RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM

This project proposes a sensor-based water quality monitoring system. The main components include a microcontroller for processing the system, communication system for inter and intra node communication and several sensors. Real-time data access can be done by using remote monitoring and Internet of Things (IoT) technology. The technology used in this project are IOT webpage, MYSQL, SMS alert, e-mail alert, temperature sensor, PH sensor and turbidity sensor. Water's PH level, temperature, turbidity value and date/time will be stored in webpage .If the acquired value is above the threshold value automated warning SMS alert will be sent to the specified account. The uniqueness of our proposed project is to obtain the water monitoring system with high frequency, highmobility, and low powered.

Our main aim is to develop a system for continuous monitoring of river water quality at remote places using suitable technology with low power consumption, low-cost and high detection accuracy. pH, conductivity, turbidity level, etc. are the limits that are analyzed to improve the water quality.

Following are the aims of idea implementation:

- To measure water parameters such as pH, dissolved oxygen, turbidity, conductivity, temperature etc. using available sensors at remote place.

- To simulate and analyze quality parameters for quality control.

- To send SMS to an authorized person automatically when water quality detected does not match the preset standards, so that, necessary actions can be taken