I take this opportunity to express my deep sense of gratitude and thanks to Prof. Maheshwar Sharon, Professor of Chemistry, Department of Chemistry, Indian Institute of Technology, Bombay for his keen interest and valuable guidance throughout the course of studies.

I am thankful to Dr. H.J. Arnikar, Retired Professor and Head of Chemistry Department, Poona University and Dr. V.K. Phansalkar, Professor and Head of Chemistry Department, Poona University for providing adequate facilities to carry out this research work.

My thanks are also due to the technical staff of the University and of the Chemistry Department, Poona University for necessary cooperation rendered to me during the course of studies.

I am very much thankful to my research colleagues Dr. A.K. Kalia, Mr. B.G. Mahajan, Mr. A.P. Bholagiri, Mr. R.R. Pradhananga, Mr. D.D. Dhawale, Mr. Ashwini Sinha, Mr. B.M. Prasad and Mr. S.G. Sharan for their timely help during the course of investigation.

My thanks are also due to Poojya Sane Guruji Vidya Prasarak Mandal Shahada and Dr. V.M. Deshmukh (Ph.D.),
Principal, Science, Com. and Shri S.I. Patil Arts College, Shahada, Dist. Dhulia for the sanction of leave for writing the thesis. My thanks are due to lecturers V.P. Dhande, A.C. Chawbe, S.S. Patil and C.P. Khairnar and other colleagues in this college for their cooperation and adjustment in duties when I was on leave.

My special thanks to Mr. N.H. Paike, Mr. M.N. Jachake, Mr. V.V. Jogadand and Mr. A.S. Patil for rendering the financial help in need and their well wishes to me, which kept me enthusiastic during studies.

My warmest thanks to Dr. (Mrs.) Madhuri Sharon, Lecturer in Botany Department, Poona University for her great cooperation and help during the writing of thesis.

I would also like to thank University Grants Commission for the award of Junior Research Fellowship under special assistance programme in Nuclear Chemistry, Department of Chemistry, University of Poona during the tenure of which experiments of this work were carried out in Chemistry Department of Poona University.

Chemistry Department
Poona University, Poona-7

R.S. HIRAJDAR