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Општа и неорганска хемија

Over de continuïteit van den gas- en vloeistoftoestand J.D. van der Waals 1873

Emerging Non-Clinical Biostatistics in Biopharmaceutical Development and Manufacturing Harry Yang 2016-11-30 The premise of Quality by Design (QbD) is that the quality of the pharmaceutical product should be based upon a thorough understanding of both the product and the manufacturing process. This state-of-the-art book provides a single source of information on emerging statistical approaches to QbD and risk-based pharmaceutical development. A comprehensive resource, it combines in-depth explanations of advanced statistical methods with real-life case studies that illustrate practical applications of these methods in QbD implementation.

Encyclopedia of Earth and Physical Sciences: Index volume 1998 This 'encyclopedia contains about 400 articles covering the major topics in earth and physical sciences. Aimed at the high school student, the text is clearly written and touches on topics in the news....The over 1400 high-quality illustrations make this set a pleasure to browse....A useful addition for high school and public libraries.'

Principles of General Chemistry Martin Stuart Silberberg 2007 Silberberg's Principles of General Chemistry offers students the same authoritative topic coverage as his 4th edition textbook while appealing to today's efficiency-minded and value-conscious instructors and students. Principles allows for succinct coverage of content with minimal emphasis on pedagogic learning aids. This new approach offers a more straightforward approach to learning the core principles without sacrificing depth, clarity, or rigor.

The Chemistry of Plants: Perfumes, Pigments and Poisons 2nd Edition Margareta Séquin 2021-02-05 This new edition of a popular book, eases access to organic chemistry by connecting it with the world of plants and their colours, fragrances and defensive mechanisms.

Biomedical & Pharmaceutical Sciences with Patient Care Correlations Reza Karimi 2014-01-29 Biomedical & Pharmaceutical Sciences with Patient Care Correlations provides a solid foundation in the areas of science that pharmacy students most need to understand to succeed in their education and career. Offering a comprehensive overview of the biomedical and pharmaceutical sciences, it is an ideal primary or secondary textbook for introductory courses. Students can also use this text to refresh their scientific knowledge before beginning graduate study. Biomedical & Pharmaceutical Sciences with Patient Care Correlations includes 16 chapters that cover subjects ranging from cell biology and medicinal chemistry to toxicology and biostatistics. It also includes clinical correlations and integrated cases. Practical as well as informative, this essential reference relates the subject matter to the real world of pharmacy practice to assist students throughout their graduate studies and professional careers. Features Provides a comprehensive introduction to the biomedical and pharmaceutical sciences curriculum Serves as an ideal text for all introductory pharmacy courses Covers the topics that are most challenging for students Relates science to the real world of pharmacy practice Includes over 525 illustrations, photos, and figures

Biochemistry: Fundamentals and Bioenergetics Meera Yadav 2021-10-29 Biochemistry: Fundamentals and Bioenergetics presents information about the basic and applied aspects of the chemistry of living organisms. The textbook covers the scope and importance of biochemistry, the latest physical techniques to determine biomolecular structure, detailed classification, structure and function of biomolecules such as carbohydrates, lipids, amino acids, proteins, nucleic acids, vitamins, enzymes and hormones. Readers will also learn about processes central to energy metabolism including photosynthesis and respiration, oxidative phosphorylation, DNA replication, transcription and translation, recombinant DNA technology. Key Features - logical approach to biochemistry with several examples - 10 organized chapters on biochemistry fundamentals and metabolism - focus on biomolecules and biochemical processes - references for further reading

Medical and Health Care Books and Serials in Print 1988

PEMANFAATAN ELEKTRODEPOSISI PADA PROSES CARBON CAPTURE Ahmad Atif Fikri

Experimentos de química en microescala para nivel medio superior María del Carmen Doria Serrano 2009

2010-11-04

Books in Print 1991

Principles of General Chemistry Martin Silberberg 2012-01-17 Silberberg's *Principles of General Chemistry* offers students the same authoritative topic coverage as its parent text, *Chemistry: The Molecular Nature of Matter and Change*. The *Principles* text allows for succinct coverage of content with minimal emphasis on pedagogic learning aids. This more streamlined approach to learning appeals to today's efficiency-minded, value-conscious instructors and students without sacrificing depth, clarity, or rigor.

Polymer Electronics Meng Hsin-Fei 2013-02-19 Polymer semiconductor is the only semiconductor that can be processed in solution. Electronics made by these flexible materials have many advantages such as large-area solution process, low cost, and high performance. Researchers and companies are increasingly dedicating time and money in polymer electronics. This book focuses on the fundamental materials and device physics of polymer electronics. It describes polymer light-emitting diodes, polymer field-effect transistors, organic vertical transistors, polymer solar cells, and many applications based on polymer electronics. The book also discusses and analyzes in detail preparation techniques and device properties of polymer electronics.

