

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION
ENGINEERING**

LITERATURE SURVEY

Real-Time River Water Quality Monitoring and Control System



Guide Name: MR.K. ELAMATHI

SUBMITTED BY

A. LAVANAYA

R. PRIYADHARASHINI

J. PAVITHRA

N. NIVINDHA

S. no	Tittle of Paper	Advantages	Disadvantages	Technology used
1	Water quality monitoring system based on Internet of Things.	It tracks turbidity, pH, and other aspects of water quality and sends the information to the management center.	It is costly because of using smart sensors also the size of sensors is not reliable for water tap.	A solution that combines the design of an STM32 single-chip microcontroller, sensors, Wi-fi wireless transmission, smart sensor and remote water quality management is presented by chengcheng et al
2	Efficient cloud based real time water Quality Monitoring system using Internet of Things.	It us determined when the water level in lakes or ponds reaches the lower or upper level. It can also forecast water and overflow.	Measuring the Value of pH temperature Pressure and water by different sensor.	pH sensor, ORP measurement provides insight into the level of oxidation reactions occurring in the solution For many system applications these sensors provide an indication of water quality conditions.
3	River Water quality monitoring based on the Internet of Things.	Pure water in healthcare facilities, a healthy water supply made possible in the river water quality monitoring based on IOT.	The waters in many supply system have to be allocated based on past availability or existing consumer demand. The practice does not necessarily.	The Technology which are used pH sensor ,Ultrasonic sensor, Turbidity sensor, Thermometer sensor ,RF module.

4	Statistical model based on Internet of things.	Aquatic life preservation practical, Achieve sustainability through LEED and well certifications.	<p>There are no specific management plans or sanctions on water extractions in many areas, such as pumping groundwater.</p> <p>There have casual less water to be soluble and even led to the mining of that resources in some respects.</p>	A statistical model based on Internet of Things for water quality analysis using different water quality parameters such as pH, conductivity, dissolved oxygen, temperature, Bio chemical oxygen demand.
5	River Water Quality Monitoring based on wireless sensor	<p>Wireless sensor Network which aids in River Water Quality Monitoring.</p> <p>This also promote a novel technique for the design of a water quality sensor node which can be used for monitoring the pH of water.</p>	It focus only on the pH of river here the other parameters such as turbidity ,conductivity and temperature are not considered.	A river water quality monitoring system based on wireless sensor network which helps in continuous and remote monitoring of the water quality data in India. The wireless sensor node in the system is designed for monitoring the pH of water, which is one of the main parameters that affect the quality of water.
6	Detection on water pollution and water management based on Internet of things.	Based on a study of existing water quality monitoring system and scenario of water we can say that proposed system is more suitable to monitor water quality parameters in real time.	The cost associated with false alarms is due to not being able to detect the signs.	the water quality parameter such as pH, turbidity, conductivity, dissolved oxygen, temperature. The measured values from the sensors are processed by microcontroller and these processed values are transmitted remotely to the controller that is raspberry pi using Zigbee protocol

7	Detection on water pollution and water management using smart sensor IOT	<p>Existing system has a mechanisms which are semi-automated or manually controlled devices which are to be handled by a person responsible for monitoring the water quality. There is need to have human intervention in taking various reading of the water parameters.</p> <p>The instruments or tools are used either by putting/inserting a water sensing part into water and seeing the result on small display device or by directly inserting a portable device in water and watching the output on the display.</p>	<p>Central Water Commission (CWC) monitors water quality, by collecting samples from representative locations within the processing and distribution system.</p> <p>These samples are analyzed at the well-equipped laboratories. At these laboratories, samples of raw water.</p>	<p>The Sensor Web architecture for crisis management, described in this paper, provides active monitoring of measuring parameters and timely responses in cases of environmental disasters.</p> <p>The River Water Management and Alert System built on this architecture enable access, control and management of river water pollution</p>
8	River Water Monitoring and system sensor based on sensor web.	The River Water Management and Alert System built on this architecture enable access, control and management of river water pollution.	<p>Turbidity is a measure of the cloudiness of water.</p> <p>Turbidity has indicated the degree at which the water loses its transparency.</p>	<p>This set of technologies has found various implementations, especially in the area of environmental monitoring.</p> <p>The Sensor Web architecture for crisis management, described in this paper, provides active monitoring of measuring parameters and timely responses in cases of environmental disasters.</p>

9	Heterogenous Wireless sensor network for flood prediction	propose a new architecture for building decision support systems using heterogeneous wireless sensor networks. The architecture is built around standard hardware and existing.	The effectiveness of the proposed architecture by applying it to a flood prediction scenario.	The technology which are used in that is IEEE 802.15,IPV6 Over low power wireless Personal Area Networks and Constrained Application Protocol.
10	Heterogenous wireless sensor networks using CoAP and SMA to predict natural disasters	In this network CoAP is used as a unified application layer protocol for exchanging sensor data. Therefore, CoAP over SMS protocol is used for exchanging sensor data.	Furthermore, the effectiveness of the heterogeneous wireless sensor network for predicting natural disaster	The technology which are used in that are IEEE 802.15.4,IPV6 Over low power wireless personal Area network (6LoWPAN),Constrained Application protocol,3G and SMS.