Book Chemistry Free

Organic Chemistry of Explosives is the first text to bring together the essential methods and routes used for the synthesis of organic explosives in a single volume. Assuming no prior knowledge, the book discusses everything from the simplest mixed acid nitration of toluene, to the complex synthesis of highly energetic caged nitro compounds. Reviews laboratory and industrial methods, which can be used to introduce aliphatic C-nitro, aromatic C-nitro, N-nitro, and nitrate ester functionality into organic compounds Discusses the advantages and disadvantages of each synthetic method or route, with scope, limitations, substrate compatibility and other important considerations Features numerous examples in the form of text, reaction diagrams, and tables.

Essentials of Computational Chemistry provides a balanced introduction to this dynamic subject. Suitable for both experimentalists and theorists, a wide range of samples and applications are included drawn from all key areas. The book carefully leads the reader thorough the necessary equations providing information explanations and reasoning where necessary and firmly placing each equation in context.

Sixth graders have to balance their academics and social lives. It isn't easy, especially if they're stuck on lessons that are difficult to digest. That's why we decided to create this chemistry book of physical and chemical reactions. With easy-to-understand texts and wonderful background images, this book promises an easy read. This is definitely a must-have!

At a time when U.S. high school students are producing low scores in mathematics and science on international examinations, a thorough grounding in physical chemistry should not be considered optional for science undergraduates. Based on the author's thirty years of teaching, Essentials of Physical Chemistry merges coverage of calculus with chemist

A Novel

Introduction to Chemistry

Analysis and Instrumentation

Synthesis, Characterization, and Biomedical Applications

BANNED: The Golden Book of Chemistry Experiments was a children's chemistry book written in the 1960s by Robert Brent and illustrated by Harry Lazarus, showing how to set up your own home laboratory and conduct over 200 experiments. The book is controversial, as many of the experiments contained in the book are now considered too dangerous for the general public. There are apparently only 126 copies of this book in libraries worldwide. Despite this, its known as one of the best DIY chemistry books every published. The book was a source of inspiration to David Hahn, nicknamed "the Radioactive Boy Scout" by the media, who tried to collect a sample of every chemical element and also built a model nuclear reactor (nuclear reactions however are not covered in this book), which led to the involvement of the authorities. On the other hand, it has also been the inspiration for many children who went on

to get advanced degrees and productive chemical careers in industry or academia.
This is part one of two for Chemistry by OpenStax. This book covers chapters 1-11. Chemistry is designed for the two-semester general chemistry course. For many students, this course provides the foundation to a career in chemistry, while for others, this may be their only college-level science course. As such, this textbook provides an important opportunity for students to learn the core concepts of chemistry and understand how those concepts apply to their lives and the world around them. The text has been developed to meet the scope and sequence of most general chemistry courses. At the same time, the book includes a number of innovative features designed to enhance student learning. A strength of Chemistry is that instructors can customize the book, adapting it to the approach that works best in their classroom. The images in this textbook are grayscale.
The Revised Edition Retains The Essential Theories Of Nuclear Structure And Stability, Radioactivity And The Principles Of Fission, Fusion And Breeder Reactors Of The Earlier Editions. The Preparation Of The More Commonly Used Radioisotopes And Their Uses As Tracers In Research, Medicine, Agriculture And Industry Are Described. The Book Also Covers The Elements Of Radiation And Radiochemistry Illustrated With Additional Examples. The Section On Mossbauer Effect Is Retained. The Chapter On The Detection And Measurement Of Radioactivity Is Revised To Include Thermo Luminescence And Cerenkov Detectors.New Additions In The Present Edition Include A Whole Chapter On The Separation And Uses Of Stable And Radioactive Isotopes Needed In Bulk Amounts In The Atomic Age. How An Extension Of Basic Principles Of Nuclear Magnetic Resonance (Nmr) Has Led To The Sophisticated Magnetic Resonance Imaging (Mri), The Latest Diagnostic Tool In Medicine Is Discussed Lucidly. Another Chapter Is Added Entitled A Roll-Call Of Elementary Particles , Wherein The Baffling Properties Of Quarks And Gluons, With Their Esoteric Flavours, Colours, Strangeness And Charm Are Reviewed Showing How Their Scientific Characteristics Tend To Merge In Philosophy.The Book Meets The Needs Of Honours And Post-Graduate Students Offering Nuclear, Radiation And Radiochemistry.
For B.Sc 3rd year students of all Indian Universities. The book has been prepared keeping view the syllabi prepared by different universities on the basis of Model UGC Curriculum. A large number of illustrations, pictures and interesting examples have been provided to make the reading interesting and understandable. The question that have been provided in the Exercise are in tune with the latest pattern of examination.
Advanced Chemistry
Essentials of Physical Chemistry
An Intermediate Text
March's Advanced Organic Chemistry
Physical Chemistry and Acid-Base Properties of Surfaces
For more than a quarter century, Cotton and Wilkinson's Advanced Inorganic Chemistry has been the source that students and professional chemists have turned to for the background needed to understand current research literature in inorganic chemistry and aspects of organometallic chemistry. Like its predecessors, this updated Sixth Edition is organized around the periodic table of elements and provides a systematic treatment of the chemistry of all chemical elements and their compounds. It incorporates important recent developments with an emphasis on advances in the interpretation of structure, bonding, and reactivity.“/p> From the reviews of the Fifth Edition: "The first place to go when seeking general information about the chemistry of a particular element, especially when up-to-date, authoritative information is desired." —Journal of the American Chemical Society "Every student with a serious interest in inorganic chemistry should have [this

