ACKNOWLEDGEMENT

Praise thank fullness is given to The Only One Savior, Jesus Christ who always help me, and have given health, strength, spirit, knowledge, and materrial to finish thesis.

Title of this is "The Implementation of Contextual Teaching and Learning (CTL) Model Based on Collaborative with Media Index card Match to Increase Student's Achievement on Salt Hydrolysis Topic''that arraged to obtain the degree of Sarjana Pendidikan in Chemistry Department, faculty of Mathematics and Natural Science, State University of Medan (UNIMED).

In this oppurtunity, i would to express his gratitude to Prof.Dr.Retno Dwi Suyanti,M.Si. as my thesis supervisor who has provided guidance,advices, motivation, and suggestion during the prosess of completing this thesis. I also give thanks to Dr.Zainuddin Muhktar, M.Si., Dr. Muhammat Yusuf, S.Si.M,Si., Agus Kembaren, S.Si,M.Si an eveluator committe who has provided suggestion from the plan until the completion of this thesis. The gratitude also goes to Prof. Dr. Herbet Sipahutar, M.S., M.Sc. the dean of Mathematics and Natural Science Faculty, State University of Medan, and Prof. Dr. Iis Siti Jahro, M.Si., as a Coordinator Bilingual Programme, their advices and other necessary administrative.

I also give thanks to Prof. Dr. Iis siti Jahro,M.Si as the Academis Supervisior who always guide research during lecturer, great thanks Dr.Ajat Sudrajat, M.Si. as validator of instrument test in this research, and the entire along with Mr and Mrs. Staff and Lecturer in Chemistry department FMIPA UNIMED who helped the author. The author also presented to School Pinciple of SMA N 1 Berastagi, Alberto Colia,M.Pd that give permision and Korry Naiggolan, S.Pd., as the chemistry teacher in SMA N 1 Berastagi. Special gratitude and appreciation to the my lovely father Johannes Pandiangan and my lovely mother Konnia Simbolon and also to my dearest sister (Pradelima pandiangan,Lina Wati pandiangan and Ningsi Pandiangan) for their love supports, pray, motivation and

caring that they give. My Brother (Maratur Pandiangan) and Darmen Hutapea thank you for the careness and given me support until the completion of this thesis. The authors also express thank to all friends in Bilingual Chemistry Education'12. thanks to groups Getek's :Wita Locarizky Siregar, Fridayuni Simanjuntak, Ivana Margaret Simanjuntak and Rolina Pandiangan together (Sad, happy,pray together, laugh together and help each other and love each other the most important is always there)love love this groups. all family of U.Josua Pandiangan, family of mother Simbolon and father, big family of Fridayuni simanjuntak and Wita Locarizky siregar, for support and pray, and special thanks to someone that heart, thanks for the owns my love, careness, pray, and motivation. I also would like to say thank you to all whose names cannot be mentioned one by one for their support and friendfhip through my academic years.

The authors tried for maximal effort in the completion of this thesis. Authors hope the critique and suggestion from readers for completeness the thesis perfectly. Finally, the writer hopes this thesis can be useful to enrich the reader in science education and for futher improvement of this thesis.

Medan, Juny 2016
The Writer



(ROLINA PANDIANGAN)