

## CHAPTER I

### INTRODUCTION

#### 1.1 Research Background

One of education's problem is the low quality of education in Indonesia. Where it is always discussed although using unit national curriculum as pedoman but the quality of education in Indonesia is still low. Therefore, the government try their best to increase the quality of education, which is start from elementary school to the university. Increasing the quality of education can be performed continuously, conventionally or through innovation. Innovation in education is seen as the central concept for obtaining change for a better education(Wikipedia,2012).

One of innovation to increase the quality education is innovation in teaching and learning activities, where the innovation of teaching and learning activities is very interesting to discuss because the implementation of the right teaching method would increase student's achievement in learning chemistry. To help student in teaching and learning activities, students need learning media as learning sources such as learning module or textbook to make them more understand about chemistry learning material . Therefore, doing development of chemistry learning material through making innovative learning modules with the certain chemistry topic because they are important done especially to provide good quality chemistry learning material that will be studied by student. To improve the basic concept for students to learn could be conducted through providing a good teaching materials such as text books and modules related to the student development ( Saragih and Situmorang, 2012).

Learning chemistry emphasizes providing learning experiences directly through the use and development of process skills and scientific attitudes. According to some researches, researchers concluded that, (1) chemistry is not famous subject matter for students; (2) chemistry is not able to improve students' cognitive ability; (3) chemistry make a gap between teacher and students; (4) chemistry has not improvement. Accordint to Perry (2008), even thought school programs have an effort to develop students' conceptual understanding, but there

is no relationship among the materials. According Silitonga (2005), the reality is often faced by teacher in school is that students often think chemistry is a difficulty lesson so that is not unusual for a student felt unable to advance in studying chemistry.

These difficulties have an impact on student's learning result are less satisfactory. Chemistry is an experimental science, can not be learned only by reading, writing or listening it. Chemical Sciences not only learn to master a body of knowledge of facts, concepts, principles, but also is a process of discovery and mastery of the procedures or the scientific method. Therefore, in teaching chemistry there are two important issues that must be considered, namely the chemical as a product of the scientists in the form of facts, concepts, principles, laws, and theories of chemistry as a process of scientific work.

Many Chemistry topics that students assume difficult to understand because Usually teachers explain the chemistry topic by conventional method, difficult language to be gotten, not interest student and inappropriate learning media especially topic about salt hydrolysis which contain many the variety of learning activity such as concept understanding, observation of laboratory activity, and analysis problems base on the basic competence which is expected from the material is determining the type of salt hydrolysis in the water and pH of the solution(Simatupang,2013). Therefore, need to doing the innovation of teaching and learning process through innovative learning module of chemistry topic that will help teacher and student in learning process.

The development of innovative learning module on teaching of salt hydrolysis base on curriculum 2013 is very important as it is known that innovative teaching and learning be able to motivate students to learned effective that may improve students achievement in chemistry. The development of chemistry learning module and textbook from Senior High School and Madrasah Aliyah (SMA/MA) are important done to get the good quality chemistry learning module and textbook that can be used by student appropriate to curriculum 2013. The good quality and standard chemistry learning module will be able to help student in learning activity so the competence needed to achieve appropriate to the

main discussion that be learned. According to Bain, et.all. (2005), A good textbook is expected help the students to understand the concept of chemistry clearly.

Innovative learning module of chemistry class XI in Senior high School will be developed base on curriculum 2013, the implementation of curriculum 2013 start on 2013, curriculum 2013 is applied because more effective learning and emphasis on character education. This curriculum requires teachers to be more patient, attentive and undersatnding, as well as having the creativity and dedication to grow the confidence of learners. Teaching and learning process in curriculum 2013 will be improved by using the variety of approaches that put more emphasis on learner competence, which includes knowledge, skills, and activities of learners in thinking and acting.

