

**ANDROID BASED**  
**FEED WATER**  
**SYSTEM**  
**CONTROL IN ICE**  
**FACTORY**

GPTC KORATTY

# ABSTRACT

- Monitoring is very important in industry.
- Monitoring is done by sensor with most accuracy and reliability.
- In ice factory all the parameters is locally and remotely read by android device.
- A modulating valve is controlled by android phone.
- pH controller is installed in water and also control the valve.
- The Peltier device is fixed in the system and it works according to the temperature changes.



# OBJECTIVES

- To allow easy use of mobile in order to control industrial machines simultaneously.
- To reduce the power consumption through the temperature control.
- Avoid chemical accident by using ph control
- Be a good future generation with good health.

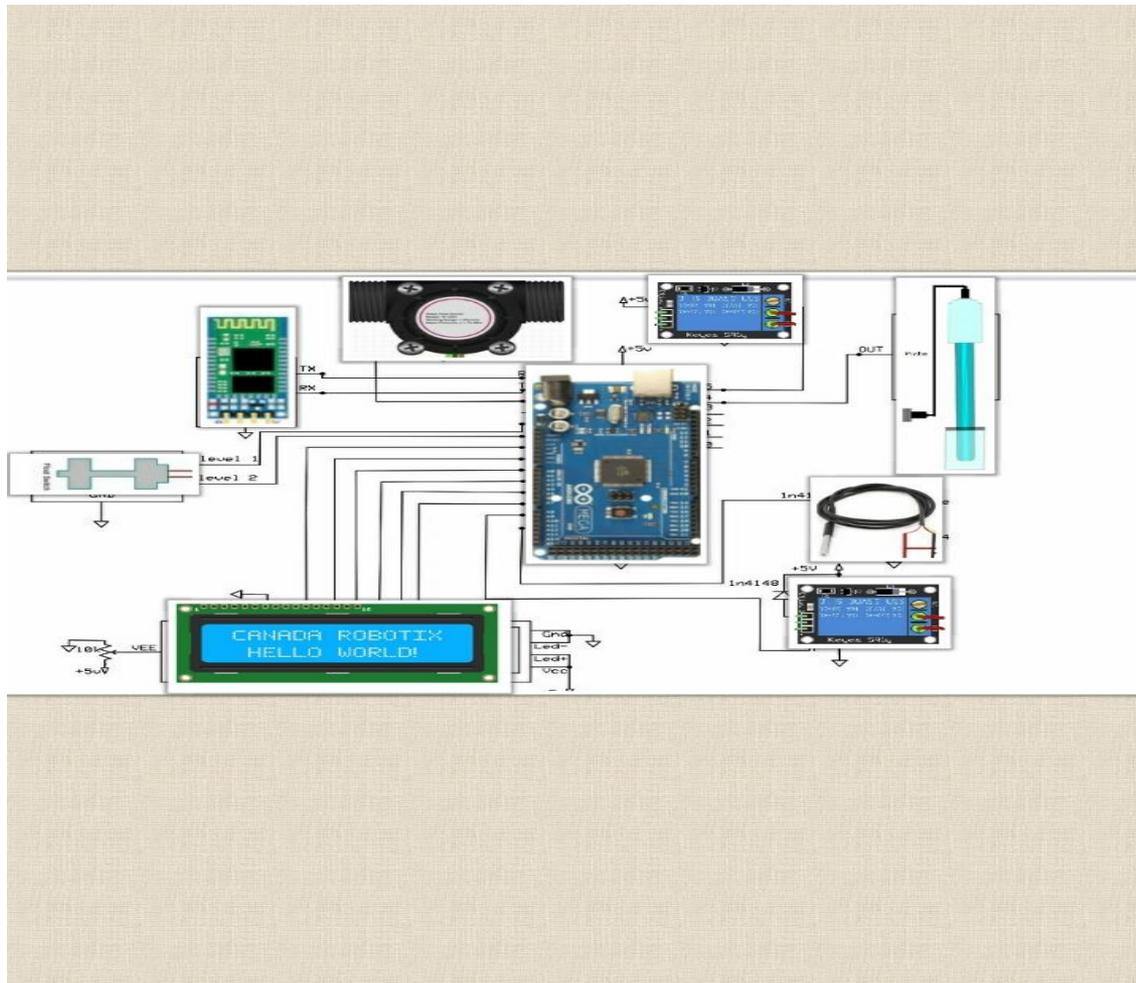


## EXISTING SYSTEM

- Wired technology
  - difficult to monitoring & long construction time.
- pH of raw water is not check in ice factory.
- The variation in the temperature cause high working load to compressor.



