

CHAPTER V

CONCLUSIONS AND SUGESTIONS

5.1. Conclusions

1. Analysis of students' misconceptions on acid-base chemistry topic using Acid-Base Chemistry Misconception Test showed that there were fifteen kinds of misconceptions identified in five main concepts of acid-base chemistry namely acid and base concepts (22.07%), pH and pOH concepts (43.58%), ionization degree and equilibrium constant concepts (8.94%), acid-base indicators concept (6.15%), and acid-base titration concept (9.50%).
2. Analysis of students' responses showed that there were four areas as the main problems in formation of students' misconceptions namely fragmentation of students' understanding, problems with symbols and mathematical formula, difficulties in understanding the context in acid-base chemistry, and problems in generalization

5.2. Suggestions

From the data of students' misconceptions on acid-base chemistry identified in this study, it is suggested for high school chemistry teachers to give more attention to the problem of misconceptions in learning activities in class. Chemistry teachers are recommended to implement the result of this study by identifying students' misconception in the beginning of their class in order to prevent further students' difficulties in learning acid-base chemistry.

Further investigations about students' misconceptions on acid-base chemistry topic are suggested using various methods to get better data analysis. Considering the importance in collecting the data of students' misconceptions, it is also suggested for other researchers to investigate students' misconception for other topics in chemistry.