Scheikunde voor Dummies John T. Moore 2005 Dit boek behandelt de theorie en pikt en passant ook nog kernenergie mee en een hoop natuurkunde.

Nature of Science in General Chemistry Textbooks Mansoor Niaz 2011-07-15 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.

Chemistry Education and Contributions from History and Philosophy of Science Mansoor Niaz 2015-12-23 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

Calendar of Dalhousie College and University Dalhousie University 1935

Evolving Nature of Objectivity in the History of Science and its Implications for Science Education Mansoor Niaz 2017-10-26 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

Basic Molecular Quantum Mechanics Steven A. Adelman 2021-08-01 Quantum mechanics is a general theory of the motions, structures, properties, and behaviors of particles of atomic and subatomic dimensions. While quantum mechanics was created in the first third of the twentieth century by a handful of theoretical physicists working on a limited number of problems, it has further developed and is now applied by a great number of people working on a vast range of problems in wide areas of science and technology. Basic Molecular Quantum Mechanics introduces quantum mechanics by covering the fundamentals of quantum mechanics and some of its most important chemical applications: vibrational and rotational spectroscopy and electronic structure of atoms and molecules. Thoughtfully organized, the author builds up quantum mechanics systematically with each chapter preparing the student for the more advanced chapters and complex applications. Additional features include the following: This book presents rigorous and precise explanations of quantum mechanics and mathematical proofs. It contains qualitative discussions of key concepts with mathematics presented in the appendices. It provides problems and solutions at the end of each chapter to encourage understanding and application. This book is carefully written to emphasize its applications to chemistry and is a valuable resource for advanced undergraduates and beginning graduate students specializing in chemistry, in related fields such as chemical engineering and materials science, and in some areas of biology.

The British National Bibliography Arthur James Wells 2009

Feyerabend's Epistemological Anarchism Mansoor Niaz 2020-01-27 This book argues that the traditional image of Feyerabend is erroneous and that, contrary to common belief, he was a great admirer of science. It shows how Feyerabend presented a vision of science that represented how science really works. Besides giving a theoretical framework based on Feyerabend's philosophy of science, the book offers criteria that can help readers to evaluate and understand research reported in important international science education journals, with respect to Feyerabend's epistemological anarchism. The book includes an evaluation of general chemistry and physics textbooks. Most science curricula and textbooks provide the following advice to students: Do not allow theories in contradiction with observations, and all scientific theories must be formulated inductively based on experimental facts. Feyerabend questioned this widely prevalent premise of science education in most parts of the world, and in contrast gave the following advice: Scientists can accept a hypothesis despite experimental evidence to the contrary and scientific theories are not always consistent with all the experimental data. No wonder Feyerabend became a controversial philosopher and was considered to be against rationalism and anti-science. Recent research in philosophy of science, however, has shown that most of Feyerabend's philosophical ideas are in agreement with recent trends in the 21st century. Of the 120 articles from science education journals, evaluated in this book only 9% recognized that Feyerabend was presenting a plurality of perspectives based on how science really works. Furthermore, it has been shown that Feyerabend could even be considered as a perspectival realist. Among other aspects, Feyerabend emphasized that in order to look for breakthroughs in science one does not have to be complacent about the truth of the theories but rather has to look for opportunities to "break rules" or "violate categories." Mansoor Niaz carefully analyses references to Feyerabend in the literature and displays the importance of Feyerabend's philosophy in analyzing, historical episodes. Niaz shows through this remarkable book a deep understanding to the essence of science. - Calvin Kalman, Concordia University, Canada In this book Mansoor Niaz explores the antecedents, context and features of Feyerabend's work and offers a more-nuanced understanding, then reviews and considers its reception in the science education and philosophy of science literature. This is a valuable contribution to scholarship about Feyerabend, with the potential to inform further research as well as science education practice.- David Geelan, Griffith University, Australia Student's Solutions Manual to accompany Principles of General Chemistry Martin Silberberg 2012-03-26 This supplement contains detailed solutions and explanations for all colored problems in the main text.

Many-Electron Approaches in Physics, Chemistry and Mathematics Volker Bach 2014-07-01 This book provides a broad description of the development and (computational) application of many-electron approaches from a multidisciplinary perspective. In the context of studying many-electron systems Computer Science, Chemistry, Mathematics and Physics are all intimately interconnected. However, beyond a handful of communities working at the interface between these disciplines, there is still a marked separation of subjects. This book seeks to offer a common platform for possible exchanges between the various fields and to introduce the reader to perspectives for potential further developments across the disciplines. The rapid advances of modern technology will inevitably require substantial improvements in the approaches currently used, which will in turn make exchanges between disciplines indispensable. In essence this book is one of the very first attempts at an interdisciplinary approach to the many-electron problem.

