CHAPTER V

CONCLUSION AND RECOMMENDATION

A. Conclusion

Research of Nature of Science based lesson implementation in learning water pollution has been done systematically, based on the result and analyzes it is acquired some conclusions as follows:

- 1. The implementation of Nature of Science based lesson in learning water pollution is proved can improve students' concept mastery significantly. It can be noticed by the results of hypothesis test using Paired T-Test which is 0.002 and the score of N-Gain which is 0.50 that categorizing as medium improvement under four level of cognitive taxonomy (C1-C4).
- 2. The implementation of Nature of Science based lesson in learning water pollution has positive impact on students' scientific argumentation skill. It is proved by as much 63.64% students already reached level three of argumentation or more. It means that more than a half of students already able to include the rebuttal in their argumentation statement. Since the present of rebuttal is the indicator of complex argumentation statement.
- 3. The students' impression on Nature of Science based lesson shows positive result in all indicators which are students' interest, students' pleasure and students' comfort.

B. Recommendation

Based on the findings of the research that has been conducted and concluded, there are several recommendations that necessary to be conveyed by the researchers, some of them are:

1. It is recommended for the other researcher to include the other aspect of Nature of Science in the learning process such as scientific theory and law, theory laden nature of science and myth of science.

- 2. Assessing students' understanding about nature of science aspect. In order to make sure that the activities based on nature of science aspect which done is delivered well to the students.
- 3. Teacher has to conduct pre-experimental teaching to make sure that students get used and familiar with nature of science based lesson and the activities that represent the aspect of nature of science.
- 4. Teacher has to making the rules of discussion in detail and create a rule that make all students to tell their argumentation so that there is no student who keep silent during the discussion.
- 5. Nature of science based lesson could be conducted in more session and meetings so that the researcher can obtained more firm results in both scientific argumentation skill and concept mastery.