## ACKNOWLEDMENT

All praise to the Almighty God, Allah SWT who has been giving us mercies and blessing so that I can finish this thesis well. Sholawat and salam may praise to our beloved prophet as the last messenger of Allah SWT, Muhammad SAW who has guided us from the darkness to the lightness.

The title of this thesis is "The Development of Innovative Learning Material With Project On The Teaching Of Redox Titration". This research was done in State University of Medan that prepared to get Sarjana Pendidikan Degree of Chemistry Education, Faculty of Mathematics and Natural Sciences.

On this occasion, the writer convey great respect and gratitude to:

- Special gratitude for my beloved parents, (My father H.Heryanto and my mother Hj.Murianna) who always loving, caring, supporting and praying for me and everything I do during my study. Thank you so much for your love so that I can complete my first degree in State University of Medan. Keep praying for me dad and mom. I'll always make you proud of me with this big efforts. Many thanks also for my beloved brother and sister, Hasby Hernando and Nadrasiah Heryana who always supporting, giving motivation, laugh and made some funny moments with me hahaha. I love you siblings. And also thank you to my lovely nephew, Humam Hernando Situmeang, because you, I always smile with anything happened. Words can't describe how much I love you guys!
- Prof. Drs. Manihar Situmorang, M.Sc., Ph.D., as thesis supervisor who has provided guidance and suggestion to the writer since the beginning of the study until completion in writing this thesis.
- Dr. Zainuddin Muchtar, M.Si., Dr. Ir. Nurfajriani, M.Si and Rini Selly, S.Pd., M.Sc., as thesis examiner and reviewer counselor for their advices, suggestion, guidance and constructive comments in the process of thesis completion.
- Dr. Iis Siti Jahro, M.Si as my Academic Supervisor who always guided me during lecture process. Thank you so much Ma'am.

- Prof. Dr. Retno Dwi Suyanti. M.Si, Dr. Herlinawati, S.Si., M.Si and Nora Susanti, S.Si., M.Sc., Apt as the expert lecturers for validation of my media, material and language. Thank you ma'am for the great suggestion.
- I would like to express gratitude to Dr. Martina Restuati, M.Si as the Dean of FMIPA Unimed, Dr. Iis Siti Jahro, M.Si and Nora Susanti, S.Si., M.Sc., Apt as the Coordinator and Secretary of Bilingual Program in FMIPA Unimed, Dr. Ayi Darmana, M.Si as Head of Chemistry Department and along with Mr, Mrs Staff and Lecturers in Educational Chemistry Department especially in Bilingual Study Program of FMIPA Unimed who have helped me.
- The author also said thanks to Laboratory Staff of State University of Medan for giving permission to do research in State University of Medan. The author's gratitude also to all of students who have rendered their time as a sample of research.
- Thanks to my bestie Wak leng Siregar (Anggita Aswad Siregar), for playing game together since 2006 until now. Even though you didn't understand about my thesis but you always give me some motivation and give me some funny talk to discuss. You are a good listener wak. Thank you!
- Jecky Bukit as my partner in doing thesis who always remind me to finish my thesis as soon as possible. Because we know jeck, we have waiting almost one month hahaha, but we already know everything is on time in good time.
- Greatest thank you for all of my classmate, CESP 15 (Citra, Deminar, Dwi, Esi, Enny, Ellya, Ely, Lusi, Kristian, Rusyda, Riska, Yosi). Thank you for the togetherness and happiness. Hope we can meet in other perfect condition and situation. See you on top and i'll gonna miss you lads!
- My thanks to Bilingual Chemistry Family who always support me until now, especially for CESP 16 and CESP 17 for the kindness and the suggestions.
- Thanks to my PPL partners in Tebing Tinggi (Debby, Elisabet, Indri and Santun) for having a great time with me during our PPL moments and also thank you to my PPL team Tebing Tinggi for giving me everything even when I got an accident, you guys always help me in any condition. Once again, thank you!

- Thank you also to Headmaster, Teachers, all students of SMAN 1 Tebing Tinggi (especially Theheirssmansa, Gopostsmansa, Transfourmerssmansa, Stellasquad, Lithikummansa and Xikaatsmansa) for the unforgettable and memorable experiences there. See you soon!
- @teammysticmedan, thank you also for your kindness, laugh, experience and happiness. Keep solid guys!
- Tasya Savira as my special partner in my life, thank you for your support, words and everything that you gave for me. Hope we can through this moment together as always. I miss you!
- And thanks for all people, whose name didn't mentioned who always support me. I love you all.

Actually the writer have do the maximal effort in completion this thesis, but he is aware there are many weakness in this thesis. Writer hope for suggestions and constructive criticism from readers for completeness this thesis perfectly. At least, writer hope this thesis can be useful to enrich the readers in science education.

THE Medan, July 2019
UNIVERSITY
Writer

Habib Hernando Reg Number.4153332011