



I would like to dedicate this thesis to my parents, in laws and my beloved, Deepak Kapoor, all of whom had a major influence in my life, goals and ambitions.

I would like to express my heartiest gratitude to my research supervisor, Dr. Anjali Patel, Associate Professor, Department of Chemistry, Faculty of Science, M. S. University of Baroda, whose expertise, understanding, and patience, added considerably to my research experience. I appreciate her vast knowledge and skills in many areas. Her wide knowledge and her logical way of thinking have been of great value for me. Her understanding, encouraging and personal guidance have provided a good basis for the present thesis. She is a dedicated researcher and has spent innumerable hours for me to achieve this goal. I thank her, for her valuable guidance and important support throughout this work. Her ideas and concepts will always have a remarkable influence on my entire career.

Varsha
Varsha Brahmkhatri