

ACKNOWLEDGEMENTS

It is my great privilege to express my sincerest gratitude and indebtedness to my esteemed teacher and guide, **Dr. R. L. Blokhra, Professor**, Department of Chemistry, Himachal Pradesh University, Shimla-5 (India) under whose guidance I have been able to accomplish this work. His interest, sympathetic attitude and constructive criticism have been a source of constant inspiration.

I am highly thankful to the Chairman, Department of Chemistry, Himachal Pradesh University, Shimla for providing necessary laboratory facilities.

Cooperations received from **Miss Reeta**, Lecturer in Hindi is highly acknowledged.

I am also thankful to my research-mates and friends whose cooperation in exchange of views always led to constructive results.

Thanks are due to the technician **Sh. Balmukand Kashyap** and **Ravinder Zinta** for repair and preparation of the Lab. instruments.

This work would remain incomplete if I do not make a mention of **my parents and brothers** who have always been a driving force behind all my achievements and whose sheer affection nurtured my feeble spirit throughout the work, will ever-remain to be worshipped.

Lastly but not least I thank Sh. Kishan Chand for typing the thesis very carefully without any error.

Shyam Singh
(SHYAM SINGH)