

GAS LEAKAGE & ALERTING SYSTEM FOR INDUSTRIES

TEAM ID: PNT2022TMID31403

This project helps the industries in monitoring the emission of harmful gases. In several areas, the gas sensors will be integrated to monitor the gas leakage. If in any area gas leakage is detected the admins will be notified along with the location. In the web application, admins can view the sensor parameters.

1.DEFINE YOUR PROBLEM STATEMENT

Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

🕒 5 minutes

PROBLEM STATEMENT

Domestically we use natural gas and it is very useful for burning purposes. If this gas is leaked in our kitchens, offices or factories and not sensed in time, it may lead to a fatal disaster, and may cause human loss. For this purpose, we came forward with an idea of making such an electronic device to sense that leakage and alarm the respective persons to solve that leakage problem and save assets and human lives.



Key rules of brainstorming

To run an smooth and productive session



Stay in topic.



Encourage wild Ideas.



Defer judgment.



Listen to others.



If possible, be visual.

2.BRAINSTORM:

Write down any ideas that come to mind that address your problem statement.

AISHA REFANA A

Monitor the amount of gases in our environment.	Response times are in the order 1 second.	Can easily be conformed to be 'Intrinsically Safe'
Because of the internal reference cell, the system is self calibrating.	Only one gas can be measured with each instrument.	Reliable technology.

HARIN VENUGOPALAN

Prevent free hazards and explosions	Supervise gas concentration levels	Ensure worker's health
Real-time updates about leakages	Costeffective installation	Data analytics for improved decisions

JEEVANANDHAM P

Highest accuracy and repeatability	extended battery life and long life sensors enable low maintenance.	Easy of use with one-button operation and present alarm levels
Low sensor drift,	Easy to maintain. Servicing and calibration options.	Robust design for withstood harsh and rugged environments, even under stress and high temperatures. Radio frequency interference is diffi.

KAMALI

Inbuilt data and event logging capabilities reduce burden on plant controllers.	Preventing potentially explosive atmospheres	Simple, measures flammability of gases Low cost, proven technology
Less sensitive to calibration errors.	Uses a physical rather than chemical technique.	Avoiding effective ignition sources

IDEAS:

The sensor has excellent sensitivity combined with a quick fast response time	It also detects alcohol so it is used as liquor tester	It is possible to get instantaneous result
Extremely FAST RESPONSE time on changing parameters	It is possible to get high accuracy	Extremely precise repeatability

3.GROUP IDEAS:

20 minutes



Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

20 minutes

