



# INTRODUCTION TO BIONORGANIC CHEMISTRY



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# **INTRODUCTION TO BIOINORGANIC CHEMISTRY**

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## **PREFACE**

The book Introduction to Bioinorganic chemistry is written according to the latest curriculum of chemistry masters students. This text covers material that could be a part of third semester course in bioinorganic chemistry for students and advanced undergraduate students in chemistry or biochemistry. Authors believe that such a course should provide students with the background required to follow the research literature in the field. The topics were collected to represent those areas of bioinorganic chemistry that are mature enough for textbook presentation. The book is categorized into small chapters to make it convenient for students and instructors as well. The concepts are explained using proper figures and tables to make it easier to understand. What we have attempted to do in each chapter is to cover the underlying principles of bioinorganic chemistry as well as outlining the state of knowledge in selected topics. We have chosen not to include abbreviated summaries of the inorganic chemistry, biochemistry, and spectroscopy that students may need as background in order to master the material presented. We assume that the reader of this book will assign reading from relevant sources that are appropriate to the prior knowledge of the students taking the course.

**Dr. V. D. Tripathi**

## **Abbreviations**

Adenine (A)

Adenosine Triphosphate (ATP)

Base Excision Repair (BER)

Carboxypeptidase A (CPA)

Cytosine (C)

Deoxyribose Nucleic Acid (DNA)

Electron Transfer (ET)

Guanine (G)

Hemoglobin (Hb)

hydroxyl (OH)

Magnetic Resonance Imaging (MRI)

Myoglobin (Mb)

Parathyroid hormone (PTH)

Plastocyanin (Pc)

Single Stranded (SS)

Superoxide Dismutase (SOD)

Thymine (T)

## INDEX

<b>Chapter 1: Introduction.....</b>	<b>1</b>
1.1 Introduction: .....	1
1.2 Elements in Living Systems: .....	2
1.3 Porphyrin Ring:.....	3
1.3.1 key point:.....	6
1.4 Metalloporphyrin: .....	7
1.5 Role of Iron in Living System: .....	7
<b>Chapter 2: Metal Storage Transport and Biomineralisation Ferritin, Transferrin and Siderrophores .....</b>	<b>9</b>
2.1 Introduction: .....	9
2.2 Storage of Iron-Ferritin: .....	10
2.2.1 Role of Ferritin: .....	10
2.2.2 Structure of Ferritin: .....	10
2.3 Transport of Iron-Transferrins: .....	11
2.3.1 Key Point:.....	11
2.4 Siderophores: .....	12
<b>Chapter 3: Iron - Containing Proteins with Porphyrin Ligand Systems .....</b>	<b>14</b>
3.1 Introduction: .....	14
3.2 Hemoglobin: .....	14
3.2.1 Properties Hemoglobin: .....	15
3.2.2 Biological Roles of the Hemoglobin:.....	16
3.2.3 Structure of the Hemoglobin: .....	18
3.3 Myoglobin (MB):.....	24
3.3.1 Structure of The Myoglobin: .....	25
3.4 The Dioxygen-Binding Reaction: .....	26
3.4.1 Cooperative Effect: .....	26
3.4.2 Bohr's Effect: .....	27
3.5 Heme Models: .....	28

<b>Chapter 4: Photosynthesis</b> .....	<b>31</b>
4.1 Introduction:.....	31
4.2 Phase of Photosynthesis:.....	32
4.3 Role of Photosystem I and Photosystem II:.....	33
4.4 Mechanism of Light Dependent Reduction:.....	34
4.5 Generation of ATP Via Cyclic Electron Flow:.....	36
4.6 The Dark Reaction of Photosynthesis, The Calvin Cycle:....	37
<b>Chapter 5: Nitrogen Fixation</b> .....	<b>40</b>
5.1 Introduction:.....	40
5.2 Type of Nitrogen Fixation:.....	40
5.2.1 Basic Requirement of Nitrogen Fixation Is:.....	42
5.3 General Structural Feature:.....	42
5.4 Specific Structural Feature:.....	43
5.5 Mode of Action of Nitrogenase:.....	45
5.6 Summary:.....	48
<b>Chapter 6: Metalloenzymes</b> .....	<b>50</b>
6.1 Introduction:.....	50
6.2 Carboxypeptidase A (Zinc Enzyme):.....	51
6.2.1 Structure of Carboxypeptidase A:.....	52
6.2.2 Mechanism of Carboxypeptidase A:.....	54
6.3 Mechanism of Action of Carbonic Anhydrase:.....	56
6.4 Catalases and Peroxidases:.....	57
6.4.1 Biological Role and The Main Properties of Catalases:.....	58
6.4.2 Main Biological Role of Peroxidases:.....	59
6.4.3 Mechanism and Structural Features:.....	59
6.5 Cytochrome P-450:.....	63
6.5.1 Structure of Cytochrome P-450:.....	66
6.5.2 The mechanism of oxidation of a substrate with cytochrome P-450:.....	67
6.6 Copper Enzyme:.....	69
6.6.1 Superoxide Dismutase (SOD) A Copper Enzyme:	69