book]." —Journal of Chemical Education "A mine of information . . . an invaluable guide." —Nature "The standard by which all other inorganic chemistry books are judged." —Nouveau Journal de Chimie "A masterly overview of the chemistry of the elements." —The Times of London Higher Education Supplement "A bonanza of information on important results and developments which could otherwise easily be overlooked in the general deluge of publications." —Angewandte Chemie

Chemistry 2e is designed to meet the scope and sequence requirements of the two-semester general chemistry course. The textbook provides an important opportunity for students to learn the core concepts of chemistry and understand how those concepts apply to their lives and the world around them. The book also includes a number of innovative features, including interactive exercises and real-world applications, designed to enhance student learning. The second edition has been revised to incorporate clearer, more current, and more dynamic explanations, while maintaining the same organization as the first edition. Substantial improvements have been made in the figures, illustrations, and example exercises that support the text narrative.

Explores bioconjugate properties and applications ofpolymers, dendrimers, lipids, nanoparticles, and nanotubes Bioconjugation has enabled breakthroughs across many areas ofindustry and biomedicine. With its emphasis on synthesis,properties and applications, this book enables readers tounderstand the connection between chemistry and the biologicalapplication of bioconjugated materials. Its detailed descriptionsof methods make it possible for researchers to fabricate and takefull advantage of bioconjugates for a broad range of applications.Moreover, the book sets the foundation for the development of newapplications, including assays, imaging, biosensors, drug delivery,and diagnostics. Chemistry of Bioconjugates features contributions from aninternational team of leading experts and pioneers in the field.These contributions reflect the authors' firsthand laboratoryexperience as well as a thorough review of the current literature.The book's six sections examine: General methods of bioconjugation Polymer bioconjugates Organic nanoparticle-based bioconjugates Inorganic nanomaterial bioconjugates, including metals andmetal oxides Cell-based, hydrogel/microgel, and glyco-bioconjugates Characterization, physico-(bio)chemical properties, andapplications of bioconjugates This comprehensive exploration of bioconjugates includesdiscussions of polymers, dendrimers, lipids, nanoparticles, andnanotubes. References at the end of each chapter serve as a gatewayto the most important original research findings and reviews in thefield. By drawing together and analyzing all the latest chemicalmethods and research findings on the physico-chemical andbiochemical properties of bioconjugates, Chemistry ofBioconjugates sheds new light on the significance and potentialof bioconjugation. The book is recommended for organic and polymerchemists, biochemists, biomaterial scientists, carbohydratechemists, biophysicists, bioengineers, and drug and gene deliveryscientists.

