Inorganic Chemistry R L Dutta

Journal of Scientific & Industrial Research
Inorganic Chemistry of the Transition Elements
The Chemistry of Nitrogen
Current Science
General & Inorganic Chemistry Vol 1
Organometallic Compounds
Electrons, Atoms, and Molecules in Inorganic Chemistry
Books in Print Supplement
Advances in Inorganic Chemistry and Radiochemistry
S.Chands Success Guide (Q&A) Inorganic Chemistry
Progress in Inorganic Chemistry
Chemistry
Chemical Science in Colonial India
Science & Culture
Polyhedron
Electroanalytical Abstracts
Reviews in Inorganic Chemistry
Science and Culture
Fertilizer Technology
Spectroscopic Properties of Inorganic and Organometallic Compounds
Synthesis and Reactivity in Inorganic and Metal-organic Chemistry
Quarterly Journal - Indian Chemical Society
Handbook of Preparative Inorganic Chemistry
Journal of the Indian Chemical Society
Russian Journal of Inorganic Chemistry
Asian Journal of Chemistry

Journal of the Indian Chemical Society
Advances in Inorganic Chemistry
Inorganic Chemistry
Organic Chemistry, Volume 2: Stereochemistry And The Chemistry Natural Products, 5/E
The Chemistry of Copper, Silver and Gold
A Textbook of Inorganic Chemistry – Volume 1
Synthetic Methods of Organometallic and Inorganic Chemistry: Copper, silver, gold, zinc, cadmium, and mercury
Chemistry-I (As per AICTE)
Metal And Non-Metal Biguanide Complexes
Elements of Magnetochemistry
General And Inorganic Chemistry (fifteenth Edition)
Electronic Structure and Magnetism of Inorganic Compounds
Books in Print
Comprehensive Inorganic Chemistry II

SIDNEY LEVY

Journal of Scientific & Industrial Research Elsevier
Advances in Inorganic Chemistry and Radiochemistry
Inorganic Chemistry of the Transition Elements John Wiley & Sons
Specialist Periodical Reports provide systematic and detailed review coverage of progress in the major areas of chemical research. Written by experts in their specialist fields the series creates a unique service for the active research chemist, supplying regular critical in-depth accounts of progress in particular areas of chemistry. For over 80 years the Royal Society of Chemistry and its predecessor, the Chemical Society, have been publishing reports charting developments in chemistry, which originally took the form of Annual Reports. However, by 1967 the whole spectrum of chemistry could no longer be contained within one volume and the series Specialist Periodical Reports was born. The Annual Reports themselves still existed but were divided into two, and subsequently three, volumes covering Inorganic, Organic and Physical Chemistry. For more general coverage of the highlights in chemistry they remain a 'must'. Since that time the SPR series has altered according to the fluctuating degree of activity in various fields of chemistry. Some titles have remained unchanged, while others have altered their emphasis along with their titles; some have been combined under a new name whereas others have had to be discontinued.

The current list of Specialist Periodical Reports can be seen on the inside flap of this volume.

The Chemistry of Nitrogen Elsevier

Electrons, Atoms, and Molecules in Inorganic Chemistry: A Worked Examples Approach builds from fundamental units into molecules, to provide the reader with a full understanding of inorganic chemistry concepts through worked examples and full color illustrations. The book uniquely discusses failures as well as research success stories. Worked problems include a variety of types of chemical and physical data, illustrating the interdependence of issues. This text contains a bibliography providing access to important review articles and papers of relevance, as well as summaries of leading articles and reviews at the end of each chapter so interested readers can readily consult the original literature. Suitable as a professional reference for researchers in a variety of fields, as well as course use and self-study. The book offers valuable information to fill an important gap in the field. Incorporates questions and answers to assist readers in understanding a variety of problem types Includes detailed explanations and developed practical approaches for solving real chemical problems Includes a range of example levels, from classic and simple for basic concepts to complex questions for more sophisticated topics Covers the full range of topics in inorganic chemistry: electrons and wave-particle duality, electrons in atoms, chemical binding, molecular symmetry, theories of bonding, valence bond theory, VSEPR theory, orbital hybridization, molecular orbital theory, crystal field theory, ligand field theory, electronic spectroscopy, vibrational and rotational spectroscopy

Current Science Academic Press

For B.Sc. Part I,II & III Classes of all Indian Universities and also covering U.G.C. model curriculum. Authenticate, simple, to the point and modern account of each and every topic. Relevant, Clear, well labelled diagrams. Easy to understand treatment of most difficult and intricate topic. Questions from university papers of various Indian Universities

General & Inorganic Chemistry Vol 1 Sarat Book Distributors

With special reference to the study of chemistry; covers the period, 1765-1947.

