## CHAPTER V CONCLUSION AND SUGGESTION

## 5.1 Conclusion

Based on the research of development of innovated chemistry learning module on the topic of electrolyte and Nonelectrolyte solution based on curriculum 2013 that conducted in three school, it can concluded that:

- 1. The standardization that was conducted by chemistry lecturer as expert in the chemistry topic in state university of medan and also chemistry teacher in each school who active in teaching using bilingual in teaching process. Both of lecturer give value is good in criteria of the module that is 3.72 and for the teacher 3.67. means that the aequence of chemistry materials in the module in order the topic of electrolyte and non electrolyte solution is easy to be learn and it meet the curriculum education unit can be arrange.
- 2. The analysis of chemistry textbook for SMA/MA grade X for bilingual class especially on the topic of electrolyte and non electrolyte solution not fully meet the corecompetency, basic competency feasibility of content, design presentation, and feasibility of language analysis for chemistry textbook code B1 is 75%, code B2 is 55%, code B3 is 50% and code B4 is 35%. It caused by the book doesn't complete all the materials in the textbook and also for design is not suitable with background and also for language ts not good enough.
- 3. Learning module is effective to improve studen's achievement in high group. It can be seen from average value of posttest-1 by using innovated chemistry learning module than textbook. HG in experiment 86.17±4.78 is higher than in control class 82.33±2.99. and for LG in experimental class 79.33±4.46 is higher than in cotrol class that is 72.17±3.42
- 4. The effectivity of innovated chemistry learning module based on curriculum 2013 can see after doing posttest-2 and it show that average percentage in

high groupog experiment class is 98.49% higher than in control class 95.84%, while in Low group the average of effectivity of student's achievement in experimental class is 100.26%

higher than in control class 98.52%.therefore it could be conclude that innovated learning module give positive influence and more effective to improve student's achievement.

5. The innovated chemistry learning module will applyed the teaching process from teacher center learning into student's centre learning. And teacher also must be used innovated chemistry textbook to increase student's achievement.

## 5.2 Suggestion

Based on the result of research that has been done, author suggest:

- Before using chemistry textbook or chemistry learning module, teacher should check overall chemistry textbook. Especially for materials content, language, presentation layout, teacher must do that before consumed by students.
- 2. Chemistry learning modul recomended in teaching and learning process, because it has been standarized.
- 3. Chemistry teacher should master all content chemistry module and the wau how to use the module before consumed by students.
- 4. For the next researcer its better using observation sheet for students as authentic data while teaching and learning process and also can improve the material based on their check.