ACKNOWLEDGEMENT

I like this opportunity to express my gratitude to Dr. S.K. Mishra, Ex-Dean, Faculty of Science and Ex-Principal, D.B.S. College, Kanpur for exposing me to the field of “THEORETICAL STUDY OF III-V AND II-VI SEMICONDUCTING MIXED CRYSTALS OF THE TYPE AB_{1-x}C_x HAVING ZINC-BLENDE STRUCTURE,” his kind guidance and his interest without which the present work would have been impossible.

I express my indebtedness and sincere thanks to Dr. S.S. Kushwaha Ex-Vice Chancellor Kashi Vidyapeeth Varanasi, Ranchi University, Ranchi for constant encouragement, stimulating discussion and sustained interest throughout the phase of this work. In fact his nice behaviour and well informed ideas formed the inspiration to do level best.

I am also grateful to Dr. S.N. Mehrotra, Ex-Vice Chancellor, Agra University, Agra, Jodhpur University, Jodhpur for his soft words continuous encouragement, a constructive criticism and moral support towards achieving academic excellence.

I would also like to acknowledge my deep sense of gratitude to Dr. Vikas Mishra, Reader, Dept. of Physics, D.B.S. College, Kanpur for his inspiration and providing necessary facilities.
I express my sincere thanks to my seniors Dr. Prakas Mishra and Dr. Sanjay K. Kushwaha who have helped me a lot in my ways towards completing the thesis.

The Thesis would not have assumed its form without of willing and ungrudging roles played by my parents Dr. Harishchandra Dixit, Principal, S.R.A. Sanskrit Mahavidyalaya, Mahewah Etawah and Dr. Mithilesh Kumari Dixit, Reader, K.K. P.G. College, Etawah. I am also very much thankful to my younger and older sisters Tripti and Monika.

No words of thanks can be enough to holy God, holy omnipotent and holy immortal who remains sympathetic during my hard days.

I am highly obliged Mr. Iqbal Ahmad for taking pains in neat and clean computer typing and composing of the manuscript.

I am thankful to my best friends Satish Shukla, Abhay Saghde, Nishad Deshpandey and Subhash Pokhariyal for their helps suggestions and ever smiling co-operative role.

04/04/08

Peeyush Dixit