

Oxtoby Chemistry 7th Edition

NOTE: This edition features the same content as the traditional text in a convenient, three-hole-punched, loose-leaf version. Books a la Carte also offer a great value; this format costs significantly less than a new textbook. Before purchasing, check with your instructor or review your course syllabus to ensure that you select the correct ISBN. Several versions of MyLab(tm) and Mastering(tm) platforms exist for each title, including customized versions for individual schools, and registrations are not transferable. In addition, you may need a Course ID, provided by your instructor, to register for and use MyLab and Mastering products. For courses in two-semester general chemistry. Accurate, data-driven authorship with expanded interactivity leads to greater student engagement. Unrivaled problem sets, notable scientific accuracy and currency, and remarkable clarity have made Chemistry: The Central Science the leading general chemistry text for more than a decade. Trusted, innovative, and calibrated, the text increases conceptual understanding and leads to greater student success in general chemistry by building on the expertise of the dynamic author team of leading researchers and award-winning teachers. In this new edition, the author team draws on the wealth of student data in Mastering(tm) Chemistry to identify where students struggle and strives to perfect the clarity and effectiveness of the text, the art, and the exercises while addressing student misconceptions and encouraging thinking about the practical, real-world use of chemistry. New levels of student interactivity and engagement are made possible through the enhanced eText 2.0 and Mastering Chemistry, providing seamlessly integrated videos and personalized learning throughout the course. Also available with Mastering Chemistry Mastering(tm) Chemistry is the leading online homework, tutorial, and engagement system, designed to improve results by engaging students with vetted content. The enhanced eText 2.0 and Mastering Chemistry work with the book to provide seamless and tightly integrated videos and other rich media and assessment throughout the course. Instructors can assign interactive media before class to engage students and ensure they arrive ready to learn. Students further master concepts through book-specific Mastering Chemistry assignments, which provide hints and answer-specific feedback that build problem-solving skills. With Learning Catalytics(tm) instructors can expand on key concepts and encourage student engagement during lecture through questions answered individually or in pairs and groups. Mastering Chemistry now provides students with the new General Chemistry Primer for remediation of chemistry and math skills needed in the general chemistry course. If you would like to purchase both the loose-leaf version of the text and MyLab and Mastering, search for: 0134557328 / 9780134557328 Chemistry: The Central Science, Books a la Carte Plus MasteringChemistry with Pearson eText -- Access Card Package Package consists of: 0134294165 / 9780134294162 MasteringChemistry with Pearson eText -- ValuePack Access Card -- for Chemistry: The Central Science 0134555635 / 9780134555638 Chemistry: The Central Science, Books a la Carte Edition

Mathematical Physics in Theoretical Chemistry deals with important topics in theoretical and computational chemistry. Topics covered include density functional theory, computational methods in biological chemistry, and Hartree-Fock methods. As the second volume in the Developments in Physical & Theoretical Chemistry series, this volume further highlights the major advances and developments in research, also serving as a basis for advanced study. With a multidisciplinary and encompassing structure guided by a highly experienced editor, the series is designed to enable researchers in both academia and industry stay abreast of developments in physical and theoretical chemistry. Brings together the most important aspects and recent advances in theoretical and computational chemistry. Covers computational methods for small molecules, density-functional methods, and computational chemistry on personal and quantum computers. Presents cutting-edge developments in theoretical and computational chemistry that are applicable to graduate students and research professionals in chemistry, physics, materials science and biochemistry.

Long considered the standard for honors and high-level mainstream general chemistry courses, PRINCIPLES OF MODERN CHEMISTRY continues to set the standard as the most modern, rigorous, and chemically and mathematically accurate text on the market. This authoritative text features an "atoms first" approach and thoroughly revised chapters on Quantum Mechanics and Molecular Structure (Chapter 6), Electrochemistry (Chapter 17), and Molecular Spectroscopy and Photochemistry (Chapter 20). In addition, the text utilizes mathematically accurate and artistic atomic and molecular orbital art, and is student friendly without compromising its rigor. End-of-chapter study aids focus on only the most important key objectives, equations and concepts, making it easier for students to locate chapter content, while applications to a wide range of disciplines, such as biology, chemical engineering, biochemistry, and medicine deepen students' understanding of the relevance of chemistry beyond the classroom.

