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Conceptual Chemistry Volume I For Class XI Apr 27 2020 Conceptual Chemistry Volume I For Class XI

Illustrated Guide to Home Chemistry Experiments Aug 12 2021 For students, DIY hobbyists, and science buffs, who can no longer get real chemistry sets, this one-of-a-kind guide explains how to set up and use a home chemistry lab, with step-by-step instructions for conducting experiments in basic chemistry -- not just to make pretty colors and stinky smells, but to learn how to do real lab work: Purify alcohol by distillation Produce hydrogen and oxygen gas by electrolysis Smelt metallic copper from copper ore you make yourself Analyze the makeup of seawater, bone, and other common substances Synthesize oil of wintergreen from aspirin and rayon fiber from paper Perform forensics tests for fingerprints, blood, drugs, and poisons and much more From the 1930s through the 1970s, chemistry sets were among the most popular Christmas gifts, selling in the millions. But two decades ago, real chemistry sets began to disappear as manufacturers and retailers became concerned about liability. The Illustrated Guide to Home Chemistry Experiments steps up to the plate with lessons on how to equip your home chemistry lab, master laboratory skills, and work safely in your lab. The bulk of this book consists of 17 hands-on chapters that include multiple laboratory sessions on the following topics: Separating Mixtures Solubility and Solutions Colligative Properties of Solutions Introduction to Chemical Reactions & Stoichiometry Reduction-Oxidation (Redox) Reactions Acid-Base Chemistry Chemical Kinetics Chemical Equilibrium and Le Chatelier's Principle Gas Chemistry Thermochemistry and Calorimetry Electrochemistry Photochemistry Colloids and Suspensions Qualitative Analysis Quantitative Analysis Synthesis of Useful Compounds Forensic Chemistry With plenty of full-color illustrations and photos, Illustrated Guide to Home Chemistry Experiments offers introductory level sessions suitable for a middle school or first-year high school chemistry laboratory course, and more advanced sessions suitable for students who intend to take the College Board Advanced Placement (AP) Chemistry exam. A student who completes all of the laboratories in this book will have done the equivalent of two full years of high school chemistry lab work or a first-year college general chemistry laboratory course. This hands-on introduction to real chemistry -- using real equipment, real chemicals, and real quantitative experiments -- is ideal for the many thousands of young people and adults who want to experience the magic of chemistry.

Chapterwise Topicwise Solved Papers Chemistry for Engineering Entrances 2020 Jun 10 2021 For cracking any competitive exam one need to have clear guidance, right kind of study material and thorough practice. When the preparation is done for the exams like JEE Main and NEET one need to have clear concept about each and every topic and understanding of the examination pattern are most important things which can be done by using the good collection of Previous Years' Solved Papers. Chapterwise Topicwise Solved Papers CHEMISTRY for Engineering Entrances is a master collection of exams questions to practice for JEE Main & Advanced 2020, which have been consciously revised as per the latest pattern of exam. It carries 15 Years of Solved Papers [2019-2005] in both Chapterwise and topicwise manner by giving the full coverage to syllabus. Each topic is well explained in a lucid manner so that candidates can understand the concept easily and quickly. This book gives the complete coverage of Questions asked in JEE Main & Advanced, AIEEE, IIT JEE & BITSAT, UPSEE, MANIPAL, EAMCET, WB JEE, etc., Thorough practice done from this book will the candidates to move a step towards their success. TABLE OF CONTENT PART I Based on Class XI NCERT - Some Basic Concepts of Chemistry, Structure of Atom, Classification of Elements and Periodicity in Properties, Chemical Bonding and Molecular Structure, States of Matter, Thermodynamics, Equilibrium, Redox Reactions, Hydrogen, s-Block Elements, p-Block Elements, Organic Chemistry : Some Basic Principles and Techniques, Hydrocarbons, Environmental Chemistry, PART II Based on Class XII NCERT - The Solid State, Solutions, Electrochemistry, Chemical Kinetics, Surface Chemistry, Nuclear Chemistry, p-Block Elements, The d-and f-Block Elements, Coordination Compounds, Haloalkanes and Haloarenes, Alcohols, Phenols and Ethers, Aldehydes, Ketones and Carboxylic Acids, Nitrogen Containing Compounds, Biomolecules, Polymers, Chemistry in Everyday Life, Analytical Chemistry, General Principles and Processes of Isolation of Elements, Questions Asked in JEE Main 2015, Solved Papers 2016 (JEE Main, BITSAT, AP EAMCET, TS EAMCET, GGSIPU), Solved Papers 2017 (JEE Main & Advanced, BITSAT, VIT & WBJEE), Solved Papers 2018 (JEE Main & Advanced, BITSAT & WBJEE), Solved Papers 2019 (JEE Main & Advanced, BITSAT & WBJEE).

