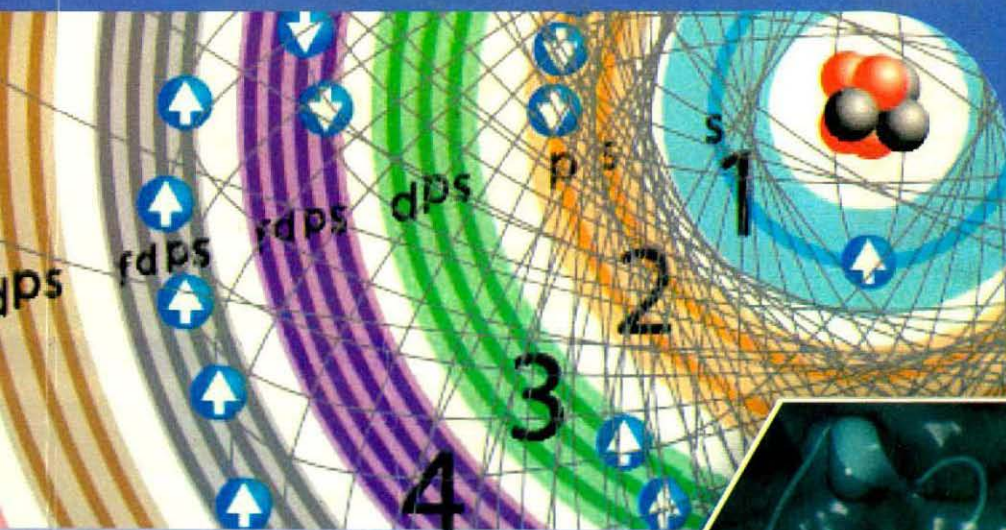


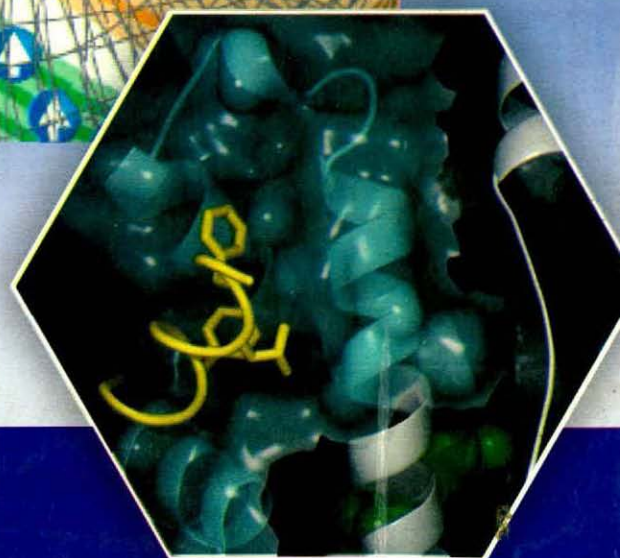
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PREFACE TO THE THIRD EDITION

In the present edition of this book I have retained all the text matter that was judged good in the previous edition.

Main features of this new edition are :

- (i) Emphasis has been put on the discussion of the correlation between the structure and properties of elements/compounds.
- (ii) At the end of each chapter some typical conceptual questions with their answers/solutions have been given. I strongly believe that these questions will be beneficial to the students during their examination period. These questions have been chosen with a view that they cover every important concept, reaction equation, mechanism and principle. Answers to these questions are clear, concise and correct. I hope that by doing these questions the students will develop confidence in their abilities in Inorganic Chemistry.
- (iii) At the end of each chapter latest questions asked in various Indian Universities' examinations have been incorporated. By solving these questions the students can precisely know their own success level.
- (iv) Subject index has been provided at the end of the book. This can be used for quick cross-reference and detailed contents.

Acknowledgments

I am extremely grateful to all my students and fellow-teachers all over the country for their support.

I wish to put on record my sincere thanks to Mrs. Nirmala Gupta (CMD), Mr. Amit Gupta (CEO), Mr. Navin Joshi, Vice President (Publishing) and Mr. Shishir Bhatnagar (Manager Editorial and Pre-Press) for the encouragement and guidance that I have received from them during the publication of the book.

Last but not the least I express my sincere thanks to Mr. Bhuvnshwar Kumar Tyagi, for all type of support in the revision of this book.

I would be glad to receive suggestions and comments for further improvement of the book.

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PREFACE TO THE FIRST EDITION

Originally this book was written by famous scientist Professor Satya Prakash, D.Sc. He was Professor of Chemistry at Allahabad University, Allahabad. First edition of the book published in the year 1944. In the year 1986, S. Chand & Company Ltd. requested me to revise this book. For me it was a great challenge to revise the book by Prof. Satya Prakash ji. But due to confidence of publishers on me, I have done this great job with full sincerity. By revising this book, I have tried to explain the chemistry of elements on the basis of the latest theories of chemistry. Although the book is primarily written for B.Sc. students, yet it contains many topics useful for B.Sc. (Hons.) and M.Sc. (Part I) students of most of Indian Universities. First few chapters of the book are devoted to the study of fundamentals of chemistry like structure of the atom, periodic classification of the elements, chemical bonding, radioactivity etc. The others describe the extraction, properties and uses of the elements along with the preparation, properties, uses and structure of their important compounds. Every chapter of the book is followed by a large number of descriptive and objective type questions, asked in various years of B.Sc. examination of Indian Universities.

I wish to express my sincere thanks for Shri T.N. Goyal, Sales Manager, S. Chand & Company Ltd. for his valuable suggestions and able guidance received by me whenever required, during the period of the printing of the book. He has extended his full cooperation in the publication of the book. Finally a lot of thanks are also due to my family members, Smt. Madan, Km Sapna and Master Hero, for their full cooperation and patience.

A request to the fellow teachers and students. The real judges of a book are the teachers concerned and the students for whom the book has been written. I, therefore, request my fellow teachers as well as students to send me their comments and suggestions for the further improvement of the next editions of the book.

Dr. R.D. MADAN

Burj, Gali —
Opposite Oriental Bank of Commerce
Khurja
October 2, 1986