The author's goal for the book is that it's clearly written, could be read by a calculus student and would motivate them to engage in the material and learn more. Moreover, to create a text in which exposition, graphics, and layout would work together to enhance all facets of a student's calculus experience. They paid special attention to certain aspects of the text: 1. Clear, accessible exposition that anticipates and addresses student difficulties. 2. Layout and figures that communicate the flow of ideas. 3. Highlighted features that emphasize concepts and mathematical reasoning including Conceptual Insight, Graphical Insight, Assumptions Matter, Reminder, and Historical Perspective. 4. A rich collection of examples and exercises of graduated difficulty that teach basic skills as well as problem-solving techniques, reinforce conceptual understanding, and motivate calculus through interesting applications. Each section also contains exercises that develop additional insights and challenge students to further develop their skills.

How teachers view the nature of scientific knowledge is crucial to their understanding of science content and how it can be taught. This book presents an overview of the dynamics of scientific progress and its relationship to the history and philosophy of science, and then explores their methodological and educational implications and develops innovative strategies based on actual classroom practice for teaching topics such as the nature of science, conceptual change,

constructivism, qualitative-quantitative research, and the role of controversies, presuppositions, speculations, hypotheses, and predictions. Field-tested in science education courses, this book is designed to involve readers in critically thinking about the history and philosophy of science and to engage science educators in learning how to progressively introduce various aspects of 'science-in-the-making' in their classrooms, to promote discussions highlighting controversial historical episodes included in the science curriculum, and to expose their students to the controversies and encourage them to support, defend or critique the different interpretations. Innovating Science Teacher Education offers guidelines to go beyond traditional textbooks, curricula, and teaching methods and innovate with respect to science teacher education and classroom teaching.

German Visual Dictionary A visual way to learn German It's a fact—seeing something helps us remember it. This handy guide helps you build your German vocabulary with full-color pictures that illustrate the words. You'll be able to communicate with native speakers faster as you learn and remember more words and their meanings. The book is organized by themes such as transportation, accommodations, restaurants and eating, sports, emergencies, shopping, and more, making it especially useful for travelers. Boost your learning speed today! Inside Navigate a city Handle money like a local Master short conversations Be prepared for emergencies

Continuing a long tradition, Lu's Basic Toxicology, Seventh Edition, combines relatively comprehensive coverage of toxic substances in food, air, and water with brevity, thereby continuing to serve as an updated introductory text for toxicology students and for those involved in allied sciences that require a background in toxicology. The new edition, which now becomes an edited work with contributions from experts around the globe, features four new chapters and a number of existing chapters that have been updated and expanded, notably those on mechanisms of toxic effects, conventional toxicity studies, the cardiovascular system, and risk assessment and regulatory toxicology. The book consists of four parts (Part I–Part IV) that provide guidance on principles of toxicology and testing procedures for toxicities as well as a concise, yet detailed, mechanism of both target organ and nontarget organ toxicities. The book is rounded off with a final section (Part IV) on the toxic effects of chemicals and risk assessment, giving toxicologists, both students and practicing professionals, the necessary tools to enhance their practice. This edition includes new chapters on Clinical Toxicology, Systems Toxicology, Chemicals and Children, and Toxicology of Reproductive Systems, providing the essentials of these topics in the same style as the other chapters in the book. With separate subject and chemical indexes, this is a useful, quick shelf reference for everyone working in toxicology today.