General, Organic, and Biochemistry Study Guide Jul 11 2021 "This study guide provides reader-friendly reinforcement of the concepts covered in the textbook. Features include : Chapter outlines ; "Are you able to ...?" ; Worked text problems ; Fill-ins ; Test yourself ; Concept maps. Can also be used for Blei and Odian's Organic and Biochemistry".

Phase Equilibria, Phase Diagrams and Phase Transformations Sep 01 2020 Computational tools allow material scientists to model and analyze increasingly complicated systems to appreciate material behavior. Accurate use and interpretation however, requires a strong understanding of the thermodynamic principles that underpin phase equilibrium, transformation and state. This fully revised and updated edition covers the fundamentals of thermodynamics, with a view to modern computer applications. The theoretical basis of chemical equilibria and chemical changes is covered with an emphasis on the properties of phase diagrams. Starting with the basic principles, discussion moves to systems involving multiple phases. New chapters cover irreversible thermodynamics, extremum principles, and the thermodynamics of surfaces and interfaces. Theoretical descriptions of equilibrium conditions, the state of systems at equilibrium and the changes as equilibrium is reached, are all demonstrated graphically. With illustrative examples - many computer calculated - and worked examples, this textbook is an valuable resource for advanced undergraduates and graduate students in materials science and engineering.

Sociology and the New Systems Theory Jan 17 2022 After providing a review of classical theory, this book carefully sketches the chief contributions of living systems theory, social entropy theory, autopoiesis, and other approaches. It shows that these approaches are without flaws of earlier functionalism, yet they retain the breadth and integrative potential needed by mainstream theorists concerned about the threat of hyperspecialization and fragmentation within sociology.

Human Chemistry (Volume Two) Aug 24 2022 Volume two begins with Goethe's theories of affinities, i.e. the chemical reaction view of human life in 1809. This is followed by the history of how the thermodynamic (1876) and quantum (1905) revolutions modernized chemistry such that affinity (the 'force' of reaction) is now viewed as a function of thermodynamic 'free energy' (reaction spontaneity) and quantum 'valency' (bond stabilities). The composition, energetic state, dynamics, and evolution of the human chemical bond A?B is the centerpiece of this process. The human bond is what gives (yields) and takes (absorbs) energy in life. The coupling of this bond energy, driven by periodic inputs of solar photons, thus triggering activation energies and entropies, connected to the dynamical work of life, is what quantifies the human reaction process. This is followed by topics including mental crystallization, template theory, LGBT chemistry, chemical potential, Le Chatelier's principle, Muller dispersion forces, and human thermodynamics.

Thermodynamics and Statistical Mechanics Mar 19 2022 This text aims to help students understand energy, its different forms and transformations, and the key role of entropy, as applied to chemical systems.

Chemical Principles Apr 08 2021 Written for calculus-inclusive general chemistry courses, Chemical Principles helps students develop chemical insight by showing the connections between fundamental chemical ideas and their applications. Unlike other texts, it begins with a detailed picture of the atom then builds toward chemistry's frontier, continually demonstrating how to solve problems, think about nature and matter, and visualize chemical concepts as working chemists do. Flexibility in level is crucial, and is largely established through clearly labeling (separating in boxes) the calculus coverage in the text: Instructors have the option of whether to incorporate calculus in the coverage of topics. The multimedia integration of Chemical Principles is more deeply established than any other text for this course. Through the unique eBook, the comprehensive Chemistry Portal, Living Graph icons that connect the text to the Web, and a complete set of animations, students can take full advantage of the wealth of resources available to them to help them learn and gain a deeper understanding.

Organic Chemistry Dec 28 2022 Accompanying CD-ROM ... "has been enhanced with updated animated illustrations to accompany the presentations [and] Chem3D files for helpful structure visualization."--Page 4 of cover.