Organometallic Compounds Dalal Institute

Straight from the frontier of scientific investigation . . . Nowhere is creative scientific talent busier than in the world of inorganic chemistry. And the respected Progress in Inorganic Chemistry series has long served as an exciting showcase for new research in this area. With contributions from internationally renowned chemists, this latest volume reports the most recent advances in the field, providing a fascinating window on the emerging state of the science. "This series is distinguished not only by its scope and breadth, but also by the depth and quality of the reviews." —Journal of the American Chemical Society "[This series] has won a deservedly honored place on the bookshelf of the chemist attempting to keep afloat in the torrent of original papers on inorganic chemistry." —Chemistry in Britain CONTENTS OF VOLUME 48: Synthesis, Structure, and Properties of Organic-Inorganic Perovskites and Related Materials (David B. Mitzi, IBM T. J. Watson Research Center, Yorktown Heights, New York). Transition Metals in Polymeric 1 - Conjugated Organic Frameworks (Richard P. Kingsborough and Timothy M. Swager,

Massachusetts Institute of Technology, Cambridge, Massachusetts). The Transition Metal Coordination Chemistry of Hemilabile Ligands (Caroline S. Slone, Dana A. Weinberger, and Chad A. Mirkin, Northwestern University, Evanston, Illinois). Organometallic Fluorides of the Main Group Metals Containing the C-M-F Fragment (Balaji R. Jagirdar, Eamonn F. Murphy, and Herbert W. Roesky, Universität Göttingen, Germany). Coordination Complex Impregnated Molecular Sieves-Synthesis, Characterization, Reactivity, and Catalysis (Partha P. Paul, Southwest Research Institute, San Antonio, Texas). Advances in Metal Boryl and Metal-Mediated B-X Activation Chemistry (Milton R. Smith III, Michigan State University, East Lansing, Michigan).

Electrons, Atoms, and Molecules in Inorganic Chemistry Pearson Education India

In This Short But Authoritative Book, Drs. Ray And Kauffman Succinctly Review All Important Studies On Complexes Of Biguanide And Its Derivatives Published Since Priyadaranjan Rays Classical Chemical Review Article By Giving Special Attention To Synthesis, Properties, Magnetism, Spectroscopy, Reactions, Kinetics, Structures And Applications. This Book Is The Only One Of Its Kind. The Structures Of The Ligands And Their Complexes As Revealed By Magnetic Moments, Electronic Spectra, Epr And X-Ray Crystallography Have Been Considered.The Books References Which Number More Than Four Hundred Should Give Practising Scientists Ready Access To The Crucial Details Needed For Research And Development On These Theoretically And Practically Significant Compounds. As Such, It Provides Data That Widely Scattered Is In Scientific Literatures In A Single Handy Source Book. This Book Is Heartily Recommend To Inorganic, Organic, Medical And Pharmaceutical Chemists, As Well As To Anyone Concerned With This Unique Class Of Ligands And Their Complexes With A Wide Variety Of Elements Of Varying Oxidation States And Coordination Numbers.

Books in Print Supplement Royal Society of Chemistry

Both elementary inorganic reaction chemistry and more advanced inorganic theories are presented in this one textbook, while showing the relationships between the two.

Advances in Inorganic Chemistry and Radiochemistry Royal Society of Chemistry

Comprehensive Inorganic Chemistry II reviews and examines topics of relevance to today's inorganic chemists. Covering more interdisciplinary and high impact areas, Comprehensive Inorganic Chemistry II includes biological inorganic chemistry, solid state chemistry, materials chemistry, and nanoscience. The work is designed to follow on, with a different viewpoint and format, from our 1973 work, Comprehensive Inorganic Chemistry, edited by Bailar, Emeléus, Nyholm, and Trotman-Dickenson, which has received over 2,000 citations. The new work will also complement other recent Elsevier works in this area, Comprehensive Coordination Chemistry and Comprehensive Organometallic Chemistry, to form a trio of works covering the whole of modern inorganic chemistry. Chapters are designed to provide a valuable, long-standing scientific resource for both advanced students new to an area and researchers who need further background or answers to a particular problem on the elements, their compounds, or applications. Chapters are written by teams of leading experts, under the guidance of the Volume Editors and the Editors-in-Chief. The articles are written at a level that allows

undergraduate students to understand the material, while providing active researchers with a ready reference resource for information in the field. The chapters will not provide basic data on the elements, which is available from many sources (and the original work), but instead concentrate on applications of the elements and their compounds. Provides a comprehensive review which serves to put many advances in perspective and allows the reader to make connections to related fields, such as: biological inorganic chemistry, materials chemistry, solid state chemistry and nanoscience. Inorganic chemistry is rapidly developing, which brings about the need for a reference resource such as this that summarise recent developments and simultaneously provide background information. Forms the new definitive source for researchers interested in elements and their applications; completely replacing the highly cited first edition, which published in 1973.