Based on the description, the researcher is interested in conducting research on developed the learning material on teaching of Salt Hydrolisis base on Curriculum 2013 because curriculum 2013 has the difference the way of assessment student's achievement than the curriculum that had been used before. The writer is interested to conduct a research titled

**“THE DEVELOPMENT OF LEARNING MATERIAL ON TEACHING OF SALT HYDROLISIS BASE ON CURRICULUM 2013.”**

## **1.2 Problem Identification**

Base on the background which has been described previously, some problems can be identified as the following:

1. Learning modules are important to improve student's achievement and motivation in learning chemistry subject
2. Learning modules on the teaching of chemistry subject that be used by school must be developed to make students easy to understand, interested to study, innovative, and more active in teaching and learning activity to improve their learning outcomes.
3. Students are difficult to understand about salt hydrolisis chemistry topic because the content of salt hydrolisis many the variaty of learning activity

such as concept understanding, observation of laboratory activity, and analysis problems base on the characteristic

4. Teachers have to skill to teach the materials of chemistry by the appropriate methods and models to makes students motivate and active in teaching and learning activity.
5. The availability of quality learning modules appropriate to the curriculum 2013 are needed to support implementation curriculum 2013.
6. The development of learning materials on the teaching of Salt Hydrolysis based on curriculum 2013 is needed to improve student's learning outcomes.

### **1.3 Research Scope**

The research Scope is **The Development Of Innovative Learning Module On Teaching Of Salt Hydrolysis Base On Curriculum 2013**. This study was conducted to develop innovative learning module of high school students class XI Natural Science program in school year 2014/2015 base on curriculum 2013 to improve the quality of learning process (innovation of learning method and learning model), and student's achievemant. The variety of learning material will be developed by researcher that adapted to the subject of Salt Hydrolysis based on curriculum 2013 and doing evaluation and standardization of learning materials by chemistry lecturer, teachers and students.

### **1.4 Problem Formulation**

To give the direction of this research, problem formulation is needed to limit the research that will ficitate discussion of the problems raised. The problem formulation of this research are :

1. How to develop chemistry innovative module to meet student's competence based on chemistry curriculum 2013?
2. How to design of innovative learning module through integration of laboratory activity, outside activity, and learning media into chemistry material of salt hydrolysis?

3. How to standarize chemistry innovative module to obtain standard and innovative module on teaching of salt hydrolysis?
4. How effective in the developed innovative module to improve students achievement on teaching of chemistry salt hydrolysis?
5. Are the student interested on using standard innovative module to meet the requirement on student's competence in curriculum 2013?

### **1.5 Research Objectives**

The objective of this research is to increase the understanding of students in Salt Hydrolysis as a topic in chemistry subject, and increase the student's achievement. The specific objectives have been achieved in this research are the following:

1. To develop chemistry innovative module to meet student's competence based on chemistry curriculum 2013
2. To design of innovative learning module through integration of laboratory activity, outside activity, and learning media into chemistry material of salt hydrolysis To develop the learning material that is suitable for student to improve their learning outcomes in topic of Salt Hydrolysis
3. To standarize chemistry innovative module to obtain standard and innovative module on teaching of salt hydrolysis
4. To investigate the effectivity of the developed innovative module to improve students achievement on teaching of chemistry salt hydrolysis
5. To know the student's interesting on using effective in the developed innovative module to improve students achievement on teaching of chemistry salt hydrolysis

### **1.6 Research Benefits**

In general, with the development of Learning material base on curriculum 2013 in the preparation of chemistry module is expected to provide benefits in the form of improved quality of the learning process on the topic of Salt Hydrolysis. In particular the benefits of this research are:

1. Knowing the Effectiveness of developing innovative learning module to increase the students achievement in Salt Hydrolysis concept.
2. As the addition of literature review or reference for creating another learning material based on curriculum 2013 in another subject matter in chemistry in Senior High School and for teacher in teaching-learning process.
3. Increase the researcher's knowledge toward developed innovative learning module based on curriculum 2013 that can be used in the teaching and learning process to improve the quality of education in Indonesia
4. As important input for prospective teacher that developed innovative learning module based on curriculum 2013 can be as alternative choice to improve student's outcomes
5. To enrich the students'research in additional do the usual research especially to student in chemistry department in State University of Medan.