LITERATURE SURVEY

ON

REAL-TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM

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ABSTRACT

Water is the primary need of all living beings and residing without water is not possible. With the advancement of generation and industrialization, environmental pollutions have turn out to be a first-rate subject. Water pollutants is one of the maximum serious kinds of this environmental pollution. Our lives rely on the satisfactory of water that we in-take in special methods, from juices which might be produced by using the industries. Any imbalance in the exceptional of water could severely have an effect on the human health and at the same time it'd have an effect on the ecological balance among all species. Water nice refers back to the chemical, organic, radiological, and biological parameters of the water. The critical parameters of the water quality vary primarily based at the utility of water. For instance, for aquariums, it is vital to maintain the temperature, pH stage, dissolved oxygen degree, turbidity, and the extent of the water in a sure regular variety as a way to make sure the safety of the fish inside the aquarium. For the industrial and family applications, however, some parameters of the water are extra vital to be monitored often than the others, depending on using the water. River water is monitored and controlled by using different kind of sensors and Raspberry pi.

Book/journal	Author's name	Inference
Detection on water pollution and water management using smart sensors IOT	J. Navarajan	This research paper focuses on Detection on water pollution and water management using smart sensors IOT. To ensure the safe supply of drinking water the quality should be monitored in real time for that purpose new approach IOT (Internet of Things) based water quality monitoring has been proposed. This system consists some sensors. Which measure 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 core controller that is raspberry pi using Zigbee protocol. 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. 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.

Sensor Web for River Water Pollution Monitoring	Natasa Markovic	This research paper focuses on Sensor Web for River Water Pollution Monitoring and Alert System Sensor Web has provided infrastructure for collecting and processing data from distributed and heterogeneous sensors. This set of technologies has found various implementations, especially in the area of environmental monitoring. 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. The River Water Management and Alert System built on this architecture enable access, control and management of river water pollution.
Wireless Sensor Network for River Water Quality Monitoring	K. A. Unnikrishna Menon	This research paper focuses on Wireless Sensor Network for River Water Quality Monitoring in India This paper introduces 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. Wireless sensor Network which aids in River Water Quality

		Monitoring. This paper also proposes a novel technique for the design of a water quality sensor node which can be used for monitoring the pH of water.
IoT Based Real-time River Water Quality Monitoring System	Brinda Das, P.C. Jain	The conventional method of testing water quality is to gather samples of water manually and send to the lab to test and analyze. This method is time consuming, wastage of man power, and not economical. The water quality measuring system that we have implemented checks the quality of water in real time through various sensors (one for each parameter: pH, conductivity, temperature) to measure the quality of water. The ZigBee module in the system transfers data collected by the sensors to the microcontroller wirelessly, and a GSM module transfers wirelessly the data further from the microcontroller to the smart phone/PC.
Wireless Sensor Network Real-Time Water Quality Monitoring System	Mohammad Salah Uddin, Bin Emranb, Subhasish Ghosha,	Current water quality monitoring system is a manual system with a monotonous process and is very time-consuming. This paper proposes a sensor-based water quality monitoring system. The main components of Wireless Sensor Network (WSN) 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. 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 ML-lib, Deep learning neural network models, Belief Rule Based (BRB) system and is also compared with standard values.