

CHAPTER 6

CONCLUSION

The following conclusions can be drawn from the aquarium water quality monitoring project. Turbidity sensor and temperature sensor can read and work well. However, the pH sensor is less stable in reading sudden changes in water. The pH sensor will read data well in the long term if the water parameters do not change suddenly.

Sugeno fuzzy logic can be implemented in this project with several stages such as determining the membership function of each sensor or input that will be processed in fuzzification, then the rule base must be made carefully and correctly so that no errors occur in the next stage, the last stage is defuzzification, used to determine the output whether the buzzer will turn on or off.

It can be seen from the test table that the sensor can work optimally if it is used to detect water quality for a long time, provided that there are no sudden changes in water parameters. This system can be used and makes it easy to monitor the quality of aquarium water although the final results are not entirely accurate with the results of testing using aqua water where pH, temperature and normal turbidity have values of 26.31 for temperature, 6.71-7.78 for pH and turbidity with a voltage above 2 which means clear.