DESIGN AND FABRICATION OF TURBIDITY METER BASED ON MICROCONTROLLER ATMega 8535

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Abstract

Turbidity meter based on microcontroller ATMega 8535 has successful been built. The photodiode has been used for measuring the amount of cloudiness in the water. The amount of cloudiness in the water is measured based on Nephelometer method, which is the scattered light by suspended particles in the water. The LED and photodiode detector are arranged parallel to each other with the distance of 2 inch. Results showed that the system can be used to measure the amount of cloudiness in the water in the range 0 – 200 NTU with the maximum of standard deviation was 1.33 NTU.

Keywords: Turbidity, NTU, Photodiode, Nephelometry