Preface

Bioinorganic chemistry is an interdisciplinary subject developed through the cross-fertilization of knowledge emerged from studies in chemistry, biochemistry, physics, biology, medicine, environmental science and so on. Although the subject is of vital interest to researchers, many areas of the subject are matured enough for textbook presentation. Looking over this, University Grants Commission in India has recommended the topics of bioinorganic chemistry as part of the curriculum for undergraduate and postgraduate courses in chemistry. Moreover, in abroad too, topics of bioinorganic chemistry are included in syllabi of most of the universities and institutes.

During my long journey of teaching span of more than 40 years in three different universities, I had always realized the lack of textbooks in bioinorganic chemistry that covers most of the topics for in-depth teaching of the subject matters. Moreover, I was also in quest of reading materials in the form of research papers, reviews and books, so that curriculum at postgraduate, M.Phil. and Ph.D. levels in any University of India and abroad too can be revised for updating man powers in chemistry for manifold applications. This book entitled *Bioinorganic Chemistry: Some New Facets* comprising four chapters is designed to meet out the objectives mentioned above. Although many more topics are still not covered in this book as it may only increase the bulkiness of the book, these will be given attention in my next book.

The book also aims at assisting students in preparing competitive examinations, namely, NET, GATE, SLET, Doctoral Entrance Test (DET) and others, particularly in India. The end of each chapter has multiple-choice, short-answer and long-answer questions covering the topics discussed in the chapter for self-evaluation of students.

In completing a book of this nature, one accumulates gratefulness to the previous authors and editors of books, research papers, reviews and monographs on the relevant topics. I have consulted these sources freely and borrowed their ideas and views with no hesitation in preparing this manuscript. These sources are mentioned at several places in the text and also listed in bibliography, for which I am highly thankful to these authors.

Moreover, this book is the outcome of my teaching of the subject for more than two decades for several batches of M.Sc. and M.Phil. students at the Department of Chemistry, Rani Durgavati University, Jabalpur (M.P.), India. I have benefitted enormously from the response, questions and criticisms of my students.

Looking over the problems of students in learning the subject, I have tried my best to present the subject with student-friendly approach that is expressing it in an interactive manner and in simple language with many illustrative examples. Therefore, I hope that the book will serve as a textbook for M.Sc., M.Phil. and Ph.D. students of chemistry.

My endeavour will be amply rewarded if the book is found helpful to the students and teachers. In spite of serious attempts to keep the text free of errors, it would be presumptuous to hope that no error has crept in. I shall be grateful to all

those who may care to send their criticism and suggestions for the improvement of the book to my e-mail ID (rcmaurya1@gmail.com).

The writing of this book was initiated in September 2018 at 4515 Wavertree Drive, Missouri City-77459, Texas, during our stay with my daughter Dr. Abhilasha and son-in-law Dr. Adarsh, for which they deserve thanks.

Last but not least, I thank my wife Mrs. Usha Rani Maurya for her patient understanding of the ordeal which she had to undergo due to my almost one-sided attention during the completion of this challenging task. I am also indebted to my students Dr. J. M. Mir, Dr. P. K. Vishwakarma and Dr. D. K. Rajak for their encouragement and cooperation.

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