S.Chands Success Guide (Q&A) Inorganic Chemistry Elsevier

The Chemistry of Copper, Silver and Gold deals with the chemistry of copper, silver, and gold and covers topics ranging from the occurrence and metallurgy of copper to copper compounds and compounds containing copper-metal bonds, compounds of silver, and gold alloys. Hydrides and halides, cyanides and oxides, hydroxides and oxyacids, and thiocyanates and selenocyanates are also discussed. This volume is comprised of three chapters and opens with a brief history of copper, along with its occurrence and metallurgy, analysis, and compounds. The next chapter is devoted to silver and its compounds, while the last chapter describes gold, its isotopes and alloys, chemistry, and gold hydrides and halides, cyanides and oxides, hydroxides and oxyacids. Gold sulfides, selenides and tellurides, and nitrates are also considered, along with nitrides, azides, phosphides, and arsenides; and thiosulfates, selenates, selenites, thiocyanates, and selenocyanates. The final sections look at gold complexes and the organometallic and analytical chemistry of gold. This book will be a valuable source of information for inorganic chemists.

Progress in Inorganic Chemistry S. Chand Publishing

Advances in Inorganic Chemistry

Chemistry New Age International

Spectroscopic Properties of Inorganic and Organometallic Compounds provides a unique source of information on an important area of chemistry. Divided into sections mainly according to the particular spectroscopic technique used, coverage in each volume includes: NMR (with reference to stereochemistry, dynamic systems, paramagnetic complexes, solid state NMR and Groups 13-18); nuclear quadrupole resonance spectroscopy; vibrational spectroscopy of main group and transition element compounds and coordinated ligands; and electron diffraction. Reflecting the growing volume of published work in this field, researchers will find this Specialist Periodical Report an invaluable source of information on current methods and applications. Specialist Periodical Reports provide systematic and detailed review coverage in major areas of chemical research. Compiled by teams of leading experts in their specialist fields, this series is designed to help the chemistry community keep current with the latest developments in their field. Each volume in the series is published either annually or biennially and is a superb reference point for researchers. www.rsc.org/spr

Chemical Science in Colonial India Royal Society of Chemistry
An advanced-level textbook of inorganic chemistry for the graduate (B.Sc) and postgraduate (M.Sc) students of Indian and foreign universities. This book is a part of four volume series, entitled "A Textbook of Inorganic Chemistry – Volume I, II, III, IV". CONTENTS: Chapter 1. Stereochemistry and Bonding in Main Group Compounds: VSEPR theory, dπ -pπ bonds, Bent rule and energetic of hybridization. Chapter 2. Metal-Ligand Equilibria in Solution: Stepwise and overall formation constants and their interactions, Trends in stepwise constants, Factors affecting stability of metal complexes with reference to the nature of metal ion and ligand, Chelate effect and its thermodynamic origin, Determination of binary formation constants by pH-metry and spectrophotometry. Chapter 3. Reaction Mechanism of Transition Metal Complexes – I: Inert and labile complexes, Mechanisms for ligand replacement reactions, Formation of complexes from aquo ions, Ligand displacement reactions in octahedral complexes- acid hydrolysis, Base hydrolysis, Racemization of tris chelate complexes, Electrophilic attack on ligands. Chapter 4. Reaction Mechanism of Transition Metal Complexes – II: Mechanism of ligand displacement reactions in square planar complexes, The trans effect, Theories of trans effect, Mechanism of electron transfer reactions – types; Outer sphere electron transfer mechanism and inner sphere electron transfer mechanism, Electron exchange. Chapter 5. Isopoly and Heteropoly Acids and Salts: Isopoly and Heteropoly acids and salts of Mo and W: structures of isopoly and heteropoly anions. Chapter 6. Crystal Structures: Structures of some binary and ternary compounds such as fluorite, antifluorite, rutile, antirutile, crystobalite, layer lattices- CdI_2, BiI_3; ReO_3, Mn_2O_3, corundum, pervoskite, Ilmenite and Calcite. Chapter 7. Metal-Ligand Bonding: Limitation of crystal field theory, Molecular orbital theory, octahedral, tetrahedral or square planar complexes, π-bonding and molecular orbital theory. Chapter 8. Electronic Spectra of Transition Metal Complexes: Spectroscopic ground states, Correlation and spin-orbit coupling in free ions for Ist series of transition metals, Orgel and Tanabe-Sugano diagrams for transition metal complexes (d1 – d9 states), Calculation of Dq, B and β parameters, Effect of distortion on the d-orbital energy levels, Structural evidence from electronic spectrum, John-Tellar effect, Spectrochemical and nephalauxetic series, Charge transfer spectra, Electronic spectra of molecular addition compounds. Chapter 9. Magantic Properties of Transition Metal Complexes: Elementary theory of magneto - chemistry, Guoy’s method for determination of magnetic susceptibility, Calculation of magnetic moments, Magnetic properties of free ions, Orbital contribution, effect of ligand-field, Application of magneto-chemistry in structure determination, Magnetic exchange coupling and spin state cross over. Chapter 10. Metal Clusters: Structure and bonding in higher boranes, Wade’s rules, Carboranes, Metal Carbonyl Clusters - Low Nuclearity Carbonyl Clusters, Total Electron Count (TEC). Chapter 11. Metal-π Complexes: Metal carbonyls, structure and bonding, Vibrational spectra of metal carbonyls for bonding and structure elucidation, Important reactions of metal carbonyls; Preparation, bonding, structure and important reactions of transition metal nitrosyl, dinitrogen and dioxygen complexes; Tertiary phosphine as ligand.
Science & Culture Vikas Publishing House

