

**Project Design Phase-I**  
**Proposed Solution**

Date	19 September 2022
Team ID	PNT2022TMID7276
Project Name	Gas Leakage Monitoring and Alerting System
Maximum Marks	2 Marks

**Proposed Solution :**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Gas leaks are considered to be very dangerous since they can build into an explosive concentration, So the proposed solution is used for the development for an efficient system & an application that can monitor and alert the workers.
2.	Idea / Solution description	This system uses GSM technique to send alert message to respective person if no one is there in the house or at the area of gas leakage. So GSM module helps in sending immediate alert message regarding gas leakages. The main advantage of this system over the manual method is that, it does all the process automatically and has a quick response time.
3.	Novelty / Uniqueness	Gas Leakage monitoring with low power consumption & small size design, 0-100% vol CH <sub>4</sub> , CH <sub>4</sub> leak detector, High precision, Dual channel. Industry-leading Brand gas sensor with technology innovation and lean manufacturing.
4.	Social Impact / Customer Satisfaction	Low voltage alarm & automatic shutdown, colour LCD display and also quickly detects gas leakage point. Easy installation and provide efficient results.
5.	Business Model (Revenue Model)	The gas leakage model was applied to analyse the pressure, temperature and flow rate of gas leakage over time under both the steady state and dynamic conditions. As the product usage can be understood by everyone, it is easy for their safest organization.
6.	Scalability of the Solution	Establishing fast communication equipment with the nearest fire station and other relief station to have the fastest response in case of an accident. Even when the gas leakage is more, the product sense the accurate values and alerts the workers effectively.