AIR QUALITY MONITORING

Phase 2 : Innovation

In this project air quality will measured and monitored with different types of sensors (gas sensors like MA2, MA135 and other) with also environment sensors that which will connect to ESP8266 , 32 or Arduino Uno Boards.IoT-based air quality monitoring systems leverage the power of connected devices to gather real-time data on air quality. These systems typically consist of sensors that measure various pollutants such as particulate matter, carbon monoxide, nitrogen dioxide, and ozone levels in the air. The sensors are connected to a network and transmit data to a central server or cloud platform for processing and analysis.One advantage of IoT-based air quality monitoring is its ability to provide continuous and widespread coverage. By deploying multiple sensors across different locations, it becomes possible to monitor air quality in real-time on a larger scale. This can help identify pollution hotspots, track pollutant sources, and assess the effectiveness of pollution control measures.Moreover, IoT-based systems often come with data visualization tools and user-friendly interfaces, making it easier for users to access and interpret the collected data. This can be particularly useful for individuals, communities, and organizations looking to make informed decisions about their daily activities, such as choosing routes with better air quality, adjusting ventilation systems, or planning outdoor activities.Additionally, IoT-based air quality monitoring systems can integrate with other smart devices and systems, enabling automated responses. For example, if the air quality reaches a certain threshold, the system can trigger actions like adjusting air purifiers, activating ventilation systems, or sending alerts to relevant stakeholders.Overall, IoT-based air quality monitoring systems offer a scalable and efficient approach to monitoring and managing air pollution, empowering individuals and communities to take proactive steps towards improving air quality.