I express my sincere gratitude to my supervisor Dr. R.S. Chauhan, Reader and Head, Department of Physics, R.P.G. College Jamuhai, Jauanpur (U.P.), India, for suggesting me this problem and for giving guidance and constant encouragement during my research work. I feel indebted to him for all kind of help he gave to me throughout the course of these investigations.

I feel pleasure to thank Dr. Virendra Singh, Reader, Department of Physics, T.D. P.G. College, Jaunpur (U.P.), India for his keen interest in the present investigations and for providing research facilities in the Department as a Co-supervisor.

I am also thankful to Principal, T.D. P.G. College Jaunpur (U.P.) India, for helping me in various ways during my research work.

I am also thankful to the Dr. D.P. Singh, Head, Department of Physics, T.D.P.G. College, Jaunpur (U.P.), India for providing me necessary facilities. I am also thankful to the Dr. S.K. Singh Rathore, Reader, Department of Mathematics, T.D.P.G. College, Jaunpur for this constant encouragement and useful suggestion.
It is my duty to thank Sri Ram Manorath Singh (father) and Smt. Subhadra Singh (mother), for their blessings, and helping me in various ways during my research work. I am also thankful Late Mata Prasad Singh (grand father) whose blessings are even to day more powerful for me.

I am also thankful to Sri Man Mohan Singh Rathore (elder brother) and Smt. Poonam Singh Rathore (Bhabhi) for their good wishes during the course of these investigations.

At last, I thank Mr. Mohd. Iliyas 'Munna' for typing the manuscript efficiently in a very short time.

Department of Physics
T.D. P.G. College
Jaunpur (U.P.), India

Date: ____________

(Arvind Kumar Singh)
Research Scholar