"Chemistry is designed for the two-semester general chemistry course. For many students, this course provides the foundation to a career in chemistry, while for others, this may be their only college-level science course. As such, this textbook provides an important opportunity for students to learn the core concepts of chemistry and understand how those concepts apply to their lives and the world

around them. The text has been developed to meet the scope and sequence of most general chemistry courses. At the same time, the book includes a number of innovative features designed to enhance student learning. A strength of Chemistry is that instructors can customize the book, adapting it to the approach that works best in their classroom."--Openstax College website.

Concise Physical Chemistry

The Chemistry, Properties and Tests of Precious Stones

The Golden Book of Chemistry Experiments

Principles, Patterns, and Applications

Chemistry

Translated by Florence Constable Bicknell. A wondrous introduction to the world of chemistry, designed specifically for younger readers with the intention of arousing their interest in science. Using everyday objects found around the house or in the local store, this book is set as a storyline in which an "Uncle Paul" teaches his two nephews the secrets behind building an artificial volcano; how to set metals on fire; the flammable properties of water; how to make a fire hotter; how to make soap bubbles rise; how to make invisible ink; the science behind effervescent wines, ciders, and beer; how plants feed on carbon, water, and air-and much more. From the translator's preface: "The personal, biographical interest of the book is not to be overlooked. The boys Jules and Emile are the author's own children; faithfully portrayed even to the names they bear. In his captivating fashion the man of vast learning makes himself at once teacher and comrade to his young hearers, and we learn that 'his chemistry lessons especially had a great success.' "With apparatus of his own devising and of the simplest kind he could perform a host of elementary experiments, the apparatus as a rule consisting of the most ordinary materials, such as a common flask or bottle, an old mustard-pot, a tumbler, a goose-quill or a pipe-stem. "A series of astonishing phenomena amazed their wondering eyes. He made them see, touch, taste, handle, and smell, and always 'the hand assisted the word, ' always 'the example accompanied the precept, ' for no one more fully valued the profound maxim, so neglected and misunderstood, that 'to see is to know.' "Though living creatures necessarily claimed the naturalist's first affections, he nonetheless 'animates even the simple elementary bodies, celebrating the marvelous activities of the air, the violence of chlorin, the metamorphoses of carbon, the

miraculous bridals of phosphorus, ' and the 'splendors which accompany the birth of a drop of water.'"

Modern Analytical Chemistry is a one-semester introductory text that meets the needs of all instructors. With coverage in both traditional topics and modern-day topics, instructors will have the flexibilty to customize their course into what they feel is necessary for their students to comprehend the concepts of analytical chemistry.

Designed for students in Nebo School District, this text covers the Utah State Core Curriculum for chemistry with few additional topics.

This three-part treatment translates the technical language of research monographs on the theory of free energy transfer in biology, making the subject more accessible to novices. 1989 edition.

Elements of Chemistry

Free Energy Transduction and Biochemical Cycle Kinetics

Theories and Models

Essentials of Nuclear Chemistry

Introductory Chemistry Online!

NEW YORK TIMES BESTSELLER • GOOD MORNING AMERICA BOOK CLUB PICK • A must-read debut! Meet Elizabeth Zott: a "formidable, unapologetic and inspiring" (PARADE) scientist in 1960s California whose career takes a detour when she becomes the unlikely star of a beloved TV cooking show in this novel that is "irresistible, satisfying and full of fuel. It reminds you that change takes time and always requires heat" (The New York Times Book Review). "A unique heroine ... you'll find yourself wishing she wasn't fictional." —Seattle Times Chemist Elizabeth Zott is not your average woman. In fact, Elizabeth Zott would be the first to point out that there is no such thing as an average woman. But it's the early 1960s and her all-male team at Hastings Research Institute takes a very unscientific view of equality. Except for one: Calvin Evans; the lonely, brilliant, Nobel-prize nominated grudge-holder who falls in love with—of all things—her mind. True chemistry results. But like science, life is unpredictable. Which is why a few years later Elizabeth Zott finds herself not only a single mother, but the reluctant star of America's most beloved cooking show Supper at Six. Elizabeth's unusual approach to cooking ("combine one tablespoon acetic acid with a pinch of sodium chloride") proves revolutionary. But as her following grows, not everyone is happy. Because as it turns out, Elizabeth Zott

isn't just teaching women to cook. She's daring them to change the status quo. Laugh-out-loud funny, shrewdly observant, and studded with a dazzling cast of supporting characters, Lessons in Chemistry is as original and vibrant as its protagonist.