Chemical Principles Student's Study Guide & Solutions Manual Feb 24 2020

Chemistry 2e Nov 27 2022

Comprehensive Chemistry XI May 29 2020

Fundamental Principles of Nuclear Engineering Jan 25 2020 This book highlights a comprehensive and detailed introduction to the fundamental principles related to nuclear engineering. As one of the most popular choices of future energy, nuclear energy is of increasing demand globally. Due to the complexity of nuclear engineering, its research and development as well as safe operation of its facility requires a wide scope of knowledge, ranging from basic disciplines such as mathematics, physics, chemistry, and thermodynamics to applied subjects such as reactor theory and radiation protection. The book covers all necessary knowledge in an illustrative and readable style, with a sufficient amount of examples and exercises. It is an easy-to-read textbook for graduate students in nuclear engineering and a valuable handbook for nuclear facility operators, maintenance personnel and technical staff.

Concise Physical Chemistry Dec 16 2021 This book is a physical chemistry textbook that presents the essentials of physical chemistry as a logical sequence from its most modest beginning to contemporary research topics. Many books currently on the market focus on the problem sets with a cursory treatment of the conceptual background and theoretical material, whereas this book is concerned only with the conceptual development of the subject. Comprised of 19 chapters, the book will address ideal gas laws, real gases, the thermodynamics of simple systems, thermochemistry, entropy and the second law, the Gibbs free energy, equilibrium, statistical approaches to thermodynamics, the phase rule, chemical kinetics, liquids and solids, solution chemistry, conductivity, electrochemical cells, atomic theory, wave mechanics of simple systems, molecular orbital theory, experimental determination of molecular structure, and photochemistry and the theory of chemical kinetics.

Chemistry³ Mar 27 2020 Providing equal coverage of organic, inorganic and physical chemistry - coverage that is uniformly authoritative - this text builds on what students may already know and tackles their misunderstandings and misconceptions. The authors achieve unrivalled accessibility through carefully-worded explanations, the introduction of concepts in a logical and progressive manner, and the use of annotated diagrams and step-by-step worked examples. Students are encouraged to engage with the text and appreciate the central role that chemistry plays in our lives through the unique use of real-world examples and visuals. Frequent cross-references highlight the connections between each strand of chemistry and explain the relationship between the topics, so students can develop an understanding of the subject as a whole.

Chemical Education: Towards Research-based Practice Dec 24 2019 Chemical education is essential to everybody because it deals with ideas that play major roles in personal, social, and economic decisions. This book is based on three principles: that all aspects of chemical education should be associated with research; that the development of opportunities for chemical education should be both a continuous process and be linked to research; and that the professional development of all those associated with chemical education should make extensive and diverse use of that research. It is intended for: pre-service and practising chemistry teachers and lecturers; chemistry teacher educators; chemical education researchers; the designers and managers of formal chemical curricula; informal chemical educators; authors of textbooks and curriculum support materials; practising chemists and chemical technologists. It addresses: the relation between chemistry and chemical education; curricula for chemical education; teaching and learning about chemical compounds and chemical change; the development of teachers; the development of chemical education as a field of enquiry. This is mainly done in respect of the full range of formal education contexts (schools, universities, vocational colleges) but also in respect of informal education contexts (books, science centres and museums).

Chemical Principles Study Guide/Solutions Manual May 21 2022 Written for general chemistry courses, 'Chemical Principles' helps students develop chemical insight by showing the connection between chemical principles and their applications.

Perspectives on Statistical Thermodynamics Aug 20 2019 This original text develops a deep, conceptual understanding of thermal physics and highlights the important links between statistical physics and classical thermodynamics. It examines how thermal physics fits within physics as a whole, and is perfect for undergraduate and graduate students, and researchers interested in a fresh approach to the subject.

NCERT Chemistry Class 11 - [CBSE Board] Jan 05 2021 Syllabus : Unit I : Some Basic Concepts of Chemistry, Unit II : Structure of Atom, Unit III : Classification of Elements and Periodicity in Properties, Unit IV : Chemical Bonding and Molecular Structure, Unit V : States of Matter : Gases and Liquids, Unit VI : Chemical Thermodynamics, Unit VII : Equilibrium, Unit VIII : Redox Reactions, Unit IX : Hydrogen, Unit X : s-Block Elements (Alkali and Alkaline earth metals) Group 1 and Group 2 Elements, Unit XI : Some p-Block Elements General Introduction to p-Block Elements, Unit XII : Organic Chemistry—Some Basic Principles and Techniques, Unit XIII : Hydrocarbons Classification of Hydrocarbons, Unit XIV : Environmental Chemistry Content : 1. Some Basic Concepts of Chemistry, 2. Structure of Atom, 3. Classification of Elements and Periodicity in Properties, 4. Chemical Bonding and Molecular Structure, 5. States of Matter, 6. Thermodynamics, 7. Equilibrium, 8. Redox Reactions, 9. Hydrogen, 10. s-Block Elements 11. p-Block Elements, 12. Organic Chemistry—Some Basic Principles and Techniques 13. Hydrocarbons 14. Environmental Chemistry I. Appendix II. Log-antilog Table

