

Holt Chemistry Concept Review

This book provides a historical analysis of the philosophical problem of individuation, and a new trajectory in its treatment. Drawing on the work of Gilles Deleuze, C.S. Peirce and Gilbert Simondon, the problem of individuation is taken into the realm of modernity. This is a vibrant contribution to contemporary debates in European philosophy. Each issue covers a different subject.

With more than 40% new and revised materials, this second edition offers researchers and students in the field a comprehensive understanding of fundamental molecular properties amidst cutting-edge applications. Including ~70 Example-Boxes and summary notes, questions, exercises, problem sets, and illustrations in each chapter, this publication is also suitable for use as a textbook for advanced undergraduate and graduate students. Novel material is introduced in description of multi-orbital chemical bonding, spectroscopic and magnetic properties, methods of electronic structure calculation, and quantum-classical modeling for organometallic and metallochemical systems. This is an excellent reference for chemists, researchers and teachers, and advanced undergraduate and graduate students in inorganic, coordination, and organometallic chemistry.

Includes section "New Books"

Alfred North Whitehead's Science and the Modern World

Curriculum Review

Exploring the Electron Density Concept in the Chemical, Biological, and Materials Sciences

The Discoveries

Chemical Principles

Embodiment and Epigenesis: Theoretical and Methodological Issues in Understanding the Role of Biology within the Relational Developmental System

What is the difference between a wink and a blink? The answer is important not only to philosophers of mind, for significant moral and legal consequences rest on the distinction between voluntary and involuntary behavior. However, "action theory"—the branch of philosophy that has traditionally articulated the boundaries between action and non-action, and between voluntary and involuntary behavior—has been unable to account for the difference. Alicia Juarrero argues that a mistaken, 350-year-old model of cause and explanation—one that takes all causes to be of the push-pull, efficient cause sort, and all explanation to be prooflike—underlies contemporary theories of action. Juarrero then proposes a new framework for conceptualizing causes based on complex adaptive systems. Thinking of causes as dynamical constraints makes bottom-up and top-down causal relations, including those involving intentional causes, suddenly tractable. A different logic for explaining actions—as historical narrative, not inference—follows if one adopts this novel approach to long-standing questions of action and responsibility.

This comprehensive volume marks a new standard in scholarship in the emerging field of the philosophy of chemistry. Philosophers, chemists, and historians of science ask some fundamental questions about the relationship between philosophy and chemistry.

This study of the questions of final causality is arranged in historical order from Aristotle to contemporary anthropic-principle cosmology. It discusses such teleological issues as chance and providence, and Aristotle's definition of nature in relation to

Pairing scientists and philosophers together, this book is an exploration of some of the new frontiers in biology (e.g., Emergence, Complex Systems, Biosemiotics, Symbiogenesis, Organic Selection, Epigenetics, Niche Construction, Teleodynamics, etc.). The chapters in this volume challenge the mechanistic metaphysics that is implicit in the reigning neo-Darwinist paradigm, point to more inclusive modes of thinking in relation to the nature of life, and contribute to the novel synthesis that is presently "in the air."

A Matter of Density

The Theatre of Production

Chaos and Society

The Nature of the Chemical Concept

Concepts of Modern Catalysis and Kinetics

Handbook of Child Psychology and Developmental Science, Theory and Method

Ebook: Chemistry: The Molecular Nature of Matter and Change

During the Enlightenment, rationality becomes not a property belonging to all humans but something that one must achieve. This transformation has the effect of excluding non-whites and non-males from the domain of reason. Heikes seeks to uncover the source of this exclusion, which she argues stems from the threat of subjectivism inherent in modern thinking. As an alternative, she considers post-Cartesian reactions of modern representationalism as well as ancient Greek understandings of mind as simply one part of a functionally diverse soul. In the end, she maintains that treating rationality as an evolutionarily situated virtue concept allows for an understanding of rationality that recognizes diversity and that grounds substantive moral concepts.

This publication, *Our Fragile World: Challenges and Opportunities for Sustainable Development* presents perspectives of several important subjects that are covered in greater detail and depth in the *Encyclopedia of Life Support Systems (EOLSS)*. The contributions to the two volumes provide an integrated presentation of knowledge and worldviews related to the state of: Earth's natural resources, social resources, institutional resources, and economic and financial resources. They present the vision and thinking of over 200 authors in support of efforts to solve the complex problems connected with sustainable development, and to secure perennial life support on "The Blue Planet". These contributions are holistic, informative, forward looking, and will be of interest to a broad readership. This volume presents contributions with focus on the Economic and Institutional Dimensions of Sustainable Development in two sections: KNOWLEDGE, TECHNOLOGY, AND MANAGEMENT (Knowledge; Technology and Management ; Economics; Finance and trade). – POLICY AND INSTITUTIONAL IMPLICATIONS FOR SUSTAINABLE DEVELOPMENT (Policy Issues; Institutional implications; Regional Analysis).

