

## ACKNOWLEDGEMENTS

I bow before God, The Almighty, who loricated me with robust health, modulus courage and acuminous energy to reach acme of this work.

I humbly express my loyal regards to my esteemed teacher and research supervisor, Dr. (Ms.) Shashi Bala Kalia, Assistant Professor, Department of Chemistry, Himachal Pradesh University, Shimla, under whose guidance I have been able to complete this work. The legacy of scientific inquiry, hard work and value of temperance that I inherited from her shall be a great wealth for me that I will cherish throughout my life.

I am thankful to Prof. M. S. Chauhan, former Chairman, Prof. D. K. Sharma, present Chairman, Department of Chemistry, H.P. University, Shimla for providing necessary facilities. I wish to express my reverence to Prof. B. C. Verma, Department of Chemistry, former Dean, Faculty of Science, H.P.U. Shimla, for his help and encouragement. I am also grateful to the entire faculty members of Department and to the library staff of Himachal Pradesh University, Shimla, for their kind help and co-operation.

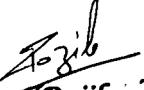
My thanks are also due to Prof. M.R. Maurya (Department of Chemistry, IIT, Roorkee), for his help in making various physical studies. I express my sincerest thanks to Prof. S.S. Kanwar (Department of Biotechnology, H.P.U., Shimla) for the guidance and provision of necessary laboratory facilities for the biological studies. I am indebted to Prof. Mahavir Singh (Department of Physics, H.P.U., Shimla) for his encouragement, valuable suggestions regarding the work.

This arduous task would have not become so simple if my lab-mates and friends, Ms. Priyanka, Mr. Anil, Ms. Pooja and Ms. Nisha, have not supported and helped me in various ways and I am delighted to be thankful to them. I am also grateful to all those who have unknowingly helped me in some way or the other to accomplish this work.

I express my gratitude from the deepest core of my heart to my loving parents (Smt. Deepa Malhotra & Sh. J. P. Malhotra) and my parents-in-law (Smt. Ram Dulari & Sh. Madan Lal Puri) whose silent blessings, timely guidance, sacrifices and everlasting affection enabled me to complete this work. Greatest appreciation is also due to my brother, sisters, brother-in-law and sister-in-law for their good wishes and encouragement throughout the course of this work.

I reserve my special indebtedness to my husband Mr. Sanjeev Kumar Puri for his care, unwavering patience, inspiration, invaluable co-operation and support and making me feel comfortable in hard times. I shall always remain indebted to my son, Rishabh for his sacred sacrifice.

Dated: 08.07.2011

  
(Rojila Devi)