ANVESHAN

CENTRAL ZONE STUDENT RESEARCH CONVENTION

I-BEAM : An IoT based environment and health monitoring system.

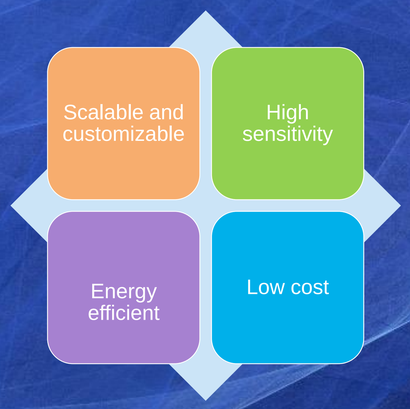
PROBLEM STATEMENT

Human activities, living organisms and natural events all add gases, liquid droplets and solids to the air. We usually call these additions to the atmosphere as air pollution when they cause problems for us or our environment. Air pollution can cause a variety of problems including health affects, poor plant growth rate and damage to buildings. Since the atmosphere is in constant motion around the world, pollutants that are created in one area may reach us hours, days, or weeks later.

OBJECTIVE

- To review the detrimental effects of the harmful gases present in the atmosphere.
- Illustrate the differences in temperature and humidity in the surrounding areas.
- Examine the various substances present in different gases.
- Develop a method to reduce the effect of pollution on human health.
- To inform and warn the pollution sources to keep a check on the emission.

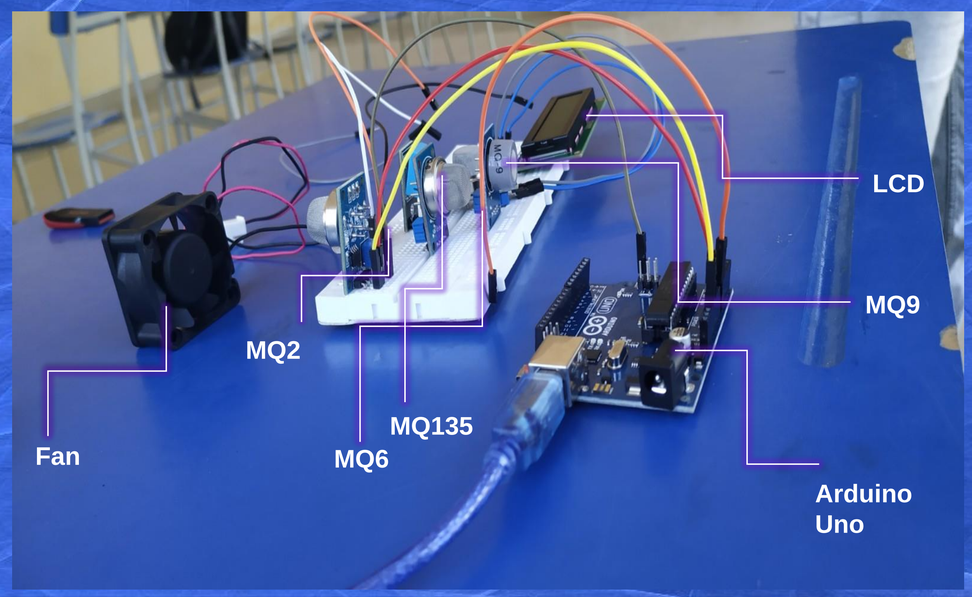
FEATURES



PROPOSED METHOD

1. To warn the emitting sources.
2. To detect and identify the gases
3. To implement a method of reducing the effects.

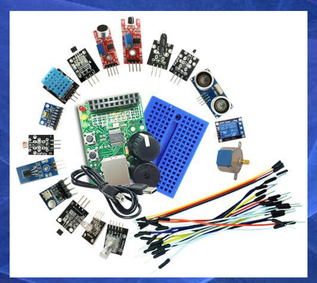
EXPERIMENTAL SETUP



TECHNOLOGY USED

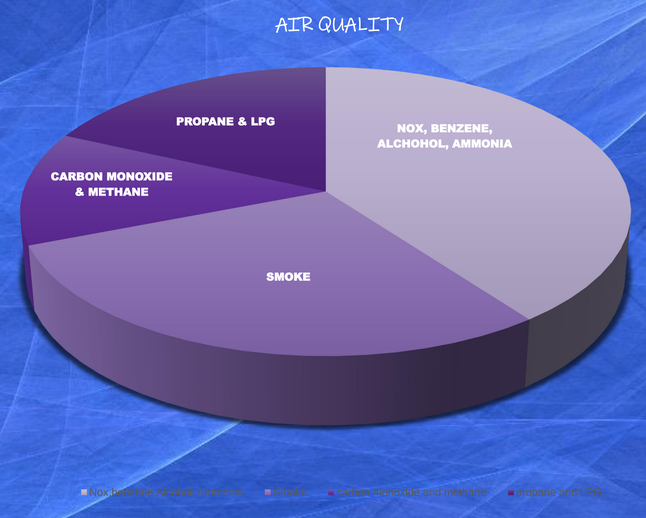
IoT

Arduino Uno



Sensors

RESULTS



CONCLUSION

- This model is used to create system that provides detection of different gases and substances in the air, this also includes different emissions from other sources like factories, automobiles, power plants, etc. It also display the quantity of that particular substances. This model will also helps in minimizing the effects of air pollution or toxic gases on human health by warning the user about the excessive emissions of gases above the specific level.

FUTURE SCOPE

- Reporting of immediate surrounding data
- Data representation of pollutant concentrations
- Wireless sense network
- Roadside pollution monitoring
- Site selection for reference monitoring systems
- Making the data available to every user