Master problem-solving and prepare for exams using the complete worked-out solutions to all in-text and odd-numbered end-of-chapter questions provided in this manual. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Intended for students of intermediate organic chemistry, this text shows how to write a reasonable mechanism for an organic chemical transformation. The discussion is organized by types of mechanisms and the conditions under which the reaction is executed, rather than by the overall reaction as is the case in most textbooks. Each chapter discusses common mechanistic pathways and suggests practical tips for drawing them. Worked problems are included in the discussion of each mechanism, and "common error alerts" are scattered throughout the text to warn readers about pitfalls and misconceptions that bedevil students. Each chapter is capped by a large problem set.

Contains discussion, illustrations, and exercises aimed at overcoming common misconceptions; emphasizes on models prevails; and covers topics such as: chemical foundations, types of chemical reactions and solution stoichiometry, electrochemistry, and organic and biological molecules.

Research in science education has recognized the importance of history and philosophy of science (HPS). Nature of science (NOS) is considered to be an essential part of HPS with important implications for teaching science. The role played by textbooks in developing students' informed conceptions of NOS has been a source of considerable interest for science educators. In some parts of the world, textbooks become the curriculum and determine to a great extent what is taught and learned in the classroom. Given this background and interest, this monograph has evaluated NOS in university level general chemistry textbooks published in U.S.A. Most textbooks in this study provided little insight with respect to the nine criteria used for evaluating NOS. Some of the textbooks, however, inevitably refer to HPS and thus provide guidelines for future textbooks. A few of the textbooks go into considerable detail to present the atomic models of Dalton, Thomson, Rutherford, Bohr and wave mechanical to illustrate the tentative nature of scientific theories --- an important NOS aspect. These results lead to the question: Are we teaching science as practiced by scientists? An answer to this question can help us to understand the importance of NOS, by providing students an HPS-based environment, so that they too (just like the scientists) feel the thrill and excitement of discovering new things. This monograph provides students and teachers guidelines for introducing various aspects of NOS, based on historical episodes.

This book explores the evolving nature of objectivity in the history of science and its implications for science education. It is generally considered that objectivity, certainty, truth, universality, the scientific method and the accumulation of experimental data characterize both science and science education. Such universal values associated with science may be challenged while studying controversies in their original historical context. The scientific enterprise is not characterized by objectivity or the scientific method, but rather controversies, alternative interpretations of data, ambiguity, and uncertainty. Although objectivity is not synonymous with truth or certainty, it has eclipsed other epistemic virtues and to be objective is often used as a synonym for scientific. Recent scholarship in history and philosophy of science has shown that it is not the experimental data (Baconian orgy of quantification) but rather the diversity / plurality in a scientific discipline that contributes toward understanding objectivity. History of science shows that objectivity and subjectivity can be considered as the two poles of a continuum and this dualism leads to a conflict in understanding the evolving nature of objectivity. The history of objectivity is nothing less than the history of science itself and the evolving and varying forms of objectivity does not mean that one replaced the other in a sequence but rather each form supplements the others. This book is remarkable for its insistence that the philosophy of science, and in particular that discipline's analysis of objectivity as the supposed hallmark of the scientific method, is of direct value to teachers of science. Meticulously, yet in a most readable way, Mansoor Niaz looks at the way objectivity has been dealt with over the years in influential educational journals and in textbooks; it's fascinating how certain perspectives fade, while basic questions show no sign of going away. There are few books that take both philosophy and education seriously – this one does! Roald Hoffmann, Cornell University, chemist, writer and Nobel Laureate in Chemistry

Finite Element Analysis and Computational Fluid Dynamics have been introduced in modelling and simulation of drying and storage systems, these techniques are expected to dominate the future research and development of drying and storages, and should reduce losses and improve the quality of agricultural products, enhancing food security globally. Drying and Storage of Cereal Grains, Second Edition, covers