Jun 29 2020

Advanced Data Analysis and Modelling in Chemical Engineering May 09 2021 Advanced Data Analysis and Modeling in Chemical Engineering provides the mathematical foundations of different areas of chemical engineering and describes typical applications. The book presents the key areas of chemical engineering, their mathematical foundations, and corresponding modeling techniques. Modern industrial production is based on solid scientific methods, many of which are part of chemical engineering. To produce new substances or materials, engineers must devise special reactors and procedures, while also observing stringent safety requirements and striving to optimize the efficiency jointly in economic and ecological terms. In chemical engineering, mathematical methods are considered to be driving forces of many innovations in material design and process development. Presents the main mathematical problems and models of chemical engineering and provides the reader with contemporary methods and tools to solve them Summarizes in a clear and straightforward way, the contemporary trends in the interaction between mathematics and chemical engineering vital to chemical engineers in their daily work Includes classical analytical methods, computational methods, and methods of symbolic computation Covers the latest cutting edge computational methods, like symbolic computational methods

A-Level Study Guide Chemistry Ed H2.2 Nov 22 2019 This is an ebook version of the "A-Level Study Guide - Chemistry (Higher 2) - Ed H2.2" published by Step-by-Step International Pte Ltd. [For the revised Higher 2 (H2) syllabus with first exam in 2017.] This ebook gives concise illustrated notes and worked examples. It is intended as a study guide for readers who have studied the O-Level Chemistry or the equivalent. It contains material that most readers should want to take note of when attending formal lessons and/or discussions on the Singapore-Cambridge GCE A-Level Higher 2 (H2) Chemistry. [As the Higher 1 (H1) Chemistry syllabus is a subset of the H2 Chemistry syllabus, this ebook is also suitable for readers studying Chemistry at the H1 level.] The concise notes cover essential steps to understand the relevant theories. The illustrations and worked examples show essential workings to apply those theories. We believe the notes and illustrations will help readers learn to "learn" and apply the relevant knowledge. The ebook should help readers study and prepare for their exams. Relevant feedbacks from Examiner Reports, reflecting what the examiners expected, are incorporated into the notes and illustrations where possible, or appended as notes (NB) where appropriate. It is also a suitable aid for teaching and revision.

Laws of the Game Feb 18 2022 Using game theory and examples of actual games people play, Nobel laureate Manfred Eigen and Ruthild Winkler show how the elements of chance and rules underlie all that happens in the universe, from genetic behavior through economic growth to the composition of music. To illustrate their argument, the authors turn to classic games--backgammon, bridge, and chess--and relate them to physical, biological, and social applications of probability theory and number theory. Further, they have invented, and present here, more than a dozen playable games derived from scientific models for equilibrium, selection, growth, and even the composition of RNA.

Chemical Thermodynamics For Metals And Materials (With Cd-rom For Computer-aided Learning) Sep 20 2019 A number of thermodynamic books claiming to be original in both presentation and approach have been published. However, thermodynamics is still a confusing subject for uninitiated students and an “easy-to-forget” one for graduate engineers. In order to solve these problems, this computer aided learning package — textbook and CD-ROM — takes a new approach. This package is unique and beneficial in that it simulates a classroom lecture: it actually writes important equations and concepts on a virtual board, underlines, draws circles, places ticks to emphasise important points, draws arrows to indicate relationships, uses colours for visual effect, erases some parts to write new lines, and even repeats some parts of the lesson to stress their importance. This realistic simulation is made possible by the employment of the multimedia capabilities of the modern-day computer. Readers are not just passively presented with thermodynamics, they can also interactively select and repeat any particular topic of interest as many times as they want. This flexibility allows readers to choose their own pace of presentation. This complementary set is in many important respects better than the books that are currently available on the subject.

Physical Aspects of Deep Sea Biology Sep 13 2021

The Nature of Science Sep 25 2022 An alphabetically arranged handbook contains essays on two hundred key principles, from Kepler's laws of planetary motion and Mendel's laws of genetics, to lesser-known laws that explain everything from black holes to sunflower patterns.

