

CHAPTER 6

CONCLUSION

At this stage discuss the final conclusions in this study, based on the results of testing the conclusions that can be obtained:

1. The LDR sensor and TDS sensor successfully calculate the quality of the water, the LDR sensor calculates turbidity by scattering light from a light source that penetrates the water to the sensor, the clearer the water, the more light it receives, and vice versa. The TDS sensor calculates the dissolved solids in the water by inserting the sensor into the water.
2. The fuzzy logic algorithm of the Sugeno method is carried out through 3 stages, namely fuzzification to calculate the membership value of each variable, inference to determine fuzzy rules and then look for the smallest result from each variable, and finally defuzzification is a process to produce output in accordance with rules that have been made, and this method is successful in calculating the value of water quality well.
3. From the results of testing using 10 samples of water using the Sugeno and Mamdani methods, it was found that these two methods have the same level of accuracy of 80%, where the tap water and flour solution water have differences in the TDS Meter and the system.

This water turbidity meter uses an LDR sensor whose value is always changing and is very sensitive to any light, so for further research it is recommended to use other sensors to calculate the turbidity of this water such as the Turbidity sensor, and add other parameters to calculate water quality such as pH. and temperature.