will have less time for spending and there will be more industry the and air will be more polluted this device will let people know how safe the air is. The goal is to make the system as reasonable as possible so that people from esocialciety background can use this and if some research organization wants to do further research then if some nominal amount of money is invested tt would be a great solution to install a weather station thus air quality monitoring system.

Keywords: *Analysis, investigation, research, aspects, calibrate, esocialciety, wilve treal-timeime, Airveda*

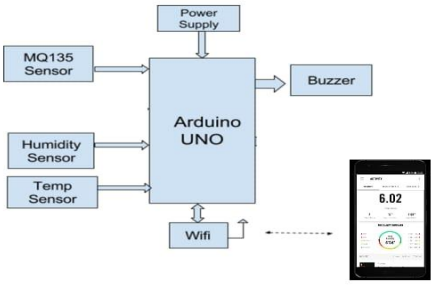
1. INTRODUCTION

Air pollution control, the techniques employed to reduce or eliminate the emission into the atmosphere of substances that can harm the environment or human health. Air is considered to be polluted when it contains certain substances in concentrations high enough and for durations long enough to cause harm or undesirable effects. These include adverse effects on human health, property, and atmospheric visibility. The atmosphere is susceptible to pollution from natural sources as well as from human activities. The best way to protect air quality is to reduce the emission of pollutants by changing to cleaner fuels and processes. Pollutants not eliminated in this way must be collected or trapped by appropriate air-cleaning devices as they are generated and before they can escape into the atmosphere. These devices are described below. The electrostatic precipitator is air pollution control equipment as it is designed to remove particulate and gaseous pollutants from the emissions of various sources, including power plants and automobiles.

2. METHODOLOGY

We have used Arduino UNO, MQ-135 air quality sensor, LCD display, breadboard, jumper wires, and potentiometer to develop an arduino based air pollution detector which combined a small-sized, minimum-cost sensor to an arduino microcontroller unit (Figure 1). The device is linked to a computer through a serial connection. From the sensor, the collected data through the arduino microcontroller. It will then be transmitted to the computer software, where it becomes documented and plotted in real-time.when the air quality goes down beyond a certain level , means when there are sufficient amount of harmful gases are present in the air like CO2 , smoke and benzene . it will show the air quality in PPM on the LCD as well as webpage so that we can moniter it very easy.

3. TABLES



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5. CONCLUSION

The air pollution monitoring system was tested for monitoring the gas levels in different parts of the country. It additionally despatched the sensor parameters to the facts server. Our project device confirmed that it's miles powerful and reasonably priced and with a few fairly operating sensors it may without a doubt be a dependable one to every person and its data might be a key to taking a few important steps for the betterment of the society because it will assist to become aware of the affected place so that we will take early steps to lessen damages for the subsequent generation.

6. RESULT AND DISSCUSION

The system to monitor the air of environment using Arduino microcontroller, IOT Technology is proposed to improve quality of air. With the use of IOT technology enhances the process of monitoring various aspects of environment such as air quality monitoring issue proposed in this paper. Here, using the MQ135 gas sensor gives the sense of different type of dangerous gas and arduino is the heart of this project.

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