## CONTENTS

Chapter 1: Nonlinear optical properties of organic and polymer systems  
Chapter 2: Computational studies on the stability and spectroscopic properties of porphyrin, chlorin, bacteriochlorin and their few metal complexes  
Chapter 3: Nonlinear optical properties of organic molecules: Theoretical investigations  
Chapter 4: Nonlinear optical polymers from natural resources: Theoretical and experimental studies on cardanol-based polyurethanes  
Chapter 5: Nonlinear optical properties of main chain chiral polyurethanes containing bisazo chromophores: Theoretical and experimental investigations  
Chapter 6: Main chain chiral polyesters with amidodiol monomers derived from γ-Butyrolactone: Theoretical and experimental investigations  
Chapter 7: Main chain chiral polyurethanes with amidodiol monomers derived from ε-Caprolactone: Theoretical and experimental investigations  
Chapter 8: Summary