

An Industrial Wastewater Management Using Cloud Based IoT System

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Abstract : Water is an essential part of living organisms. Major water pollution is caused due to contamination of industrial wastewater in the river. The most important step in bringing wastewater contaminants down to levels that are safe for nature is wastewater treatment. The contamination of river water harms both humans who consume it and the aquatic life that lives there. We introduce a new cloud-based industrial IoT paradigm in this work for real-time control and monitoring of wastewater. The proposed system prevents prohibited entry of industrial wastewater into the plant by monitoring temperature, hydrogen power (pH), CO₂ and turbidity factors from the wastewater input that the wastewater treatment facility will process. Real-time sensor values are collected and uploaded to the cloud by the system using an IoT Wi-Fi Module. By doing so, we can prevent the contamination of industrial wastewater entering the river earlier, and the necessary actions will be taken by the users. The proposed system's results are 90% efficient, preventing water pollution due to industry and protecting human lives.

Keywords : sensors, pH, CO₂, temperature, turbidity

Conference Title : ICWMCS 2023 : International Conference on Wireless and Mobile Communication Systems

Conference Location : Cancun, Mexico

Conference Dates : April 03-04, 2023