INTRODUCTION TO BIOINORGANIC CHEMISTRY

Dr. V. D. Tripathi
Nausheen Amber

Kripa Drishti Publications, Pune.

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BIOINORGANIC CHEMISTRY

Dr. V. D. Tripathi
Assistant Professor,
Department of Chemistry,
C.M. Science College,
Darbhanga.

Nausheen Amber
NEET Aspirants,
Target Achievers Academy.

Kripa-Drishti Publications, Pune.

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Authored By: **Dr. V. D. Tripathi, Nausheen Amber**

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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)

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ABOUT THE AUTHOR

Dr. V. D. Tripathi *was born in Lucknow, Uttar Pradesh and completed his Graduation and Post-Graduation from University of Lucknow in 2003 and 2006 respectively. He qualified for CSIR NET-JRF and joined for research work at CSIR (Central Drug Research Institute) Lucknow. He was awarded Ph.D. degree by Jawaharlal Nehru University, New Delhi in 2012. He is professional medicinal chemist and has worked in different laboratories of esteemed organisations including Central Drug Research Institute Lucknow, Jubilant Chemsys Noida, Zydus Cadila Healthcare Limited, LCC Toulouse France and University Paul Sabatier in field of Organic Synthesis and Medicinal Chemistry. He has the experience of working as one of the leading team members for the development of process for the first indigenous antidiabetic molecule Lipaglyn by Zydus Cadila Healthcare Limited. He was awarded prestigious CEFIPRA Indo French Research Fellowship in 2015 by DST, Government of India. He has a rich experience of research work in laboratory at CNRS-LCC Toulouse France in area of Dendrimer Synthesis. Presently he is working as Assistant Professor in the Department of Chemistry, C.M. Science College, Darbhanga. He has the experience of teaching Organic Chemistry to the students at undergraduate and Post Graduate level. He has over 35 research publications to his credit in reputed national and international journals. He has authored two books in Organic Chemistry. He has the experience as an Editor of book titled 'Future Science for Sustainable Development'. He has three Patents to his credit. He has delivered more than a dozen invited talks.*

Nausheen Amber *was born in Darbhanga, Bihar. She has completed her graduation from G. D. College, Begusarai 2011 and did her Post graduation from P.G Department of Chemistry Lalit Narayan Mithila University 2013, Darbhanga. She qualified PhD Admission Test and joined her Doctoral Research in 2019 at Lalit Narayan Mithila University. Currently She is pursuing PhD under the supervision of Dr. V. D Tripathi. She is having two research articles published in international journals and has presented three research papers in Seminars and Conferences. She has authored one book chapter in book entitled "Future Science for Sustainable Development ". Currently she is mentoring NEET Aspirants at Target Achievers Academy.*

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