The book has been designed according to the new AICTE syllabus and will cater to the needs of engineering students across all branches. The book provides the basis which is necessary for dealing with different types of physicochemical phenomena. Great care has been taken to explain the physical meaning of mathematical formulae, when and where they are required, followed by lucid development and discussion of experimental behaviour of systems. Every chapter has a set of solved problems and exercises. The idea is to instil sound understanding of the fundamental principles and applications of the subject. The author is known for explaining the concepts of Engineering Chemistry with full clarity, leaving no ambiguity in the minds of the readers.Although this book is primarily intended for BTech/BE students, it will also cater to the requirements of those pursuing BSc and MSc, including those of other disciplines like materials science and environmental science.

Polyhedron Elsevier Science Limited

The Chemistry of Nitrogen

Electroanalytical Abstracts Georg Thieme Verlag

Emphasises on contemporary applications and an intuitive problem-solving approach that helps students discover the exciting potential of chemical science. This book incorporates fresh applications from the three major areas of modern research: materials, environmental chemistry, and biological science.

Reviews in Inorganic Chemistry Academic Press

Specialist Periodical Reports provide systematic and detailed review coverage of progress in the major areas of chemical research. Written by experts in their specialist fields the series creates a unique service for the active research chemist, supplying regular critical in-depth accounts of progress in particular areas of chemistry. For over 80 years the Royal Society of Chemistry and its predecessor, the Chemical Society, have been publishing reports charting developments in chemistry, which originally took the form of Annual Reports. However, by 1967 the whole spectrum of chemistry could no longer be contained within one volume and the series Specialist Periodical Reports was born. The Annual Reports themselves still existed but were divided into two, and subsequently three, volumes covering Inorganic, Organic and Physical Chemistry. For more general coverage of the highlights in chemistry they remain a 'must'. Since that time the SPR series has altered according to the fluctuating degree of activity in various fields of chemistry. Some titles have remained unchanged, while others have altered their emphasis along with their titles; some have been combined under a new name whereas others have had to be discontinued. The current list of Specialist Periodical Reports can be seen on the inside flap of this volume.

Science and Culture University Science Books

Handbook of Preparative Inorganic Chemistry, Volume 2, Second Edition focuses on the methods, mechanisms, and chemical reactions involved in conducting experiments on inorganic chemistry. Composed of contributions of various authors, the second part of the manual focuses on elements and compounds. Included in the discussions are copper, silver, and gold. Numerical calculations and diagrams are presented to show the properties, compositions, and chemical reactions of these materials when exposed to varying laboratory conditions. The

manual also looks at other elements such as scandium, yttrium, titanium, zirconium, hafnium, and thorium. Lengthy discussions on the characteristics and nature of these elements are presented. The third part of the guidebook discusses special compounds. The manual also provides formula and subject index, including an index for procedures, materials, and devices.

Considering the value of information presented, the manual can best serve the interest of readers and scientists wanting to institute a system in the conduct of experiments in laboratories.

Fertilizer Technology Academic Press

Spectroscopic Properties of Inorganic and Organometallic Compounds New Central Book Agency