John Suchocki's *Conceptual Chemistry*, Second Edition makes chemistry come alive for the non-science student through an engaging writing style, fun and easy-to-perform experiments, and a multimedia package that is as uniquely integrated as it is extensive. Building on the success of the First Edition, this revised book provides a fresh, insightful, and welcoming look into the concepts of chemistry. Suchocki uses his considerable experience to emphasize a conceptual understanding of our everyday world from the perspective of atoms and molecules. Real-world examples and student activities are woven throughout the text, and calculations are incorporated in select instances where they assist in conceptual

understanding. Twelve core chapters cover basic chemical concepts including atomic models, chemical bonding, and chemical reactions. These are followed by seven chapters organized around applied chemistry topics such as nutrition, drugs, agriculture, water resources, the atmosphere, modern materials, and energy sources. Extensive end-of-chapter study materials encourage critical thinking and increase student understanding. The compelling supplemental multimedia package features an unprecedented level of integration with the text, including The Chemistry Place Website and Conceptual Chemistry Alive! a 12 CD-ROM set in which the author is available to each student as a personal and portable guest lecturer. The set includes video presentations, animations, a bank of more than 600 new questions, and more.

Worldviews for a New Age

Re-constructing Chemical Knowledge in Teaching and Learning

Philosophy and Individuation Between Kant and Deleuze

Philosophy of Chemistry

Hegel, Kant and the Structure of the Object

The Jahn-Teller Effect and Vibronic Interactions in Modern Chemistry

The features of chemistry that make it such a fascinating and engaging subject to teach also contribute to it being a challenging subject for many learners.

Chemistry draws upon a wide range of abstract concepts, which are embedded in a large body of theoretical knowledge. As a science, chemistry offers ideas that are the products of scientists' creative imaginations, and yet which are motivated and constrained by observations of natural phenomena.

Chemistry is often discussed and taught largely in terms of non-observable theoretical entities - such as molecules and electrons and orbitals - which probably seem as familiar and real to a chemistry teacher as Bunsen burners: and, yet, comprise a realm as alien and strange to many students as some learners' own alternative conceptions (misconceptions) may appear to the teacher. All chemistry teachers know that chemistry is a conceptual subject, especially at the upper end of secondary school and at university level, and that some students struggle to understand many chemical ideas. This book offers a step-by-step analysis and discussion of just why some students find chemistry difficult, by examining the nature of chemistry concepts, and how they are communicated and learnt. The book considers the idea of concepts itself; draws upon case studies of how canonical chemical concepts have developed; explores how chemical concepts become represented in curriculum and in classroom teaching; and discusses how conceptual learning and development occurs. This book will be invaluable to anyone interested in teaching and learning and offers guidance to teachers looking to make sense of, and respond to, the challenges of teaching chemistry.

In this captivating and lucid book, novelist and science writer Alan Lightman chronicles twenty-four great discoveries of twentieth-century science--everything from the theory of relativity to mapping the structure of DNA. These discoveries radically changed our notions of the world and our place in it. Here are Einstein, Fleming, Bohr, McClintock, Pauling, Watson and Crick, Heisenberg and many others. With remarkable insight, Lightman charts the intellectual and emotional landscape of the time, portrays the human drama of discovery, and explains the significance and impact of the work. Finally he includes a fascinating and unique guided tour through the original papers in which the discoveries were revealed. Here is science writing at its best--beautiful, lyrical and completely accessible. It brings the process of discovery to life before our very eyes.

Holt Chemistry Visualizing Matter Holt Rinehart & Winston Holt Chemistry Holt Rinehart & Winston Ebook: Chemistry: The Molecular Nature of Matter and Change McGraw Hill

This publication reflects on the discussion on using chaos theory for the study of society. It explores the interface between chaos theory and the social sciences. A broad variety of fields (including Sociology, Anthropology, Economics, Political Science, Management, Philosophy and Cognitive Sciences) is represented in the book. The leading themes are: Conceptual and Methodological Issues, Social Connectionism and the Connectionist Mind, Social Institutions and Public Policy, and Social Simulations. The book includes the following topics: the relevance of the complexity-chaos paradigm for analyzing social systems, the usefulness of nonlinear dynamics for studying the formation and sustainability of social groups, the comparison between spontaneous social orders and spontaneous biological/natural orders, the building of Artificial Societies, and the contribution of the chaos paradigm to a better understanding and formulation of public policies.

