**GREEN BEE SMART BUILDING**

**AIM:** The main aim of this project is to continuously check the various parameters values of the households or industrial areas.

**PURPOSE:**

The purpose of the project is to continuously sense the different sensor values and provide necessary alerting in the house.

**BLOCK DIAGRAM:**

**MICRO CONTROLLER**

**AT89S52**

**POWER SUPPLY**

**LCD DISPLAY**

**(16 X 2 LINES)**

**FAN**

**RELAY**

**WATER PUMP**

**BUZZER**

**TEMP SENSOR**

**FIRE SENSOR**

**GAS SENSOR**

**ADC**

**0808**

**DC MOTOR**

**Power Supply:**

**STEP DOWN**

**TRANSFORMER**

**BRIDGE**

**RECTIFIER**

**FILTER**

**CIRCUIT**

**REGULATOR SECTION**

**DESCRIPTION:**

By using this project we can detect parameters like occurrence of any fire or gas leakage or temperature values continuously and alert the people if those values cross the threshold limit.

Here in this project we have three sensors temperature sensor to detect temperature values, gas sensor to detect gas leakage, fire sensor to detect fire. These values are in analog format, to convert into digital we are using ADC circuitry. These values are continuously monitored and if temperature value crosses Threshold limit fan will be on automatically to cool the environment. If any fire is detected then the relay will switches on the water pump. If any gas/fire detection occurs or temperature value crosses threshold limit then intimation will be given to the surrounding people by means of buzzer.

By making use of these kinds of projects we can provide the security in houses, Offices and industries.

**HARDWARE COMPONENTS:**

* Power supply
* Microcontroller (AT89S52)
* Temperature Sensor
* Fire sensor/smoke sensor
* Gas sensor
* Buzzer
* ADC 0808
* LCD Display (2x16)

**SOFTWARE:**

* Keil u-Vision
* ISP
* Express PCB

**APPLICATIONS:**

1. Used in Industries

2. Used in Shopping Malls, Home, Offices

**RESULT:**

By using this Project the environment parameters are continuously monitored and alert the people in case of emergency.