The Chemistry of Plants Margareta Sequin 2015-10-20 This book is an introduction to organic chemistry and its compounds as related to plants. Chemistry tends to be seen as a field that is hard to comprehend and that has few connections with the living world. This book fills a gap as it eases access to organic chemistry by connecting it with plants and includes numerous photos and other illustrations. The book is a combination of organic chemistry with the living world of plants and is an introduction to organic plant compounds for the non-chemist. It starts with a review of basic concepts of chemistry as they relate to plant life, followed by an introduction to structures of organic compounds, which prepares the reader for the following chapters on primary metabolites and on plant fragrances, pigments, and plant defensive compounds. The final chapter relates plant compounds to human life, with subchapters on foods from plants, medicines, psychoactives, fibers, and dyes. Historic discoveries of plant compounds and their developments to contemporary uses, like modern pharmaceuticals, and a section on genetically modified plants, connect with topics of recent interest. The book leads the serious reader from chemistry basics to complex plant substances and their human uses and plant photos and stories accompany chemistry topics and chemical structures to aid understanding. The author, an organic chemist and plant enthusiast, has taught popular undergraduate college level courses on plant chemistry to non-chemistry majors and numerous field seminars to the general public for more than fifteen years. The book's topics and contents have been taught for many years and have proved successful in providing an understanding of plant compounds, organic compounds, and their importance. The book provides a basis for a better understanding of chemistry and its connections to the world of plants, the natural world in general, and to daily life. It is aimed at non-chemistry undergraduate students and to people in general who are interested in plants and who would like to learn more about them. It addresses an audience with little previous chemistry knowledge, yet, leads the serious reader to an understanding of sometimes complex plant compounds, by providing an introduction to chemistry basics, combining the chemistry with pictures and stories, and using simple, clear

language. The book can be used both as a text to introduce organic chemistry as it relates to plants and as a text of reference for more advanced readers.

MSCEIS 2019 Lala Septem Riza 2020-07-30 The 7th Mathematics, Science, and Computer Science Education International Seminar (MSCEIS) was held by the Faculty of Mathematics and Natural Science Education, Universitas Pendidikan Indonesia (UPI) and the collaboration with 12 University associated in Asosiasi MIPA LPTK Indonesia (AMLI) consisting of Universitas Negeri Semarang (UNNES), Universitas Pendidikan Indonesia (UPI), Universitas Negeri Yogyakarta (UNY), Universitas Negeri Malang (UM), Universitas Negeri Jakarta (UNJ), Universitas Negeri Medan (UNIMED), Universitas Negeri Padang (UNP), Universitas Negeri Manado (UNIMA), Universitas Negeri Makassar (UNM), Universitas Pendidikan Ganesha (UNDHIKSA), Universitas Negeri Gorontalo (UNG), and Universitas Negeri Surabaya (UNESA). In this year, MSCEIS 2019 takes the following theme: "Mathematics, Science, and Computer Science Education for Addressing Challenges and Implementations of Revolution-Industry 4.0" held on October 12, 2019 in Bandung, West Java, Indonesia.

Chemistry Martin Stuart Silberberg 2020 "Chemistry is so crucial to an understanding of medicine and biology, environmental science, and many areas of engineering and industrial processing that it has become a requirement for an increasing number of academic majors. Furthermore, chemical principles lie at the core of some of the key societal issues we face in the 21st century-dealing with climate change, finding new energy options, and supplying nutrition and curing disease on an ever more populated planet. The ninth edition of Chemistry: The Molecular Nature of Matter and Change maintains its standard-setting position among general chemistry textbooks by evolving further to meet the needs of professor and student. The text still contains the most accurate molecular illustrations, consistent step-by-step worked problems, and an extensive collection of end-of-chapter problems. And changes throughout this edition make the text more readable and succinct, the artwork more teachable and modern, and the design more focused and inviting. The three hallmarks that have made this text a market leader are now demonstrated in its pages more clearly than ever"--

Forthcoming Books Rose Arny 2002

De structuur van wetenschappelijke revoluties Thomas S. Kuhn 1972

American Book Publishing Record 2002

Computational, Education, and Materials Science Aspects Ponnadurai Ramasami 2022-10-03 Chapters collected from "The Virtual Conference on Chemistry and its Applications (VCCA-2021) – Research and Innovations in Chemical Sciences: Paving the Way Forward". This conference was held in August 2021 and organized by the Computational Chemistry Group of the University of Mauritius. These peer-reviewed chapters offer insights into research on fundamental and applied chemistry with interdisciplinary subject matter.