Understanding Our World of Atoms and Molecules

Modern Chemistry

Putting Life Back Into Biology

Synthesis of a New Discipline

A Study of Ideas and Social Movements in the Early Nineteenth Century

Visualizing Matter

In this powerful exploration of worldviews in transition, Mark Woodhouse examines current controversies in the quest for an integrative vision of reality. These include alternative medicine, holistic education, spiritual healing, and ecofeminism, as well as reincarnation, the New Physics, extraterrestrial visitations, and personal growth. In the Appendix, Fred Mills contributes a pioneering study of sacred geometry.

Why is the world orderly, and how does this order come to be? Human beings inhabit a multitude of apparently ordered systems—natural, social, political, economic, cognitive, and others—whose origins and purposes are often obscure. In the eighteenth century, older certainties about such orders, rooted in either divine providence or the mechanical operations of nature, began to fall away. In their place arose a new appreciation for the complexity of things, a new recognition of the world's disorder and randomness, new doubts about simple relations of cause and effect—but with them also a new ability to imagine the world's orders, whether natural or manmade, as self-organizing. If large systems are left to their own devices, eighteenth-century Europeans increasingly came to believe, order will emerge on its own without any need for external design or direction. In *Invisible Hands*, Jonathan Sheehan and Dror Wahrman trace the many appearances of the language of self-organization in the eighteenth-century West. Across an array of domains, including religion, society, philosophy, science, politics, economy, and law, they show how and why this way of thinking came into the public view, then grew in prominence and arrived at the threshold of the nineteenth century in versatile, multifarious, and often surprising forms. Offering a new synthesis of intellectual and cultural developments, *Invisible Hands* is a landmark contribution to the history of the Enlightenment and eighteenth-century culture.

Hegel's holistic metaphysics challenges much recent ontology with its atomistic and reductionist assumptions; Stern offers us an original reading of Hegel and contrasts him with his predecessor, Kant.

The origins and significance of electron density in the chemical, biological, and materials sciences Electron density is one of the fundamental concepts underlying modern chemistry and one of the key determinants of molecular structure and stability. It is also the basic variable of density functional theory, which has made possible, in recent years, the application of the mathematical theory of quantum physics to chemical and biological systems. With an equal emphasis on computational and philosophical questions, *A Matter of Density: Exploring the Electron Density Concept in the Chemical, Biological, and Materials Sciences* addresses the foundations, analysis, and applications of this pivotal chemical concept. The first part of the book presents a coherent and logically connected treatment of the theoretical foundations of the electron density concept.

Discussion includes the use of probabilities in statistical physics; the origins of quantum mechanics; the philosophical questions at the heart of quantum theory, like quantum entanglement; and methods for the experimental determination of electron density distributions. The remainder of the book deals with applications of the electron density concept in the chemical, biological, and material sciences. Contributors offer insights on how a deep understanding of the origins of chemical reactivity can be gleaned from the concepts of density functional theory. Also discussed are the applications of electron density in molecular similarity analysis and electron density-derived molecular descriptors, such as electrostatic potentials and local ionization energies. This section concludes with some applications of modern density functional theory to surfaces and interfaces. An essential reference for students as well as quantum and computational chemists, physical chemists, and physicists, this book offers an unparalleled look at the development of the concept of electron density from its inception to its role in density functional theory, which led to the 1998 Nobel Prize in Chemistry.

Ebook: Chemistry: The Molecular Nature of Matter and Change

Self-Organization and the Eighteenth Century

Deleuze and Philosophy

La science et le monde moderne d'Alfred North Whitehead?