# SCHEMATIC DIAGRAM



# HARDWARE NECESSITY

- ARDUINO MEGA 2560
- BLUETOOTH MODULE
- PH SENSOR
- TEMPERATURE SENSOR
- FLOW SENSOR
- FLOAT SENSOR
- MODULATING VALVE
- PELTIER SYSTEM
- PUMP
- DISPLAY MODULE
- SMARTPHONE



# SOFTWARE NECESSITY

- AURDINO PROGRAM
- ANDROID PROGRAM



# AURDINO MEGA 2560

- Microcontroller ATmega2560
- Operating Voltage 5V
- Input Voltage (recommended) 7-12V
- Input Voltage (limits) 6-20V
- Digital I/O Pins 54 (of which 14 provide PWM output)
- Analog Input Pins 16
- DC Current per I/O Pin 40 mA
- DC Current for 3.3V Pin 50 mA
- Flash Memory 256 KB of which 8 KB used by bootloader
- SRAM 8 KB
- EEPROM 4 KB
- Clock Speed 16 MHz

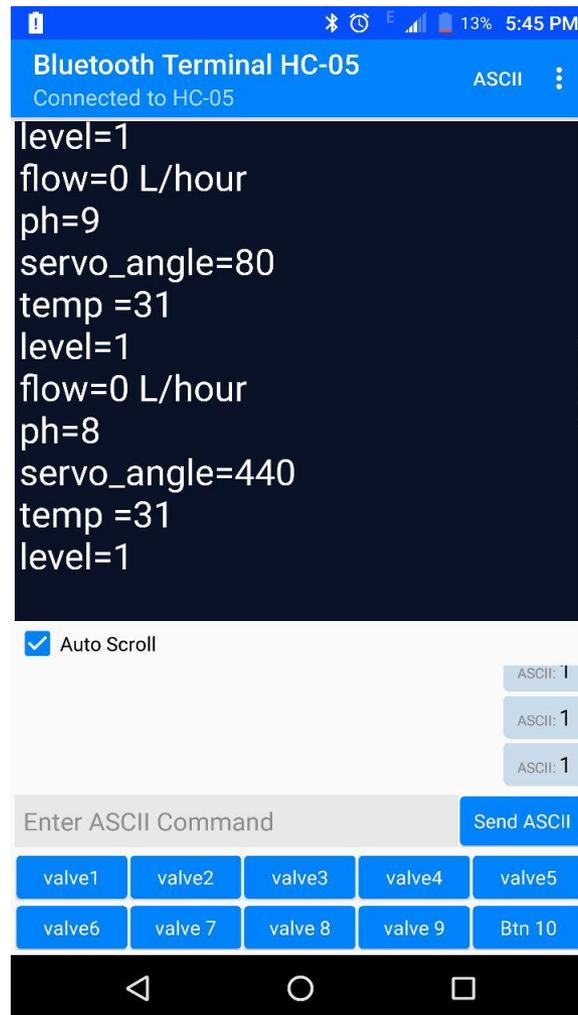


# BLUETOOTH MODULE

- Typical -80dBm sensitivity.
- Up to +4dBm RF transmit power.
- 3.3 to 5 V I/O.
- PIO(Programmable Input/Output) control.
- UART interface with programmable baud rate.
- With integrated antenna.
- With edge connector.



# BLUETOOTH VALVE CONTROLLER APP



# APPLICATION

- The project can be implemented in ice factory.
- Remote operation in ice industry.
- Locally and remotely can control.



## ADVANTAGES

- Low cost
- Easily implemented
- Flexible to use
- Reduce power consumption
- Safety is provided



## CONCLUSION

- Bluetooth network is used to help the user to control the system from remote area by sending and control instruction to the system by using an app.
- By this method is user friendly.
- By this system we can make pure ice without poisonous content.
- Power consumption is done by the temperature control.



*Thank you*

