ACKNOWLEDGEMENT

Alhamdulillah, praise and gratitude to Almighty God, Allah SWT for all the graces and blessings that provide health and wisdom to writer, so the thesis can be finished well.

The title of this thesis is "The Implementation of Problem Based Learning (PBL) Model Integrated with team Games Tournament (TGT) To Increase Student's Achievement and Creativity in Learning Colloidal System". This research is done in SMAN 1 Tanjung Pura that prepared to get Sarjana Pendidikan degree of Chemistry Education, Faculty of Mathematics and Natural Science, State University of Medan.

In this opportunity a million thanks are delivered to Mrs. Dr. Iis Siti Jahro, M.Si as thesis supervisor in written of this thesis for big support, advice, guidance, suggestion and constructive comments from beginning until the end of completing this research. Great thanks also addressed to Mr. Drs. Eddyanto, Ph.D., Mr. Muhammad Yusuf, S.Si, M.Si., and Mrs. Nora Susanti, S.Si, Apt, M.Sc., as examiner lecturer who had given advice and suggestion to completing this thesis. Thanks also goes to my Academic Supervisor, well the writer so unique when learning in UNIMED, there are two Academic Supervisor, namely in Semester I-VIII Alm. Drs. Rahmat Nauli, M.Si., and next Semester VIII, Dra. Ani Sutiani, M.Si., and unforgettable Mrs. Prof. Dr. Retno Dwi Suyanti, M.Si as instrument validator, then Mrs., Dr. Iis Siti Zahro as coordinator of Bilingual Program, Mr. Agus Kembaren, S.Si., M.Si as Head of Chemistry Department, Mr. Prof Motlan, M.Sc, Ph.D as a Dean of FMIPA UNIMED and all staff in chemistry department and FMIPA.

The writer also like to say thanks to Mr. Drs. Syafruddin as a headmaster of SMAN 1 Tanjung Pura, Mr. as chemistry teacher for help and guidance when do the research and also for all the teacher and staff in SMAN 1 Tanjung Pura who given support to writer when do the research. Unforgettable for all my students in XI-Science I as Experimental Class 1 and XI-Science 2 as Experimental Class II. Thank you for all support to writer, I miss you all. The

writer also like to say to Mr. Rusdi Ramli, S.E as a headmaster of SMA Swasta Panca Budi and Mrs. Deli S.Pd as chemistry teacher for help and guidance when do validation of test for research and thanks for all my students in XI- MIA 1 as Validator Class.

A billions thanks, special deepest gratitude and appreciation to my lovely father Sori Monang Hasibuan and my lovely mother Hazrah, for their caring, love, pray, motivation, support and education. Thanks you both of you that constant support through the ups and downs of my academic career. It has been bumpy at times, but your confidence in me has enhanced my ability to get through it all and succeed in the end. I cannot adequately express how thankful Iam. For ,my younger sister Nanda Agustina, my younger brother Hairul Azwar who always been there for me, you always help me to finished this thesis very well, always ready to help me whatever I want, whenever I need. Even iam in bad condition, but you always succeed make me happy. Thank you for everything, we grew up together and you have colored my life, iam really lucky to have brothers and sister like you all.

A billion thank for you my smelly, my ugly, my dear, Harry Prima I don't know how to expressed my thank for you. You always pray, support and love me unconditionally, always beside me even I am under pressure and so emotional, but you always make me smile and laugh. You are my passion, my mind and my beloved.

Thank you are goes to my colleagues who have been involved in supporting me to complete my education, Seruni, Melly, Rolina, Arif, Elvi, Evi, Ernita, Lisna, Biuti, Taufik, Novel, Nova, Rimbun, Lestari, Fani, Lady, Hariaty, Frida, Ivana, Mariana, Rina, Wita, Descey. Unforgettable for my funny friend Fani, Eva, Janah, Melfa, for you support and pray to me. And thank to my friend in PPL SMAN 1 Perbaungan specially Nikita, Rini, Reni, Dinda, Dwi and thank you for my beloved student's in SMAN 1 Perbaungan, specially XII-Science Plus, XII-Science 1, XI-Science 2, I miss you all my student's. Thank you for everyone who giving pray and help me to finished this thesis, I can't mentioned one by one.

The writer has done the maximal effort in the completion of this thesis, but the writer is aware there are many weaknesses in terms of both content and grammar. Writer hopes the suggestion and constructive criticism from readers for completeness the thesis perfectly. At least, the writer hopes this thesis can be useful to enrich the reader in science education.

Medan, July 2016

Writer,

Nursaadah

NIM. 4123332015