*Ideal for those who have previously studies organic chemistry butnot in great depth and with little exposure to organic chemistry ina formal sense. This text aims to bridge the gap betweenintroductory-level instruction and more advanced graduate-leveltexts, reviewing the basics as well as presenting the more advancedideas that are currently of importance in organic chemistry. * Provides students with the organic chemistry background requiredto succeed in advanced courses. * Practice problems included at the end of each chapter.*

Introductory Chemistry creates light bulb moments for students and provides unrivaled support for instructors! Highly visual, interactive multimedia tools are an extension of Kevin Revell's distinct author voice and help students develop critical problem solving skills and master foundational chemistry concepts necessary for success in chemistry.

Fully revised and updated content matching new Cambridge International Examinations 9701 syllabus for first examination in 2016. Endorsed by Cambridge International Examinations, this digital edition comprehensively covers all the knowledge and skills students need during the A Level Chemistry course (9701), for first examination in 2016, in a reflowable format, adapting to any screen size or device. Written by renowned experts in Chemistry teaching, the text is written in an accessible style with international learners in mind. Self-assessment questions allow learners to track their progress, and exam-style questions help learners to prepare thoroughly for their examinations. Answers to all the questions from within the Coursebook are provided.

Organic Chemistry

Organic Chemistry 1

Introduction to Soil Chemistry

From Gunpowder to Graphene, 250 Milestones in the History of Chemistry

The History of Chemistry

From atoms and fluorescent pigments to sulfa drug synthesis and buckyballs, this lush and authoritative chronology presents 250 milestones in the world of chemistry. As the "central science" that bridges biology and physics, chemistry plays an important role in countless

medical and technological advances. Covering entertaining stories and unexpected applications, chemist and journalist Derek B. Lowe traces the most important—and surprising—chemical discoveries.

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.

Comprehensive, Rigorous Prep for MCAT Chemistry The MCAT Chemistry Book presents a comprehensive review of general chemistry and organic chemistry to prepare for the Medical College Admission Test. Part I presents general chemistry concepts, and Part II presents organic chemistry concepts. The review sections are written in a user-friendly manner to simplify and reduce the student's burden when deciphering difficult concepts. At the end of each chapter, practice questions are included to test the understanding of the key concepts. Answers and explanations for the practice questions are provided after the review sections. Illustrations and tables are included wherever necessary to focus and clarify key ideas and concepts.

PROFESSOR CARBONIC was diligently at work in his spacious laboratory, analyzing, mixing and experimenting. He had been employed for more than fifteen years in the same pursuit of happiness, in the same house, same laboratory, and attended by the same servant woman, who in her long period of service had attained the plumpness and respectability of two hundred and ninety pounds.

Essentials of Computational Chemistry

Cambridge International AS and A Level Chemistry Coursebook with CD-ROM

Physical and Chemical Reactions : 6th Grade Chemistry Book | Children's Chemistry Books

An Open Textbook

Essentials of Chemistry

The first part of this book looks at the consequence of chemical and topological defects existing on real surfaces, which explain the wettability of super hydrophilc and super hydrophobic surfaces. There follows an in-depth analysis of the acido-basicity of surfaces with, as an illustration, different wettability experiments on real materials. The next chapter deals with various techniques enabling the measurement of acido basicity of the surfaces including IR and XPS technics. The last part of the book presents an electrochemical point of view which explains the surface charges of the oxide at contact with water or other electrolyte solutions in the frame of Bronsted acido-basicity concept. Various consequences are deduced from such analyses illustrated by original measurement of the point of zero charge or by understanding the basic principles of the electrowetting experiments.

