VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

An ASSIGNMENT REPORT ON

Hydrogen Gas Leakage & Alarm System

Submitted as Microcontroller and Embedded System

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1. INTRODUCTION

Liquefied petroleum gas is the abbreviation for LPG. This is a kind of non-renewable source. It contains more than three carbon atoms. They are mainly propane and butane. This gas is easily set on fire and must be concealed from cause of combustion and kept in highly opened region. This is odorless in its unrefined circumstances. The fragrance we note was entirely from the different gas handler called Ethyl Mercaptan. This material was top-up with the gas when it is out from main chamber areas.

In this project, we have planned to design an automatic gas leak alarm system byusing Arduino Uno board. Arduino Uno contains IC (ATMEGA 328p) plays a vital role- in microcontroller family. It is user friendly and the whole board can be controlled by using c programming. Gas leak identification is mainly designed to detect the LPG (liquid petroleum gas) which is one of the most harmful gas. These kind of gases mostly used in small scale industries & for indoor use as a cooking gas. In our platform MQ (series) sensors are mainly used for detection of gas. In MQ series we used MQ6 sensors, because they are very sensitive to petroleum gases like butane propane. MQ6 sensor activates only when the level of leaked gases reaches the threshold value at normal atmospheric air. Hence it acts as an input for Arduino. On the output side we used a suitable exhaust fan and buzzer is added. The exhaust fan is used to compensate the leaked gas with the atmosphere and the buzzer is used to alert people about the gas

2. DIAGRAM

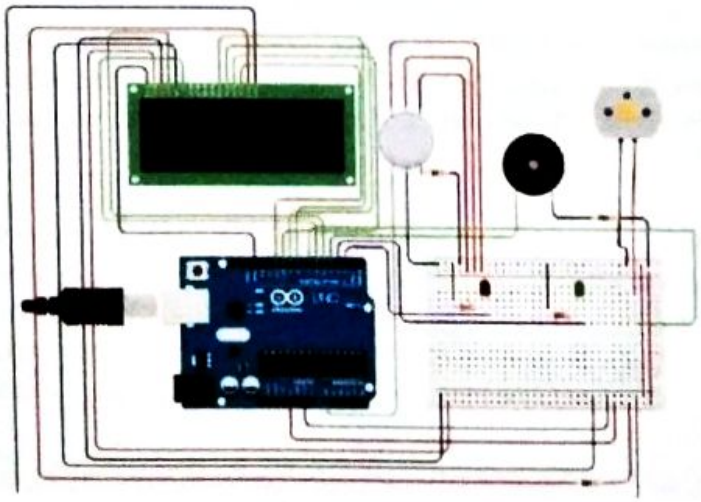

Fig 2.1