ACKNOWLEDGEMENTS

The time is finally here to finish my thesis and I take this opportunity to acknowledge and thank all those people including my family, friends, colleagues and well wishers, who have been instrumental in bringing this thesis to completion.

With due respect, I earnestly express my extreme sense of indebtedness to my ideal, most learned and worthy supervisor, Dr. Tarlok Singh Lobana, Emeritus Professor, Department of Chemistry, Guru Nanak Dev University, Amritsar, India, who suggested the problem, extended all facilities and provided inspiring guidance for the successful completion of my research work. I have been extremely lucky to have a supervisor who cared so much about my work, and who responded to my questions and queries so promptly. I am really fortunate and grateful to have such a wonderful person as my teacher and research guide. I am also thankful to my Co-supervisor, Prof. B. S. Randhawa, Department of Chemistry, Guru Nanak Dev University, Amritsar for his support and encouragement throughout my research work.

I must also acknowledge the Department of Chemistry, Guru Nanak Dev University and its faculty, which has been influential for my academic achievements. I am thankful to Prof. Manoj Kumar, Head, Department of Chemistry, Guru Nanak Dev University, Amritsar for providing necessary laboratory facilities for accomplishment of my research work. I am grateful to our librarians and other technical and non teaching staff for providing administrative and other assistance during this period.

I wish to acknowledge my labmates Dr. Rekha Sharma, Dr. Razia Sultana, Dr. Poonam Kumari, Mrs. Amanpreet Kaur, Ms. Jaspreet Kaur and Ms. Mani Kaushal for their constant help, support, fruitful scientific discussions, collaborative development of tools and valuable pieces of advice. Environment full of positive energy and humor is all we need to accomplish such an arduous task, so I must also thank my friends (Neha, Harjinder, Sonika, Naval, kamal, Mausami and Nasarul sir) for being there and supporting me.

My words will always be insufficient to verbalize my respect and profound affection for my Family and In-Laws whom soulfully provided me their inner strength and constant support to undertake the challenge of this proportion like all other spheres of life, for what I cannot measure but treasure. A special thanks to Bibbiji, Mummy, Papa, Mother-in-Law, Brothers, Bhabhiji and Sisters-in-Laws. Their unlimited love, faith, care, blessings, confidence and sacrifices has made me
whatever I am today. It would have been impossible for me to finish this work without your blessings. I would like to especially thank my Mother-in-Law, Mrs. Kamla Devi for her support during my hard times.

I owe my deep and sincere love and gratitude to my husband Dr. Vickramjeet Singh, who never agreed to my desire of eating Oily Food, although he takes care of other things effectively. I owe him a lot for his patient guidance, constant encouragement and advice. He has been a great friend over the years, and he will always hold a special place in my heart. This work would not have been possible without your love, guidance, support and encouragement. Finally, I would like to mention that during the thesis compilation I welcomed my Daughter Shivanya (Shivi) to this world. I love you more than anything and I thank God for enlightening my life with your presence.

I also gratefully acknowledge the Prof. Harjit Singh foundation and University Grants Commission (UGC-BSR), New Delhi, India for financial support.

(Shikha)