

# **LITERATURE SURVEY**

## **Real Time River Water Quality Monitoring and Control System**

**Team ID : PNT2022TMID12872**

### **PROBLEM STATEMENT:**

- Due to the limited water resources and the endangerment of pollution ,water becomes the immense need of the world.
- The advancement in the modern life style is also one of the reason to the emerging danger of the water borne diseases and water scarcity.
- Thus in order to get rid of diseases and to increase the availability of water we need to monitor the quality as well to implement a control system.
- Using the components of wireless sensors network with the help of IOT a is to be proposed water Quality monitoring system that checks all the quality parameter and provide better performance rate with perfect accurac

<b>S. N O</b>	<b>Title ,Author,Initial year</b>	<b>Concept</b>	<b>Disadv- ntages</b>	<b>Future work</b>
<b>1.</b>	<b>IOT Based Water Monitoring System by Parag Warungase in 2017</b>	The Idea of this paper is to provide a low cost system for real time monitoring of water quality in IOT environment using IOT ,sensor , Microcontroller & Zigbee .	The System is Very less effective due to the limited number of sensor utilization	A Effective System should be designed with all the necessary sensor and wireless technologies .
<b>2.</b>	<b>Water Quality Monitoring System Based on IOT by Vaishnavi V.Daigavane in 2017</b>	The Idea of this paper is to ensure the safe supply of drinking water , the quality needs to be monitors in real time using Sensors ,Arduino Model & WIFI Module	The System has low performance due to increased man power efficiency than machine.	Detecting more parameters for more secure purpose and increasing the parameters by addition of multiple sensors
<b>3.</b>	<b>Smart water quality monitoring system by N Geetha in 2021.</b>	The idea of the paper has proved that the quality of water is verified and the SMS is send to the higher authority by using index term PH sensor and GSM	The system has high complexity and low performance.	To make the circuitury simple and to increase the performance by using latest sensors

		module monitoring pollution		
<b>4.</b>	Real time river water quality monitoring using IOT by Dinak Prasad G Noida in 2017.	This project deals to provide a pollution free environment(water resources) a safe drinking water using Zigbee, GSM and sensors.	Though low cost ,efficient system is produced it lacksin technological advancement.	Still more to increase the technological advancement and to provide access any information and command objects at the touch of fingertips
<b>5.</b>	IoT based Smart Water Quality Monitoring System by Jagadeesh Basavaiah in 2021	To make certain the supply of pure water, the quality of the water should be examined in real-time. Smart solutions for monitoring of water pollution are getting more and more significant these days with innovation in sensors, communication, and Internet of Things (IoT) technology.	Expensive , inefficient utilization of human power.	latest sensors for detecting various other parameters of quality, use wireless communication standards for better communication and IoT to make a better system for water quality monitoring and the water resources can be made safe by immediate response.

6.	IoT Based Real-time River Water Quality Monitoring System by Mohammad Salah Uddin Chowdury in 2019.	Real-time data access can be done by using remote monitoring and Internet of Things (IoT) technology. Data collected at the apart site can be displayed in a visual format on a server PC with the help of Spark streaming analysis through Spark MLlib, Deep learning neural network models, Belief Rule Based (BRB) system and is also compared with standard values. If the acquired value is above the threshold value automated warning SMS alert will be sent to the agen	The system should be reliable and scalable.	Due to the limitation of the budget, we only focus on measuring the quality of river water parameters. This project can be extended into an efficient water management system of a local area. Moreover, other parameters which wasn't the scope of this project such as total dissolved solid, chemical oxygen demand and dissolved oxygen can also be quantified.
----	---	---	---	---

7.	lot Based Smart Water Quality Monitoring System by Samia Islam in February 2019	Smart Water Monitoring System uses different sensors for monitoring the water quality by determining pH, turbidity, conductivity and temperature.	High deployment and maintenance costs,Lack of sufficient infrastructure to support smart metering,Lack of skills	It prevent water pollution,It develop good aquatic eco system.
8.	Water Monitoring System Embedded with lot Device by Kamaruidzaman,Siti Nazaiyah Rahmat in 2020	<i>Monitoring water level, water quality, leakages and the flow of water through different channels are the biggest challenges in water management.</i>	high complexity and low performance	In future,improved sensors can be established and used in water monitoring system
9.	Water Quality Monitoring System Based on IOT Platform by Ahmed Abbas Fadel in 2020.	It is a new technique for water factory manufacturers by adopting wireless sensor nodes. The monitor node connected with a microcontroller	Accuracy rate is low leading to low performance	The proposed system can be extended to show its effectiveness in water monitoring systems through synchronous water monitoring and simple configuration compared to traditional systems

		device using Esp32 as transmitter and receiver nodes. The node sends its statues over the wireless network utilizing a defined internet protocol (IP). T		
<b>10</b>	<b>Real-Time Water Quality Monitoring System by Yashwanth Gowda K.N in 2020</b>	To reduce the water related diseases and prevent water population World health Organization (WHO) has also stated this crisis as "the largest mass poisoning of a population in history". The main goal of this paper to build a Sensor- based Water Quality Monitoring System	The number of parameters taken to test the quality of water is less hence the standardization should be improved.	To test more parameters of the water quality for some applications, other sensors can be included in the system. The system has wide application and it is usable and affordable by all categories of users.