the wide spectrum of drying and storage methods applied to economically important cereal produce, providing numerical examples for better understanding the complexity in drying and storage systems through modelling and simulation, aiding design and management of drying and storage systems. Chapters 1 to 8 look at air and grain moisture equilibria, psychrometry, physical and thermal properties of cereal grains, principles of air flow, and provide detailed analyses of grain drying. Chapters 9 to 13 focus on temperature and moisture in grain storages, and provide comprehensive treatment of modern grain storage systems. The book also includes a number of unsolved problems at the end of each chapter for further practice. This revised second edition includes new sections on - heat of sorption finite element modeling of single kernel CFD modeling of fluidized bed drying exergy analysis and neural network modeling numerical solution of two dimensional temperature and moisture changes in stored grain This book will provide students in agricultural engineering and food engineering with a wide spectrum of drying and storage studies previously unavailable in a single monograph. It will also serve as an excellent reference for practicing agricultural engineers, food engineers and food technologists.

If you haven't looked at The Bedford Handbook in a while, look again: This edition has everything your students need to become stronger writers--in a briefer book. This reimagined Bedford Handbook takes a fresh "essentials" approach to the familiar coverage of writing, research, style, and grammar that The Bedford Handbook has always had. The result is a handbook that's equal parts approachable and comprehensive. Students will quickly find answers in the book's direct explanations and step-by-step instruction. They'll get the practice and guidance they need with exercises, how-to guides, model papers, and class-tested examples. The advice you trust from Diana Hacker and Nancy Sommers is here. It all comes in a book that's easier to carry, easier to use, and more affordable than ever.

THE QUICK AND PAINLESS WAY TO TEACH YOURSELF BASIC CHEMISTRY CONCEPTS AND TERMS Chemistry: A Self-Teaching Guide is the easy way to gain a solid understanding of the essential science of chemistry. Assuming no background knowledge of the subject, this clear and accessible guide covers the central concepts and key definitions of this fundamental science, from the basic structure of the atom to chemical equations. An innovative self-guided approach enables you to move through the material at your own pace—gradually building upon your knowledge while you strengthen your critical thinking and problem-solving skills. This edition features new and revised content throughout, including a new chapter on organic chemistry, designed to dramatically increase how fast you learn and how much you retain. This powerful learning resource features: An interactive, step-by-step method proven to increase your understanding of the fundamental concepts of chemistry Learning objectives, practice questions, study problems, and a self-review test in every chapter to reinforce your learning An emphasis on practical concepts and clear explanations to ensure that you comprehend the material quickly Engaging end-of-chapter stories connecting the material to a relevant topic in chemistry to bring important concepts to life Concise, student-friendly chapters describing major chemistry concepts and terms, including the periodic table, atomic weights, chemical bonding, solutions, gases, solids, and liquids Chemistry: A Self-Teaching Guide is an ideal resource for high school or college students taking introductory chemistry courses, for students taking higher level courses needing to refresh their knowledge, and for those preparing for standardized chemistry and medical career admission tests.

Students can prepare for exams and succeed in your chemistry course with this comprehensive solutions manual! Featuring worked-out solutions to every odd-numbered problem in **PRINCIPLES OF MODERN CHEMISTRY**, 8th Edition, this manual shows students how to approach and solve problems using the same step-by-step explanations found in the textbook examples.

Prepare for exams and succeed in your chemistry course with this comprehensive solutions manual! Featuring worked out-solutions to the problems in **PRINCIPLES OF MODERN CHEMISTRY**, 7th Edition, this manual shows you how to approach and solve problems using the same step-by-step explanations found in your textbook examples. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

This Text Provides A Balanced And Current Treatment Of The Full Spectrum Of Engineering Materials, Covering All The Physical Properties, Applications And Relevant Properties Associated With The Subject. It Explores All The Major Categories Of Materials While Offering Detailed Examinations Of A Wide Range Of New Materials With High-Tech Applications.

Includes worked-out solutions to all Skill Development Exercises.

