

Air Quality Monitoring and Logging

Vision:

Due to deteriorating air quality of Delhi a thought came to our mind that this menace cannot be tackled until we analyse the exact composition of this city's air. Only after computing the results from such a tracker one can think of the necessary counter measures.

Idea:

Monitoring air quality via sensor modules controlled by Node MCU. The idea is to place these modules at multiple locations around the city which will communicate via WiFi and upload the data to database. The database will be accessible through both pc and smartphone.

Sensors used:

ESP8266 module, MQ Gas sensors, DHT22, Optical PM dust sensor.

Challenges:

The designed circuit was non-functioning on the fabricated PCB. Hence, we made the whole circuit on perfboard.

Machines Used:

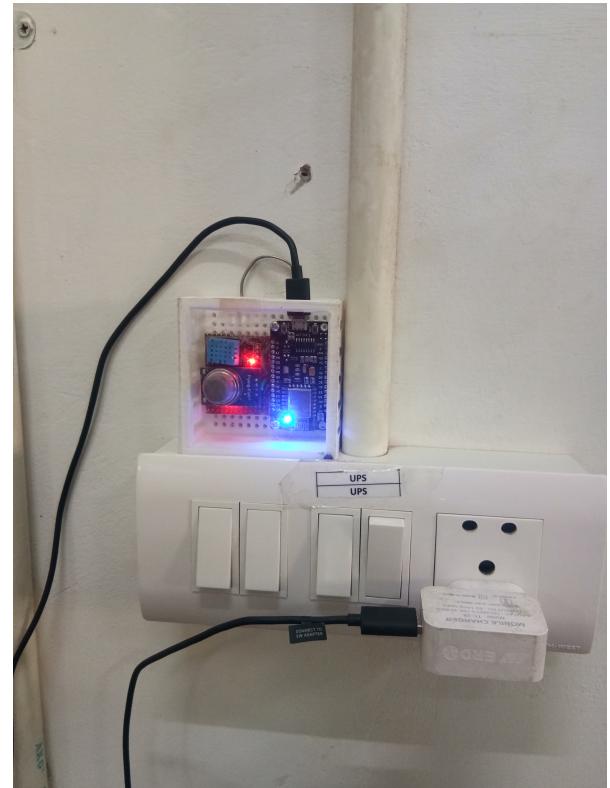
3-D printer, Ultimaker, PCB fabrication machine, Soldering Station

Support:

All of the above mentioned things were available in Design & Innovation lab at IIITD. This could not have been possible without the help of Mr. Abhijeet Mishra , who constantly guided and motivated us during the project.

Upcoming Modifications:

Based on the findings from this project we plan to make the modules more compact, energy efficient and accurate.



By Abhishek rana

