

## **LITERATURE REVIEW**

Linxi Dong et al [2019] have proposed a wireless gas monitoring system which detects the gas leakage not only in fixed concentration levels but also detects the gas which has low explosive limit using Auto Co-relation Function(ACF). It has been implemented successfully and has a detection rate of more than 95%. The average detection time delay has been reduced by less than 30 seconds.

Fabien Chraim et al [2016] has proposed a gas leakage and localization method to identify the areas where leakage is happening. The detection and localization algorithms proposed here are applied to the collected concentration data, and the methodology is evaluated. A detection rate of 91% is achieved, with seven false alarms recorded over 3 days, and an average detection delay of 108 s.

Ravi Kishore Kodali et al [2018] has proposed a project proposes a leakage detector which sends the warning to the concerned people through SMS. This detector senses the presence of harmful gases particularly, LPG, Methane and Benzene. LPG and Methane gases catch fire easily resulting in blasts. Different color LEDS are used to specify the gas leaked for example, RED LED indicates the presence of LPG.

V Suma et al [2019] has proposed a paper to present a new system automatically books a cylinder when the gas is about to empty is by sending a notification to the gas agency using Wi-Fi using Internet of Things approach. In addition to that sensor is used to detect gas leakage at home. This, work this helps the society to specifically indicate gas leakage and also helps both customers and the agency to get the gas booking made automatically using the IOT technique.

Junchi Bin has proposed an article which contains a generalized framework, i.e., tensor-based leakage detection (TBLD), is proposed to detect LNG leakage in the rural area from surveillance thermal cameras. First, the proposed TBLD takes advantage of tensor factorization to fuse thermal image and corresponding gradient maps for improving sensitivity. The experimental results demonstrate the effectiveness of the proposed TBLD, which also shows the great potential of (Tensor Based Leakage Detection)TBLD in future industrial applications.