In recent decades, repeated use of herbicides in the same field has imposed selection for resistance in species that were formerly susceptible. On the other hand, considerable research in the private and public sectors has been directed towards introducing herbicide tolerance into susceptible crop species. The evolution of herbicide resistance, understanding its mechanisms, characterisation of resistant weed biotypes, development of herbicide-tolerant crops and management of resistant weeds are described throughout the 36 chapters of this book. It has been written by leading researchers based on the contributions made at the International Symposium on Weed and Crop Resistance to Herbicides held at Córdoba, Spain. This book will be a good reference source for research scientists and advanced students. Atmospheric chemistry is one of the fastest growing fields in the earth sciences. Until now, however, there has been no book designed to help students capture the essence of the subject in a brief course of study. Daniel Jacob, a leading researcher and teacher in the field, addresses that problem by presenting the first textbook on atmospheric chemistry for a one-semester course. Based on the approach he developed in his class at Harvard, Jacob introduces students in clear and concise chapters to the fundamentals as well as the latest ideas and findings in the field. Jacob's aim is to show students how to use basic principles of physics and chemistry to describe a complex system such as the atmosphere. He also seeks to give students an overview of the current state of research and the work that led to this point. Jacob begins with atmospheric structure, design of simple models, atmospheric transport, and the continuity equation, and continues with geochemical cycles, the greenhouse effect, aerosols, stratospheric ozone, the oxidizing power of the atmosphere, smog, and acid rain. Each chapter concludes with a problem set based on recent scientific literature. This is a novel approach to problem-set writing, and one that successfully introduces students to the prevailing issues. This is a major contribution to a growing area of study and will be welcomed enthusiastically by students and teachers alike.

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Spanish Visual Dictionary Learn Spanish vocabulary faster! It's a fact—seeing something helps you remember it. This handy guide helps you build your Spanish vocabulary with full-color pictures illustrating every term. You'll be able to communicate with native speakers faster as you learn and remember more words and their meanings. The book is organized by themes such as transportation, accommodations, restaurants and eating, sports, emergencies, and shopping, making it especially useful for travelers. Boost your learning speed and get talking in Spanish today! Inside
Transportation terminology Getting around a city Restaurants and food orders Handling an emergency

Help your students improve their performance at exam time with this manual's complete solutions to the even-numbered end-of-chapter Questions and Problems answered in Appendix 5, including the Challenge Problems. The authors include references to textbook sections and tables to help guide your students through the problem-solving techniques employed by the authors.

An Introduction to Stochastic Modeling provides information pertinent to the standard concepts and methods of stochastic

modeling. This book presents the rich diversity of applications of stochastic processes in the sciences. Organized into nine chapters, this book begins with an overview of diverse types of stochastic models, which predicts a set of possible outcomes weighed by their likelihoods or probabilities. This text then provides exercises in the applications of simple stochastic analysis to appropriate problems. Other chapters consider the study of general functions of independent, identically distributed, nonnegative random variables representing the successive intervals between renewals. This book discusses as well the numerous examples of Markov branching processes that arise naturally in various scientific disciplines. The final chapter deals with queueing models, which aid the design process by predicting system performance. This book is a valuable resource for students of engineering and management science. Engineers will also find this book useful.

The Student Solutions manual, authored by Wade Freeman of the University of Illinois at Chicago, contains solutions to the odd numbered problems.

Being a student himself, Michael Rosen knows exactly how it feels when trying to learn difficult concepts. He has extensive experience tutoring General Chemistry and understands where students need help the most. THE GUIDE TO SURVIVING GENERAL CHEMISTRY is a straight-to-the-point resource that gives students exactly what they need to know, along with the best techniques for learning general chemistry. Endorsed by Professor Mark Oram, Ph.D for accuracy and topic coverage, this text is filled with study tips, example problems, and worked out solutions for all topics in the course. Michael has written the ideal guide for mastering General Chemistry. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Succeed in chemistry with the clear explanations, problem-solving strategies, and dynamic study tools of CHEMISTRY & CHEMICAL REACTIVITY, 9e. Combining thorough instruction with the powerful multimedia tools you need to develop a deeper understanding of general chemistry concepts, the text emphasizes the visual nature of chemistry, illustrating the close interrelationship of the macroscopic, symbolic, and particulate levels of chemistry. The art program illustrates each of these levels in engaging detail--and is fully integrated with key media components. In addition access to OWLv2 may be purchased separately or at a special price if packaged with this text. OWLv2 is an online homework and tutorial system that helps you maximize your study time and improve your success in the course. OWLv2 includes an interactive eBook, as well as hundreds of guided simulations, animations, and video clips. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