Chemistry Class 11 Feb 06 2021 Syllabus : Unit I : Some Basic Concepts of Chemistry, Unit II : Structure of Atom, Unit III : Classification of Elements and Periodicity in Properties, Unit IV : Chemical Bonding and Molecular Structure, Unit V : States of Matter : Gases and Liquids, Unit VI : Chemical Thermodynamics, Unit VII : Equilibrium, Unit VIII : Redox Reactions, Unit IX : Hydrogen, Unit X : s-Block Elements (Alkali and Alkaline earth metals) Group 1 and Group 2 Elements, Unit XI : Some p-Block Elements General Introduction to p-Block Elements, Unit XII : Organic Chemistry—Some Basic Principles and Techniques, Unit XIII : Hydrocarbons Classification of Hydrocarbons, Unit XI V : Environmental Chemistry
Content : 1. Some Basic Concepts of Chemistry, 2. Structure of Atom, 3. Classification of Elements and Periodicity in Properties, 4. Chemical Bonding and Molecular Structure, 5. States of Matter, 6.. Thermodynamics, 7. Equilibrium, 8. Redox Reactions, 9. Hydrogen, 10. s-Block Elements 11. p-Block Elements, 12. Organic Chemistry—Some Basic Principles and Techniques 13. Hydrocarbons 14. Environmental Chemistry I. Appendix II. Log-antilog Table

Chemical Thermodynamics at a Glance Oct 26 2022 Chemical thermodynamics considers the energy transformations which drive or which occur as a result of chemical reactions. It is a central discipline of chemistry and chemical engineering, allowing prediction of the direction of spontaneous chemical change and the position of chemical equilibrium in any reacting system. Being grounded in maths, it is often perceived as a difficult subject and many students are never fully comfortable with it. Chemical Thermodynamics at a Glance provides a concise overview of the main principles of Chemical Thermodynamics for students studying chemistry and related courses at undergraduate level. Based on the highly successful and student friendly “at a Glance” approach, the information is presented in integrated, self contained double page spreads of text and illustrative material. The material developed in this book has been chosen to ensure the student grasps the essence of thermodynamics, so those wanting an accessible overview will find this book an ideal source of the information they require. In addition, the structured presentation will provide an invaluable aid to revision for students preparing for examinations.

Oswaal ISC Question Bank Class 11 Chemistry Book (For 2023 Exam) Oct 02 2020 • Strictly as per the latest syllabus for Board 2023 Exam. • Includes Questions of the both -Objective & Subjective Types Questions • Chapterwise and Topicwise Revision Notes for in-depth study • Modified & Empowered Mind Maps & Mnemonics(Only PCMB) for quick learning • Unit wise Self -Assessment Tests • Concept videos for blended learning • Previous Years’ Examination Questions and Answers with detailed explanation to facilitate exam-oriented preparation. • Commonly made error & Answering Tips to aid in exam preparation. • Includes Academically important Questions (AI)

A-level Chemistry Oct 14 2021 Each topic is treated from the beginning, without assuming prior knowledge. Each chapter starts with an opening section covering an application. These help students to understand the relevance of the topic: they are motivational and they make the text more accessible to the majority of students. Concept Maps have been added, which together with Summaries throughout, aid understanding of main ideas and connections between topics. Margin points highlight key points, making the text more accessible for learning and revision. Checkpoints in each chapter test students' understanding and support their private study. A selection of questions are included at the end of each chapter, many form past examination papers. Suggested answers are provided in the Answers Key.

Theory And Problems For Chemistry Olympiad: Challenging Concepts In Chemistry Oct 22 2019 This study guide for the Chemistry Olympiad contains summarized concepts and examples in all areas of chemistry. The chapters are arranged in a logical manner and establishes connections between concepts. Undergraduate chemistry concepts are explained clearly: every equation in physical chemistry is derived and justified while every organic reaction has its reaction mechanism shown and explained, without assuming that readers have university-level background in the subject. The book also contains original Chemistry Olympiad sample problems that readers may use to test their knowledge. This is a first book of its kind, written by Nan Zhihan, International Chemistry Olympiad (IChO) gold medallist and winner of the International Union of Pure and Applied Chemistry (IUPAC) Prize for achieving the highest score in the experimental exam, and experienced Chemistry Olympiad trainer Dr Zhang Sheng, who has served as head mentor of Singapore IChO team for many years. It builds on the experience of both a participant and trainer to help any aspiring Chemistry Olympiad student understand the challenging concepts in chemistry.