6.6.2 Structure of Cu-Zn Superoxide Dismutase: .....	70
6.6.3 Mechanism Cu-Zn Superoxide Dismutase:.....	71
6.7 Molybdenumoxotransferases-Xanthine Oxidase: .....	72
6.7.1 Structural Features and Mechanism:.....	73

**Chapter 7: Vitamin B<sub>12</sub>.....77**

7.1 Introduction: .....	77
7.2 Structure and Characteristic Features of Vitamin B <sub>12</sub> : .....	79
7.3 Application of Vitamin B <sub>12</sub> : .....	80
7.4 Vitamin B <sub>12</sub> Deficiency: .....	81
7.5 Food Sources of Vitamin B <sub>12</sub> :.....	82
7.6 Summary:.....	82

**Chapter 8: Metal-Nucleic Acid Interactions.....84**

8.1 Introduction: .....	84
8.2 DNA (Deoxyribose Nucleic Acid):.....	85
8.3 Primary Structure of DNA:.....	88
8.3.1 The Fundamental Structure of DNA:.....	88
8.4 Secondary Structure of DNA:.....	88
8.5 DNA Polymerization:.....	91
8.5.1 Model of DNA Polymerisation: .....	93
8.5.2 Catalytic Mechanism of DNA Polymerase: .....	93
8.5.3 Detailed Description of DNA Polymerization Process: .....	95

**Chapter 9: Classification of Elements According to Their  
Action in The Biological System.....97**

9.1 Introduction: .....	97
9.2 Essential and Trace Elements: .....	97
9.3 Metal Ions in Biological System:.....	98
9.3.1 Sodium: .....	98
9.3.2 Potassium: .....	98
9.3.3 Magnesium: .....	101
9.3.4 Calcium: .....	101
9.3.5 Phosphorus: .....	102
9.3.6 Iron:.....	103
9.3.7 Zinc: .....	104
9.3.8 Copper:.....	106



9.3.9 Cobalt: .....	107
9.3.10 Sulphur: .....	108
9.3.11 Manganese: .....	108
9.3.12 Fluorine:.....	109
9.3.13 Chlorine: .....	109
9.3.14 Iodine:.....	109
9.3.15 Chromium: .....	109
9.3.16 Molybdenum: .....	110
9.3.17 Selenium: .....	110
9.3.18 Nickel: .....	110
9.4 Na <sup>+</sup> -K <sup>+</sup> -ATPASE:.....	111
9.5 Biological Metal-Coordination Sites: .....	112
<b>Chapter 10: Metal Complexes in Medicine .....</b>	<b>114</b>
10.1 Cisplatin: .....	114
10.1.1 Anticancer Drugs: .....	114
10.1.2 Wilson Disease: .....	116
10.1.3 Anti-Arthritis: .....	117
10.1.4 Hypercalcemia: .....	117
10.1.5 Siderosis Disease: .....	118
10.2 Magnetic Resonance Imaging (MRI):.....	118
10.3 Toxicity of Metals: Hg, Cd, Pb, As and The Chelate Therapy: .....	118
10.3.1 Lead: .....	119
10.3.2 Mercury: .....	120
10.3.3 Arsenic: .....	122
<b>11 Summary: .....</b>	<b>123</b>

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