ACKNOWLEDGEMENT

First and foremost, I would like to acknowledge Dr. B. K. Chougale, Lecturer, Department of Physics, Shivaji University, Kolhapur for guiding my work and for successful completion of this thesis. I wish to thank him for the numerous discussions during which his ideas and encouragement paved the direction to the work reported here.

I am also thankful to Prof. R. N. Patil, Head Department of Physics, Shivaji University, Kolhapur for his encouragement and help.

I thank all the members of teaching staff and research students especially Mr. R.S.Patil, Mr. J. D. Desai who have kindly extended a helping hand whenever I requested.

I am indebted to my parents and relatives without whose love and support this dissertation would not have seen the light of the day. I particularly thank Dr. R. G. Patil, Principal, Agriculture College, Kolhapur Dr. D. N. Patil, Lecturer Department of Geology,

University of Pune and Mr. P. R. Patil, Research Scholar, Department of Chemistry, University of Pune for their continuous encouragement throughout this work.

I must acknowledge the kind help of my colleagues at Science College, Karad in the completion of this work.

The expert and neat typing of the manuscript by Mr. A. G. Gosavi is also thankfully acknowledged.

DATE: 16/5/84

Mr. S.A.Patil,
Department of physics,
Science College,
Karad.