Journal of the Society of Chemical Industry Society of Chemical Industry (Great Britain) 1939 Includes list of members, 1882-1902, proceedings of the annual meetings and various supplements.

Books in Print Supplement 1977

Inleiding informatica J. Glenn Brookshear 2005

BUKU AJAR – DASAR KIMIA I Sulastrri 2017-12-12 Bahan ajar ini dipersiapkan untuk perkuliahan Kimia Dasar 1. Materi yang dibahas dalam Bahan ajar ini meliputi: Perkembangan Teori Atom, Sistem Periodik Unsur-Unsur, Hukum Dasar dan DasarDasar Perhitungan Kimia, Tata Nama Senyawa Kimia An-Organik, Rumus dan Persamaan Kimia, Reaksi-Reaksi Kimia, Ikatan Kimia (Ikatan ion, Kovalen, Ikatan pada logam, dan Perbandingan Sifat Senyawa Ion dan Kovalen), Reaksi dalam Larutan Berpelarut Air, Struktur dan Gaya antar Molekul, Pengantar Reaksi Reduksi dan Oksidasi, Senyawa Karbon dan Pengantar Reaksi Kimia Organik. Pembahasan dalam Bahan ajar ini juga diperkaya dengan fenomena-fenomena yang terjadi akhir-akhir ini yang berkaitan dengan perkembangan ilmu kimia dan aplikasinya dalam kehidupan sehari-hari untuk memperkaya wawasan ilmu kimia mengikuti kondisi kekinian. Tujuan penulisan Bahan ajar ini adalah untuk mempermudah mahasiswa mempelajari konsep dasar kimia, fakta-fakta tentang aplikasi kimia dasar dalam kehidupan serta sedikit penjelasan tentang prosedur kimia dalam laboratorium. Harapannya Bahan ajar ini selain untuk memperkuat kognitif juga dapat bermanfaat untuk perbaikan sikap dan perilaku yang lebih baik dalam kegiatan sehari-hari dalam hal memanfaatkan bahan kimia yang smart sesuai dengan tingkat perkembangan wawasan kognitifnya. Pada setiap bab dari buku ini juga diupayakan untuk memuat soal-soal bermuatan nilai untuk menstimulasi tumbuh kembangnya karakter-karakter baik dari pengguna buku ini.

History of the Royal Society Thomas Thomson 1812 Abridgement of the philosophical transactions from 1665 to the end of the year 1800.

Chemistry for Higher Education Jan H. Apotheker 2018-08-21 Current publication gives hands-on recommendations how to develop a successful course in either the bachelor or the master of chemistry. The author discusses different ways of course building, such as lectures, workshops, seminars and labs, explains how to identify potential improvements for the next run of the class and elucidates the tools to create an efficient learning environment that helps students to understand the nature of chemistry.

***Buku Ajar Kimia Unsur* Suyanta 2019-05-14 Bab I diawali dengan pembahasan mengenai Kelimpahan dan Asal Mula Unsur sebelum membicarakan perkembangan tabel periodik. Dalam pembahasan mengenai tabel periodik, penulis sengaja menyajikan tabel-tabel periodik alternatif yang telah diusulkan oleh para peneliti namun sangat jarang ditemukan dalam buku-buku teks. Hidrogen dibahas secara terpisah pada Bab II, tidak digabung dengan Golongan Alkali ataupun Golongan Halogen, karena hidrogen memang bukan alkali (walaupun dimasukkan dalam golongan 1A), dan juga bukan halogen (walaupun kadang-kadang dimasukkan dalam golongan 7A). Ia memiliki beberapa keunikan sehingga layak dibahas secara khusus. Selanjutnya unsur-unsur golongan 2A sampai golongan 8A dibahas masing-masing pada Bab III sampai dengan Bab X. Adapun unsur-unsur logam transisi dan logam transisi dalam, belum tercakup dalam buku ajar ini, mengingat buku ini dimaksudkan untuk mendukung pembelajaran mata kuliah Kimia Unsur yang bobotnya hanya 2 sks. Dalam buku ajar ini juga disisipkan sepuluh kisah inspiratif yang berhubungan dengan tokoh-tokoh dan bahan kimia tertentu. Bagi pengajar, kisah-kisah inspiratif tersebut dapat dimanfaatkan sebagai bahan ice breaking dalam proses pembelajaran, sedang bagi para mahasiswa dapat dimanfaatkan untuk menambah wawasan.**

***Bulletin of the Atomic Scientists 1972-10* The Bulletin of the Atomic Scientists is the premier public resource on scientific and technological developments that impact global security. Founded by Manhattan Project Scientists, the Bulletin's iconic "Doomsday Clock" stimulates solutions for a safer world.**