**FIRE DETECTIONS IN BUSES**

**AIM:** The main aim of this project is to save the passengers in case of fire accidents in buses or trains.

**PURPOSE:** In case of fire accidents in buses or trains escaping problems will be less so our system helps in saving the passengers in such cases

**BLOCK DIAGRAM:**

**MICRO CONTROLLER**

**(AT89S52)**

**POWER SUPPLY**

**smoke   
sensor**

**LCD DISPLAY   
(16x2 Lines)**

**MOTOR   
(FOR DOOR)**

**MOTOR   
(ENGINE)**

**relay**

**sprinkler**

**DESCRIPTION:**

Generally in running buses or trains in case of sudden attack of fire accidents will make the passengers panic and the total atmosphere will be also filled with smoke. if in case of closed buses then escaping chances will be also minimum so our proposal system is to monitor the fire condition in the bus and if any threshold value increased means it is treated as fire detection and then water sprinkler will be turned on automatically and the bus will be stopped and door of the bus will be opened in order to provide escape chance for passengers

Hence this project will be helpful in saving the lives in greater extent

**HARDWARE COMPONENTS:**

* Microcontroller(AT89S52)
* IR sensors
* Fire sensor
* GSM
* Buzzer
* LCD

**SOFTWARE REQUIRED:**

* Embedded C
* Kiel IDE
* ISP
* Express PC

**RESULT:**

By this prototype we can implement a safety system which avoids the deficiency of oxygen due to smoke and also passengers will be saved from fire accidents.