ACKNOWLEDGEMENTS

I give all the glory and honour to God, the Almighty for His undying love and guidance which has brought me this far. May his name be glorified through this work.

Taking this opportunity, I would like to thank my guide and mentor, Professor Nadimpalli Siva Kumar for being there for me right from the start. Sir, you are wonderful person and it has been a great experience working under your care. Thank you for trusting in me and giving me the opportunities to venture out of my ‘pond’. Thank you for the suggestions and the feedbacks without which this research would have been incomplete and thank you for the assurance given to my mum-they have really helped to keep her comforted that I am in good hands.

A special thanks to Prof O.H.Setty, Head, Department of Biochemistry, Prof M.Ramanadham, Dean, School of Life Sciences and the former head Prof. K.V.A.Ramaiah for making this research work feasible with the infrastructure and laboratory facilities.

My sincere gratitude to my doctoral committee members Prof M.Ramanadham and Prof B.Senthilkumaran, for assessing my research work in between and for the useful discussions.

I would also like to thank all the faculty members and research scholars of Life Sciences for their constant support and motivation.

I am very grateful for the financial support rendered to me by the Deutscher Akademischer Austausch Dienst (DAAD) for an extension program at the University of Greifswald, Germany from October 2009 to September 2010.

It gives me immense pleasure to thank Prof Uwe Völker, University of Greifswald, Germany for the support and guidance during my stay in Germany. I am also thankful to Dr. Elke Hammer for helping me in analyzing my proteomics data. To all my friends who made my stay in Germany a memorable one.
I also extend my gratitude to the University of Hyderabad for providing the PURSE grant and enabling me to attend the international conference, Italy.

My special thanks to Dr.K.Suresh for his valuable suggestions and advice.

To all my former and present colleagues Dr.Nagender Rao Dr.Sivaramakrishna, Dr.Praveen Kumar, Dr Kiran Kumar, Mohammad, Venu, Gnanesh, Ismail Khan, Ajith, Praveen, Rohit, and lab attendant Ramana, I am very much grateful for your friendship. The help and support you have rendered to me are priceless. May God bless all of you with success and all the joys of life.

I am deeply grateful to Rajiv Gandhi National Fellowship (RGNF), India for the financial support through JRF and SRF. I thank DST-FIST, UGC-CAS, DBT, CREBB for the infrastructure provided at School of Life Sciences.

To my friends Khrienuo and Khruks: you guys are super. I cannot imagine my stay here without you. My research work has been fun and enjoyable with your presence. THANK YOU.

My seniors Daniel, Veni and Toshi, thank you for the help, the advices, the TREATS and not forgetting the rides. I am indebted to all of you. May God shower His blessings on you.

My loved ones, back at home have been the ‘behind the scene’ supporters. Thank you Azezhos, Amus, Anas, Aniis, Anos, cousins, relatives, nieces and nephews for your constant prayers without which my research would not have come this far.

My brothers and sisters, Alo, Angabo, Adi, Akra, BIL and nieces wen and chen, ‘Thank You’ cannot suffice for everything you have done but my prayer is that God, grant you with all the happiness of life.

My deepest and most sincere gratitude to my mum for her undying love, never failing support, never tiring words of encouragement and ceaseless prayers. Ave, you have been my pillar of strength and I cannot have imagined coming this far without you. Thank you for being there all the time. May God bless you with good health, happiness and a very, very long life ahead.

Merino Visa
I dedicate this Ph.D thesis to my father, Lt. Er. Hito Visa.

Apo, I have finally completed our ‘Dream’
The ‘Dream’ we have planned together and prayed about
The ‘Dream’ we longed to see come alive
Today, when it did come true,
You are not with me physically
But I know you are rejoicing with me in Heaven
With the Lord and His angels.

Apo, I want to say ‘Thank You’ for your prayers, your advices and your encouragements.
Because of your hard work, honesty and strong principles, I have reached this far.
Your words of advices and encouragement will always be in my heart to guide me throughout.

Until the day we meet again………………….