Minutes Of The Meeting

Date: 25 August,2025

Time: 2:00 pm to 5:00 pm

Team Name: Male and females

Project Name: Secondary Pollutant Estimation near Pharma Industrial Cluster.

Team Number: 46

Venue: Lab 114

Participants:

Team members: Krrish Gupta, Mahek Desai, Sarah Roomi, Laveena Jain.

Mentor: Sandeep Budde

TA: Sasidhar V.

Discussions:

1. Had discussion with mentor.
2. We discussed some indoor and outdoor sources other than the pharmaceutical industries such as cooking oil (VOCs), vehicles, etc.
   which can also contribute to the data readings of these pollutants.
3. Discussed about the usage and purpose of thermal image camera. Sir mentioned it was a unique addition to our project.
4. Understand the purpose, use and working of each sensor.
5. Understand the parameters properly and research more on that and equations of the gases.
6. Sir mentioned how UV sensor is a nice addition to the project.
7. Discussed the purpose of the embedded systems workshop and what is a digital twin.
8. Discussed about BAM algorithm for calibration
9. Sir told us to use the sensors (our final product) for 36 hours, every 5 minutes.
10. Components finalization.
11. Try using the PM sensor given and see what is the data obtained and discussed its working.

Tasks for this week:

1. Make all the components work and research upon the data obtained.

2. Integrate all the components.
3. Make a compact and efficient design of the final product.
4. While designing the setup, consider various factors such as temperature, etc which can affect the sensor readings.
5. Update the ppt.

Components given this week:

1. ESP32
2. Cable
3. Breadboard
4. Nova PM sensor
5. 2 diodes
6. VOC sensor
7. Temperature sensor
8. Jumper wires
9. SGP30 VOC sensor

Today's work:

Sensor purpose and working: sensor working and purpose - Google Docs

Research and Relevant material: Research and Relevant Material - Google Docs

Presentation: ESW project-male and females - Google Slides