IDEATION

1. River water which is used as drinking water is a very precious commodity for all human beings. The system consists of several sensors which are used for measuring physical and chemical parameters of water. The parameters such as temperature, pH, and dissolved oxygen of the water can be measured. Using this system a person can detect pollutants from a water body from anywhere in the world.

2. Wireless Sensor Network (WSN) that assists to monitor the quality of water with the support of information sensed by the sensors dipped in water. Using different sensors, this system can collect various parameters from water, such as pH, dissolved oxygen, turbidity, conductivity, temperature, and so on. The rapid development of WSN technology provides a novel approach to real-time data acquisition, transmission, and processing. The clients can get ongoing water quality information from far away.

3. From the analysis of the collected data, unhealthy water can be treated as soon as possible from the respective authorities. A monitoring system consisting of a water capsule with sensory devices, microcontroller, and communication device is developed and the system is named as Q-water. To prolong the life of the batteries, a solar panel is installed on Q-water. The energy saving technique is implemented to sustain the lifespan of Q-water.