ACKNOWLEDGEMENT

First of all, Praise to the Lord, Jesus Christ, because His blessing the writer can finished her thesis with the title "The Development of Animation-Based Learning Media Using Adobe Flash on Chemical Bonding Material To Improve Student Learning Outcomes". This thesis report was prepared as one of the requirements to work on the thesis in the Strata-1 program in the Department of Chemistry, Faculty of Mathematics and Natural Sciences, Universitas Negeri Medan.

The author realizes in the preparation of this thesis a lot of help from various parties. Therefore on this occasion, I would like to thank:

- Mr. Dr. Ayi Darmana, M.Si., as The Head of the Chemistry Department, Faculty of Mathematics and Natural Sciences, Medan State University, and also as a Thesis Supervisory Lecturer, for guidance, advice, and motivation.
- 2. Mrs. Dr. Sri Adelila Sari, M.Si, Mr. Dr. Asep Wahyu Nugraha, M.Si, and Mr. Drs. Eddyanto, Ph.D., as my examiner lecturer who has given good input in the improvement of this thesis.
- 3. Mr. Drs. Marudut Sinaga, M.Si, as my Academic Advisor lecturer.
- 4. Mrs. Dr. Ely Djulia, M.Pd., as coordinator of Bilingual Program.
- 5. Mrs. Hj Fauziah Hasibuan S.Pd, M.Si., as Principal, Vice Principal, Father and Teacher, Administrative Staff, and students of SMA Negeri 16 Medan who has helped the author during the research process.
- 6. My beloved parents, My father Hisar Wahab Sinaga, and my mother Rosleni Manalu for their compassion, prayers, and support through funds, motivation, and a great spirit in supporting these ideals and achievements.
- 7. Dear brothers and sisters of Sri Intan Greber's Greace Sinaga, Didi Greber's Sun Paolo Sinaga, and Raja Mahatma Greber's Cavin Sinaga who always provide support, motivation, passion, advice, criticism, and prayer.
- 8. My best friend since elementary school and my novena prayer partner, Monika Pasuria Rumapea, has always been a place to talk both in terms of insecurity and things that do not matter.

- 9. Friends such as siblings, Ribka Ronauli Febyola Silalahi, always provide motivation and spirit in completing this thesis.
- 10. My friends, Maria Monalisa Sianturi and Pretty Veronica Sinaga, who have always been friends grow during in KMK and always encourage and assist in the completion of this thesis.
- 11. Compatriots, Bilingual Chemistry 2017, Dame, Bang Edi, Frandika, Frida, Grace, May, Afni, Vero, Tati, Putri, Sri, Nadya, and Wenny, who always accompany during lectures especially Dwi Retno Ambar Kesuma Ningrum and Khairun Fadhilah who always accompany, advise, motivate, a spirit in completing this thesis, also Fatayatul Hasniyah and Catur Kurniawan who always invite and motivate in the filing of the exam until graduation.
- 12. UKKMK St. Martinus has formed, built, and become a second home during my education in college.
- 13. IMAHUASS has taught the meaning of family, motivating, encouraging, and guiding while studying in college.
- 14. Love Each Other, a donation-sharing platform, which teaches the meaning of loving each other and helping those who cannot afford it regardless of status and who plays a part in it Novita Lamtiur Parhusip, Devi Triana Simanjuntak, Monika Rumapea and Trifive Sitinjak who always accompany when bored of online lectures in the village.
- 15. All parties that researchers cannot name one by one that has helped the author either directly or indirectly in completing this research report.
- 16. Last but not least, I wanna thank me for believing in me, for doing all this hard work, for having no days off, for never quitting, for just being me at all times.

Nevertheless, in this thesis report, the author realizes it is still not perfect. Therefore, the author expects suggestions and criticisms to build perfection and improvement so that finally this thesis report can provide benefits for the field of education and application in the field for a better education.