

ABSTRACT

As a basic need for living things, water must be of good quality. Measurement of good water quality can be determined by using physical parameters, namely temperature, conductivity, and brightness, while by using chemical parameters, namely salinity, acidity, dissolved oxygen and nutrients. One of the measurements of water quality that we can see clearly is in terms of aesthetics, namely by seeing or measuring the level of turbidity of the water. There are several tools that can be used to measure the level of turbidity of water, one of which is the use of a colorimeter. Colorimetry is a quantitative analysis technique for colored samples, which is used to determine the concentration of a substance based on the absorbance of light by the solution. Colorimeter was developed by adding fiber optic components. Calibration was carried out by varying the concentration from before and after the addition of wantex was carried out. The concentration variations used were 200 ppm, 400 ppm, 600 ppm to 4000 ppm by mixing them into 5 liters of clean water. After examining the intensity and concentration values, it was continued by looking for absorbance values. The results obtained are proven, the greater the concentration, the greater the absorbance value and vice versa if the concentration value is smaller, the absorbance value will be smaller.

Keyword : Colorimeter, Concentration, Absorbance