

CONTENTS

S.No.	Chapters	Page No.
1.	Introduction, brief review and theoretical treatment of multiple equilibria	1-38
	1.1. Introduction	1-2
	1.2. Brief review	2-5
	1.3. Present work	5-8
	1.4. Experimental	8-10
	1.5. Theoretical treatment of various possible equilibria	11
	1.6. Proton-ligand equilibria	11-14
	1.7. Metal-ligand equilibria	14-20
	1.8. Mixed ligand equilibria	20-24
	1.9. Computations of equilibrium constants	24-26
	1.10. Calculation of thermodynamic parameters	26-27
	1.11. References	28-38
2.	Multiple equilibria involving malonic acid and aminopolycarboxylic acids with Cd(II) and Gd(III)	39-77
	2.1. Introduction	39-43
	2.2. Experimental and computational methods	43-45
	2.3. Curves and tables	46-63
	2.4. Results and discussion	64-68
	2.5. References	69-77
3.	Multiple equilibria involving malonic acid and aminopolycarboxylic acids with UO₂(II) and VO(II)	78-108
	3.1. Introduction	78-80

3.2. Experimental and computational methods	80-81
3.3. Curves and tables	82-98
3.4. Results and discussion	99-101
3.5. References	102-108
<hr/>	
4. Multiple equilibria involving malonic acid and catecholamines with Cd(II) and Gd(III)	109-154
<hr/>	
4.1. Introduction	109-111
4.2. Experimental and computational methods	111-112
4.3. Curves and tables	113-136
4.4. Results and discussion	137-146
4.5. References	147-154
<hr/>	
5. Multiple equilibria involving malonic acid and catecholamines with UO₂(II) and VO(II)	155-185
<hr/>	
5.1. Introduction	155-156
5.2. Experimental and computational methods	157
5.3. Curves and tables	158-179
5.4. Results and discussion	180-183
5.5. References	184-185
<hr/>	
6. Summary	186-202
<hr/>	
7. Publications	
<hr/>	