Fuel Cell Engines Jul 23 2022 Fuel Cell Engines is an introduction to the fundamental principles of electrochemistry, thermodynamics, kinetics, material science and transport applied specifically to fuel cells. It covers scientific fundamentals and provides a basic understanding that enables proper technical decision-making.

Chemistry Mar 07 2021 The American Chemical Society has launched an activities-based, student-centered approach to the general chemistry course, a textbook covering all the traditional general chemistry topics but arranged in a molecular context appropriate for biology, environmental and engineering students. Written by a team of industry chemists and educators and thoroughly class-tested, Chemistry combines cooperative learning strategies and active learning techniques with a powerful media/supplements package to create an effective introductory text.

Cracking the MCAT with CD-ROM Jun 22 2022 A detailed guide to the rigorous Medical College Admission Test (MCAT) provides a thorough overview of the subject matter covered on the exam, as well as helpful test-preparation advice, and more than one thousand questions and a full-length practice test on CD-ROM. Original. 15,000 first printing.

Chemistry Class XI - SBPD Publications Dec 04 2020 Content : 1. Some Basic Concepts of Chemistry, 2. Structure of Atom, 3. Classification of Elements and Periodicity in Properties, 4. Chemical Bonding and Molecular Structure, 5. States of Matter, 6. Thermodynamics, 7. Equilibrium, 8. Redox Reactions, 9. Hydrogen, 10. s-Block Elements 11. p-Block Elements, 12. Organic Chemistry—Some Basic Principles and Techniques 13. Hydrocarbons 14. Environmental Chemistry I. Appendix II. Log-antilog Table

Oswaal ISC Question Bank Class 11 Physics, Chemistry, Math & Biology (Set of 4 Books) (For 2022-23 Exam) Nov 03 2020 • Strictly as per the Full syllabus for Board 2022-23 Exams • Includes Questions of the both - Objective & Subjective Types Questions • Chapterwise and Topicwise Revision Notes for in-depth study • Modified & Empowered Mind Maps for quick learning • Concept videos for blended learning • Previous Years’ Examination Questions and Answers with detailed explanation to facilitate exam-oriented preparation. • Commonly Made Errors & Answering Tips to aid in exam preparation. • Includes Topics found Difficult & Suggestions for students. • Includes Academically important Questions (AI) • Dynamic QR code to keep the students updated for 2023 Exam paper or any further ISC notifications/circulars

Return to Equilibrium Apr 20 2022 This work contains the proceedings of the Rocky Mountain Region Disaster Mental Health Institute's annual Disaster Mental Health Conference in Laramie, Wyoming, November 6-8, 2008.

Thermodynamics Jul 31 2020 This book offers a comprehensive overview of thermodynamics. It is divided into four parts, the first of which equips readers with a deeper understanding of the fundamental principles of thermodynamics of equilibrium states and of their evolution. The second part

applies these principles to a series of generalized situations, presenting applications that are of interest both in their own right and in terms of demonstrating how thermodynamics, as a theory of principle, relates to different fields. In turn, the third part focuses on non-equilibrium configurations and the dynamics of natural processes. It discusses both discontinuous and continuous systems, highlighting the interference among non-equilibrium processes, and the nature of stationary states and of fluctuations in isolated systems. Lastly, part four introduces the relation between physics and information theory, which constitutes a new frontier in fundamental research. The book includes step-by-step exercises, with solutions, to help readers to gain a fuller understanding of the subjects, and also features a series of appendices providing useful mathematical formulae. Reflecting the content of modern university courses on thermodynamics, it is a valuable resource for students and young scientists in the fields of physics, chemistry, and engineering.

Classical and Geometrical Theory of Chemical and Phase Thermodynamics Nov 15 2021 Because it is grounded in math, chemical thermodynamics is often perceived as a difficult subject and many students are never fully comfortable with it. The first authoritative textbook presentation of equilibrium chemical and phase thermodynamics in a reformulated geometrical framework, *Chemical and Phase Thermodynamics* shows how this famously difficult subject can be accurately expressed with only elementary high-school geometry concepts. Featuring numerous suggestions for research-level extensions, this simplified alternative to standard calculus-based thermodynamics expositions is perfect for undergraduate and beginning graduate students as well as researchers.

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