DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IBM – LITERATURE SURVEY

PROJECT TITLE

REAL - TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM

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S. NO	TITLE	TECHNOLOGY	ADVANTAGES	DRAWBACKS
1	Design And Development Of A Water Quality Monitoring System By Using IOT	This system checks the quality of water in real time through various sensors (one for each parameter ,Ph, Temp, Pollution)and uses with module to transfer the data collected from sensor to smart Phone/Pc	This system consists of multiple sensors to measure a various parameter. It is more accuracy and requires less man power.	This method consumes more time and cost of the system depends on the number of parameter
2	Water Quality Monitoring System Using IOT And Machine Learning	To measure various chemical and physical properties of water like temperature and particle density of water using sensor	Due to automation it will reduce the time to check the parameter. This is economically affordable for common people. Accuracy in measurement. Email alert is sent to user	System hardware need to be handled with care. Only limited user are added to handle the system. Only one person authorized to system able to access it.
3	Real-Time Water Quality Monitoring System	Existing method, the system which are semi-automated or manually controlled device which are handle by the person responsible of monitoring the water quality	Based on the existing water quality monitoring system and scenario of water stay that proposed system is more suitable to monitor the water.	These analysis can be performed by human intervention which are specific period only.

4	Cloud-Based Smart Water Quality Monitoring System Using IOT Sensors And Machine Learning	The advancement of technologies also plays major role to monitor water quality remotely on the large scale. Nikhil implemented the Azure cloud platform based water quality monitoring system using Node MCU microcontroller to collect the data from the sensor in Jason format	First phase we are going to conduct a survey on the recent water monitoring system and in second phase for development of the cloud-based water quality monitoring framework which checks the water nature of groundwater which is overhead	These sensor are deployed inside the tank to read parameters associated with the quality and the level of water inside the water tank
5	IOT Based Real-Time River Water Quality Monitoring System	Environmental consist of five keywords example soil, water, climate, natural vegetation and landforms. It's using different sensor and various parameter from water.	It can detect forest fire, early earthquake, reduce air pollution, monitoring snow level , prevent landslide.	It develop only water quality monitoring system based on GPRS/GSM. It required more cost.
6	River Water Monitoring System Using Internet Of Things To Determine The Location Of River Pollution	This system uses monitoring points like web based application sent the notification when there is a change in parameter and the process the incoming data then do calculation and produce the classification of status	This system uses many sensor for more parameter and is real time encryption decryption flow in this algorithm.	This system connects through so the wifi connectivity Is narrow and consumes more power and less accuracy.

7	Water Quality Monitoring System Using Arduino UNO	In this techniques, we propose a development and extension of real time water computing structure using IOT parameters and through wifi the data been transferred.	This system attach the consistency and possibility of using for real time monitoring the parameters and exclusive and cost efficient	WIFI connectivity is narrow and not more accuracy.
8	Water Quality Monitoring System Using IOT And Machine Learning	To measure various physical and chemical properties of water sensors have using send the data connects is node MCU, since the data and send to cloud based database using wired/wireless channel.	Due to automation is reduce time to check prevention from diseases and more accuracy	System hardware need to be handled with care (as we are using difference sensors and node MCU).Only limited users are added.
9	IOT Technology For Smart Water System	This techniques is one of the conventional methods of analyzing the water quality using IOT technology	This provides high recurs to the data and device used. It also help to treat the waste water	As more techniques are blooming has to improve its techniques and it requires lot of cost.
10	Real- Time River Water Quality Monitoring And Control System	Current water quality monitoring system with a monotonous process and is very time consuming. The Wireless Sensor Network(WSN)include a microcontroller for processing the system.	This system is used to collect the data and can displayed in visual format on the sever Pc with help of spark streaming analysis through Spark MLib.	In these requires more data. Sometimes acquires network problem.