Introduction to the Theory

Atomic Hypothesis and the Concept of Molecular Structure

The essential reference for human development theory, updated and reconceptualized The Handbook of Child Psychology and Developmental Science, a four-volume reference, is the field-defining work to which all others are compared. First published in 1946, and now in its Seventh Edition, the Handbook has long been considered the definitive guide to the field of developmental science. Volume 1, Theory and Method, presents a rich mix of classic and contemporary theoretical perspectives, but the dominant views throughout are marked by an emphasis on the dynamic interplay of all facets of the developmental system across the life span, incorporating the range of biological, cognitive, emotional, social, cultural, and ecological levels of analysis. Examples of the theoretical approaches discussed in the volume include those pertinent to human evolution, self regulation, the development of dynamic skills, and positive youth development. The research, methodological, and applied implications of the theoretical models discussed in the volume are presented. Understand the contributions of biology, person, and context to development within the embodied ecological system Discover the relations among individual, the social world, culture, and history that constitute human development Examine the methods of dynamic, developmental research Learn person-oriented methodological approaches to assessing developmental change The scholarship within this volume and, as well, across the four volumes of this edition, illustrate that developmental science is in the midst of a very exciting period. There is a paradigm shift that involves increasingly greater understanding of how to describe, explain, and optimize the course of human life for diverse individuals living within diverse contexts. This Handbook is the definitive reference for educators, policy-makers, researchers, students, and practitioners in human development, psychology, sociology, anthropology, and neuroscience.

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.

Most people remember chemistry from their schooldays as largely incomprehensible, a subject that was fact-rich but understanding-poor, smelly, and so far removed from the real world of events and pleasures that there seemed little point, except for the most introverted, in coming to terms with its grubby concepts, spells, recipes, and rules. Peter Atkins wants to change all that. In this Very Short Introduction to Chemistry, he encourages us to look at chemistry anew, through a chemist's eyes, in order to understand its central concepts and to see how it contributes not only towards our material comfort, but also to human culture. Atkins shows how chemistry provides the infrastructure of our world, through the chemical industry, the fuels of heating, power generation, and transport, as well as the fabrics of our clothing and furnishings. By considering the remarkable achievements that chemistry has made, and examining its place between both physics and biology, Atkins presents a fascinating, clear, and rigorous exploration of the world of chemistry - its structure, core concepts, and exciting contributions to new cutting-edge technologies. ABOUT THE SERIES: The Very Short Introductions series from Oxford University Press contains hundreds of titles in almost every subject area. These pocket-sized books are the perfect way to get ahead in a new subject quickly. Our expert authors combine facts, analysis, perspective, new ideas, and enthusiasm to make interesting and challenging topics highly readable.

"Imagination and shrewd guesswork are powerful instruments for acquiring scientific knowledge . . ." 1. H. van't Hoff The last decades have witnessed a rapid growth of quantum chemistry and a tremendous increase in the number of very accurate ab initio calculations of the electronic structure of molecules yielding results of admirable accuracy. This dramatic progress has opened a new stage in the quantum mechanical description of matter at the molecular level. In the first place, highly accurate results provide severe tests of the quantum mechanics. Secondly, modern quantitative computational ab initio methods can be synergetically combined with various experimental techniques thus enabling precise numerical characterization of molecular properties better than ever anticipated earlier. However, the role of theory is not exhausted in disclosing the fundamental laws of Nature and production of ever increasing sets of data of high accuracy. It has to provide additionally a means of systematization, recognition of regularities, and rationalization of the myriads of established facts avoiding in this way complete chaos. Additional problems are represented by molecular

wavefunctions provided by the modern high-level computational quantum chemistry methods. They involve, in principle, all the information on molecular system, but they are so immensely complex that can not be immediately understood in simple and physically meaningful terms. Both of these aspects, categorization and interpretation, call for conceptual models which should be preferably pictorial, transparent, intuitively appealing and well-founded, being sometimes useful for semi quantitative purposes.

Great Breakthroughs in 20th-Century Science, Including the Original Papers

Conceptual Chemistry

Holt Chemistry

Letters to a Young Chemist

Chemistry: A Very Short Introduction

CHEMISTRY

The eleventh edition was carefully reviewed with an eye toward strengthening the content available in OWLv2, end-of-chapter questions, and updating the presentation. Nomenclature changes and the adoption of IUPAC periodic table conventions are highlights of the narrative revisions, along with changes to the discussion of d orbitals. In-text examples have been reformatted to facilitate learning, and the accompanying Interactive Examples in OWLv2 have been redesigned to better parallel the problem-solving approach in the narrative. New Capstone Problems have been added to a number of chapters. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