This is part two of two for Chemistry: Atoms First by OpenStax. This book covers chapters 11-21. Chemistry: Atoms First is a peer-reviewed, openly licensed introductory textbook produced through a collaborative publishing partnership between OpenStax and the University of Connecticut and UConn Undergraduate

Student Government Association. This title is an adaptation of the OpenStax Chemistry text and covers scope and sequence requirements of the two-semester general chemistry course. Reordered to fit an atoms first approach, this title introduces atomic and molecular structure much earlier than the traditional approach, delaying the introduction of more abstract material so students have time to acclimate to the study of chemistry. Chemistry: Atoms First also provides a basis for understanding the application of quantitative principles to the chemistry that underlies the entire course. The images in this textbook are grayscale.

Like the author's other companion books, The Chemistry Companion provides high quality information in unique one-page-per-topic presentations that do not overburden and distract with excessive details. The book offers concise summaries of general chemistry concepts, easily accessible in a convenient, reader-friendly format.Suitable as an introducti

Chemical nomenclature is used to identify a chemical species by means of written or spoken words and enables a common language for communication amongst chemists. Nomenclature for chemical compounds additionally contains an explicit or implied relationship to the structure of the compound, in order that the reader or listener can deduce the structure from the name. This purpose requires a system of principles and rules, the application of which gives rise to a systematic nomenclature. Of course, a wide range of traditional names, semisystematic or trivial, are also in use for a core group of common compounds. Detailing the latest rules and international practice, this new volume can be considered a guide to the essential organic chemical nomenclature, commonly described as the "Blue Book". An invaluable source of information for organic chemists everywhere and the definitive guide for scientists working in academia or industry, for scientific publishers of books, journals and databases, and for organisations requiring internationally approved nomenclature in a legal or regulatory environment.

Reactions, Mechanisms, and Structure

IUPAC Recommendations and Preferred Names 2013

Nomenclature of Organic Chemistry

Advanced Inorganic Chemistry

Modern Analytical Chemistry

This book is a physical chemistry textbook that presents theessentials of physical chemistry as a logical sequence from itsmost modest beginning to contemporary research topics. Many bookscurrently on the market focus on the problem sets with a cursorytreatment of the conceptual background and theoretical material,whereas this book is concerned only with the conceptual developmentof the subject. Comprised of 19 chapters, the book willaddress ideal gas laws, real gases, the thermodynamics of simplesystems, thermochemistry, entropy and the second law, the Gibbsfree energy,

equilibrium, statistical approaches to thermodynamics,the phase rule, chemical kinetics, liquids and solids, solutionchemistry, conductivity, electrochemical cells, atomic theory, wavemechanics of simple systems, molecular orbital theory, experimentaldetermination of molecular structure, and photochemistry and thetheory of chemical kinetics.

Chemistry 2eChemistry 2e

Antoine Lavoisier's great accomplishments include the discovery of oxygen's role in combustion, helping to develop the metric system, writing the first extensive list of elements, helping to reform the nomenclature of chemistry, and the discovery that while matter may change shape through chemical reaction its mass remains the same. It is for these extraordinary accomplishments that he is often referred to as the "Father of Modern Chemistry." Some scholars argue that this moniker is more the result of self-promotion and that his discoveries relied heavily on the work of others, nonetheless his impact on advancing this field of science cannot be understated. "Elements of Chemistry" was first published in 1790 and is largely concerned with the chemistry of combustion. While modern students of chemistry might find the work limited in its scope, the historical impact of its publication cannot be understated. The experiments contained within helped to lay the foundation for the understanding of the role of oxygen, hydrogen, acids, and alcohols in chemical reactions and its emphasis on quantitative analysis and instrumentation helped to establish the use of chemistry as a legitimate science for understanding and defining the physical world.

Chemistry 2e

Organic Chemistry of Explosives

Chemistry of Bioconjugates

Loose-leaf Version for Introductory Chemistry

The Wonder Book of Chemistry