For freshman/sophomore-level courses treating calculus of both one and several variables. Clear and Concise! Varberg focuses on the most critical concepts freeing you to teach the way you want! This popular calculus text remains the shortest mainstream calculus book available – yet covers all the material needed by, and at an appropriate level for, students in engineering, science, and mathematics. It's conciseness and clarity helps students focus on, and understand, critical concepts in calculus without them getting bogged down and lost in excessive and unnecessary detail. It is accurate, without being excessively rigorous, up-to-date without being faddish. The authors make effective use of computing technology, graphics, and applications. Ideal for instructors who want a no-nonsense, concisely written treatment.

Student Solutions Manual Cengage Learning

Buddhism: Introducing the Buddhist Experience, Second Edition, focuses on the depth of Buddhist experience as expressed in the teachings and practices of its religious and philosophical traditions. Taking a broad and inclusive approach, this unique work spans over 2,500 years, offering chapters on Buddhism's origins in India; Theravada and Mahayana Buddhism; and Buddhism in Southeast Asia, Tibet, China, Korea, and Japan. It also includes an extensive discussion of modern, socially engaged Buddhism and a concluding chapter on the spread of Buddhism to the West. Author Donald W. Mitchell provides substantial selections of primary text material throughout that illustrate a great variety of moral, cultural, psychological, meditative, and spiritual Buddhist experiences. Buddhism features twenty-two boxed personal narratives by respected Buddhist leaders and scholars, including His Holiness the Dalai Lama, Dharma Master Sheng Yen, Dharma Master Cheng Yen, Jeffrey Hopkins, Sulak Sivaraksa, Rita M. Gross, Chatsumarn Kabilsingh, and Robert Aitken. The text also includes photographs, maps, a pronunciation guide, and a glossary of technical terms. Integrating more information about how Buddhism is actually practiced around the world today, the second edition adds six brief end-of-chapter essays by scholars and practitioners on cultural experiences of Buddhism in Thailand, Tibet, China, Korea, Japan, and America. Ideal for courses in Buddhism, Asian religions, and Asian philosophy, this edition also offers additional photographs, new sections on topics like Buddhist cosmology, expanded coverage of Buddhism and globalization, and updated suggestions for further reading

By the time chemistry students are ready to study physical chemistry, they've completed mathematics courses through calculus. But a strong background in mathematics doesn't necessarily equate to knowledge of how to apply that mathematics to solving physicochemical problems. In addition, in-depth understanding of modern concepts in physical chemistry requires knowledge of mathematical concepts and techniques beyond introductory calculus, such as differential equations, Fourier series, and Fourier transforms. This results in many physical chemistry instructors spending valuable lecture time teaching mathematics rather than chemistry. Barrante presents both basic and advanced mathematical techniques in the context of how they apply to physical chemistry. Many problems at the end of each chapter test students' mathematical knowledge. Designed and priced to accompany traditional core textbooks in physical chemistry, Applied Mathematics for Physical Chemistry provides students with the tools essential for answering questions in thermodynamics, atomic/molecular structure, spectroscopy, and statistical mechanics. This book explores the relationship between the content of chemistry education and the history and philosophy of science (HPS) framework that underlies such education. It discusses the need to present an image that reflects how chemistry developed and progresses. It proposes that chemistry should be taught the way it is practiced by chemists: as a human enterprise, at the interface of scientific practice and HPS. Finally, it sets out to convince teachers to go beyond the traditional classroom practice and explore new teaching strategies. The importance of HPS has been recognized for the science curriculum since the middle of the 20th century. The need for teaching chemistry within a historical context is not difficult to understand as HPS is not far below the surface in any science classroom. A review of the literature shows that the traditional chemistry classroom, curricula, and

