FOREWORD

Bismillaahirrahmaanirrahiim, Alhamdulillahhirabbil A'lamin. Praise and gratitude to Allah Subhana authors say Wa Ta'ala, to all the blessings and mercy, then this thesis can be resolved. Thesis entitled **''Development of Innovative E-book On Chemical Bonding Material To Increase Student Motivation and Learning Outcomes''**, prepared as a condition for obtaining a Bachelor's Degree of Education at the Department of Chemistry, Faculty of Mathematics and Natural Sciences, University of Medan.

In this Ι would like moment to thank Mrs. Dr. Iis Siti Jahro, M.Si as thesis supervisor (PS) which has provided guidance, advice, and motivation to the author since the beginning of the planning, research, until the completion of this thesis. Thanks are also given to Prof. Dr. Ramlan Silaban, M.Si, Dr. Zainuddin, M, M.Si, and Mrs. Nora Susanti, S.Si, Apt, M.Sc as a lecturer testers who have provided input and suggestions for the improvement of this thesis. Further thanks to Prof. Dr Manihar Situmorang, M.Sc, Ph.D as the academic supervisor (PA), which has provided a lot of input, advice and guidance for writers undergo academic activities. Further thanks to Mr. Freddy Tua Musa Panggabean, S. Pd, M. Pd as Validaor lecturer who has given a lot of input on Research Instrument writers and to all fathers and mothers and their faculty staff employees of the Department of Chemistry Unimed. Thanks also to Mrs. Elfi Sahara, S. Pd, **M.Si** as principals who have allowed the authors conducted a study in SMAN 3 MEDAN and gratitude to fathers and mothers chemistry teacher who helped me during the research process underway especially Mrs. Lenni Hamida Siregar, S.Pd who guided me in the classroom teaching and sharing useful information.

In particular and beloved authors thank the parents, father and mother **Eriadi Arliana**, as well as a motivator and inspiration in life, which is struggling in educating and educating and Mashallah pray not stop during this time for me and my sister, so in the end the author can assume Bachelor's degree. Thanks also to Sister **Devi Utari**.

Authors thank the compatriots, namely the citizens of Chemistry Bilingual Education in 2016 has given the color of life, teaches maturity, and give happiness during the lecture. Especially for the "best friend" (Vania Almira, Annisah Oktari, Fanny Fashiri, Annisah Rahma, Lili Indah Sari) best friends who are like family, hopefully we can keep in touch well into old age.

Thanks also to friends se-PS (**Khuzaimah Dasopang and my Gembul Fatimah Asri Jambak** fought alongside completing our research and thesis, **Evifani Yustika M.Br Pasaribu** classmates who helped author prepared a lot for the success of this study, as well as advice senior and information from Stambuk 2015) a success for us all.

The author has been working to the maximum extent possible in completing this thesis, but the author is aware there are still many weaknesses in terms of content, composition and grammar. To the authors expect criticism and suggestions from readers for the perfection of this thesis. Presumably the contents of this paper useful in science education enrich.

> Medan, 11th January, 2020 Author,

Dinda Nur Hasanah