

ACKNOWLEDGEMENT

Dr. T.N.Hiera, thesis supervisor, to whom I express my deep sense of gratitude for his continuous guidance and untiring supervision throughout the course of the investigation.

Prof. S.N.Sen to whom I am extremely grateful for his active interest in the work and for kindly providing with the laboratory facilities.

Prof. A.Bree to whom I express my appreciation for getting the spectrum of the mixed crystal run for us at liquid helium temperature.

Dr. A.S.N.Murthy to whom I am thankful for valuable discussions.

Prof. M.Makagawa and Dr. A.J.Thomson to whom I express my thanks for their generous gift of polyenes.

Mr. K.A.M.Panicker, K.M.Jain, B.Mallik and many other individuals in the department, to whom I am thankful for their assistance during the progress of the work.

Mr. S.K.Sarkar to whom I am thankful for his competent technical assistance and constant cooperation.

Mr. J.Ghose and S.Choudhury to whom I express thanks for their help with the typing of papers in connection with the research work.

University Grants Commission, India to whom I am thankful for a research fellowship.