textbooks while dealing with concepts such as law, theory, model, explanation, hypothesis, observation, evidence and idealization, generally ignore elements of the history and philosophy of science. This book proposes that the conceptual understanding of chemistry requires knowledge and understanding of the history and philosophy of science. "Professor Niaz's book is most welcome, coming at a time when there is an urgently felt need to upgrade the teaching of science. The book is a huge aid for adding to the usual way - presenting science as a series of mere facts - also the necessary mandate: to show how science is done, and how science, through its history and philosophy, is part of the cultural development of humanity." Gerald Holton, Mallinckrodt Professor of Physics & Professor of History of Science, Harvard University "In this stimulating and sophisticated blend of history of chemistry, philosophy of science, and science pedagogy, Professor Mansoor Niaz has succeeded in offering a promising new approach to the teaching of fundamental ideas in chemistry. Historians and philosophers of chemistry --- and above all, chemistry teachers --- will find this book full of valuable and highly usable new ideas" Alan Rocke, Case Western Reserve University "This book artfully connects chemistry and chemistry education to the human context in which chemical science is practiced and the historical and philosophical background that illuminates that practice. Mansoor Niaz deftly weaves together historical episodes in the quest for scientific knowledge with the psychology of learning and philosophical reflections on the nature of scientific knowledge and method. The result is a compelling case for historically and philosophically informed science education. Highly recommended!" Harvey Siegel, University of Miami "Books that analyze the philosophy and history of science in Chemistry are quite rare. 'Chemistry Education and Contributions from History and Philosophy of Science' by Mansoor Niaz is one of the rare books on the history and philosophy of chemistry and their importance in teaching this science. The book goes through all the main concepts of chemistry, and analyzes the historical and philosophical developments as well as their reflections in textbooks. Closest to my heart is Chapter 6, which is devoted to the chemical bond, the glue that holds together all matter in our earth. The chapter emphasizes the revolutionary impact of the concept of the 'covalent bond' on the chemical community and the great novelty of the idea that was conceived 11 years before quantum mechanics was able to offer the mechanism of electron pairing and covalent bonding. The author goes then to describe the emergence of two rival theories that explained the nature of the chemical bond in terms of quantum mechanics; these are valence bond (VB) and molecular orbital (MO) theories. He emphasizes the importance of having rival theories and interpretations in science and its advancement. He further argues that this VB-MO rivalry is still alive and together the two conceptual frames serve as the tool kit for thinking and doing chemistry in creative manners. The author surveys chemistry textbooks in the light of the how the books preserve or not the balance between the two theories in describing various chemical phenomena. This Talmudic approach of conceptual tension is a universal characteristic of any branch of evolving wisdom. As such, Mansoor's book would be of great utility for chemistry teachers to examine how can they become more effective teachers by recognizing the importance of conceptual tension". Sason Shaik Saeree K. and Louis P. Fiedler Chair in Chemistry Director, The Lise Meitner-Minerva Center for Computational Quantum Chemistry, The Hebrew University of Jerusalem, ISRAEL

Ideal for courses in Asian or Eastern religions, Religions of Asia Today, Fourth Edition, covers the same material contained in the authors' longer textbook, World Religions Today, Sixth Edition, while also featuring a unique chapter on Islam in Asia. Revealing the significance of religion in contemporary life, it explores Hinduism, Buddhism, South Asian religions, East Asian religions, indigenous religions, and new religions as dynamic, ongoing forces in the lives of individuals and in the collective experience of modern societies. This unique volume accomplishes two goals: it connects today's religions to their classical beliefs and practices and focuses on how these religions have both radically changed the modern world and been changed by it. Thoroughly revised, the fourth edition features streamlined content for greater accessibility; updated material on recent world events; and updated timelines.

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