

Acknowledgements

With a deep sense of gratitude and indebtedness, I acknowledge the encouragement, advice and guidance received from my Supervising Teacher, Dr. M. Padmanabhan, Reader in Charge, School of Chemical Sciences, Mahatma Gandhi University, Kottayam, throughout the course of this work.

I am really grateful to Dr. V. N. Rajasekharan Pillai (former Head of the Department, School of Chemical Sciences, Mahatma Gandhi University) for his encouragement of this study and for providing all the facilities to carry out the work. I also express my gratitude to all my teachers of the department for their valuable guidance and helpful suggestions during this course.

Let me take this opportunity to express my sincere gratitude to the management of Mar Thoma College, Thiruvalla, for sanctioning study leave under FIP of UGC during the period of Ph.D. programme. I also express my thanks to my parents and my wife for their constant prayers and courage inspired on me in midst of problems during this study programme.

I wish to express my extreme gratitude to all the research scholars, specially, Dr. Mathew C. Chandy, Dr. Tessymol Mathew, Mrs. Sheela Chacko, Mr. C. Arunan and Mr. George V. Thomas for their sincere cooperation and help. I also thank all the non-teaching staff of the department.

I am grateful to Mr. Ravindran Achari, Librarian and to the members of the documentation section of Mahatma Gandhi University Library for extending all the possible help during this research programme.

I remember with a sense of gratitude the following institutions IIT Madras, IIT Bombay, Aligar Muslim University, Rhotak University for taking CHN and EPR spectra.

The fellowship granted to me by UGC is also gratefully acknowledged.

I remember with thanks to M/s Copy Write, Ettumanoor for word processing and photocopying of this work.

Above all, I bow my head before God Almighty, for blessing me with necessary initiative to carry out the work successfully.

Abraham Varghese