In the past 12 years since its publication, *Concepts of Modern Catalysis and Kinetics* has become a standard textbook for graduate students at universities worldwide. Emphasizing fundamentals from thermodynamics, physical chemistry, spectroscopy, solid state chemistry and quantum chemistry, it introduces catalysis from a molecular perspective, and stresses how it is interwoven with the field of reaction kinetics. The authors go on to explain how the world of reacting molecules is connected to the real world of industry, by discussing the various scales (nano - micro - macro) that play a role in catalysis. Reflecting the modern-day focus on energy supplies, this third edition devotes attention to such processes as gas-to-liquids, coal-to-liquids, biomass conversion and hydrogen production. From reviews of the prior editions: 'Overall, this is a valuable book that I will use in teaching undergraduates and postgraduates.' (Angewandte Chemie - I. E.) '...this excellent book is highly recommended to students at technical universities, but also entrants in chemical industry. Furthermore, this informative handbook is also a must for all professionals in the community.' (AFS) 'I am impressed by the coverage of the book and it is a valuable addition to the catalysis literature and I highly recommend purchase' (Energy Sources)

Originally published 1965. This reprints the 1977 edition which included a new introduction. From the starting point of "popular" charity education, the book traces the dynamic of ideological and social change from the 1790s to the 1830s in terms of attitudes to education and analyzes the range of contemporary opinions on popular education. It also examines some of the channels through which ideas about education were disseminated and became common currency in popular movements.

The second international Chromatiques whiteheadiennes conference was devoted exclusively to the exegesis and contextualization of Whitehead's *Science and the Modern World* (1925). In order to elucidate the meaning and significance of this epoch-making work, the Proceedings are designed to form "companion" volume. With one paper devoted to each of its thirteen chapters, the Proceedings aim, on the one hand, to identify the specific contribution of each chapter to Whitehead's own research program - that is to say, to put its categories into perspective by means of an internal analysis- and, on the other hand, to identify its global impact in the history of ideas.

Rationality, Representation, and Race

Paradigm Wars

Electronic Structure and Properties of Transition Metal Compounds

The Concept of Popular Education

Section Reviews

Beyond Mechanism

Volume 44 of Advances in Child Development and Behavior includes chapters that highlight some the most recent research in the area of embodiment and epigenesis. A wide array of topics are discussed in detail, including cytoplasmic inheritance redux, emergence, self organization and developmental science, and the evolution of intelligent developmental systems. Each chapter provides in-depth discussions, and this volume serves as an invaluable resource for developmental or educational psychology researchers, scholars, and students. Chapters that highlight some of the most recent research in the area A wide array of topics are discussed in detail

The work of Gilles Deleuze has had an impact far beyond philosophy. He is among Foucault and Derrida as one of the most cited of all contemporary French thinkers. Never a student 'of' philosophy, Deleuze was always philosophical and many influential poststructuralist and postmodernist texts can be traced to his celebrated resurrection of Nietzsche against Hegel in his Nietzsche and Philosophy, from which this collection draws its title. This searching new collection considers Deleuze's relation to the philosophical tradition and beyond to the future of philosophy, science and technology. In addition to considering Deleuze's imaginative readings of classic figures such as Spinoza and Kant, the essays also point to the meaning of Deleuze on 'monstrous' and machinic thinking, on philosophy and engineering, on philosophy and biology, on modern painting and literature. Deleuze and Philosophy continues the spirit of experimentation and invention that features in Deleuze's work and will appeal to those studying across philosophy, social theory, literature and cultural studies who themselves are seeking new paradigms of thought.

This fully updated Seventh Edition of CHEMICAL PRINCIPLES provides a unique organization and a rigorous but understandable introduction to chemistry that emphasizes conceptual understanding and the importance of models. Known for helping students develop a qualitative, conceptual foundation that gets them thinking like chemists, this market-leading text is designed for students with solid mathematical preparation. The Seventh Edition features a new section on Learning to Solve Problems that discusses how to solve problems in a flexible, creative way based on understanding the fundamental

ideas of chemistry and asking and answering key questions. The book is also enhanced by new visual problems, new student learning aids, new Chemical Insights boxes, and more. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

What's it really like to be a chemist? Leading chemists share what they do, how they do it, and why they love it. "Letters to a young ..." has been a much-loved way for professionals in a field to convey their enthusiasm and the realities of what they do to the next generation. Now, Letters to a Young Chemist does the same for the chemical sciences. Written with a humorous touch by some of today's leading chemists, this book presents missives to "Angela," a fictional undergraduate considering a career in chemistry. The different chapters offer a mix of fundamental principles, contemporary issues, and challenges for the future. Marye Anne Fox, Chancellor of the University of California San Diego, talks about learning to do research and modern physical organic chemistry. Brothers Jonathan and Daniel Sessler explain the chemistry of anesthetics that make modern surgery possible while Elizabeth Nolan talks about biological imaging. Terry Collins talks about green chemistry, a more sustainable way of doing chemistry, while several authors including Carl Wamser, Harry Gray, John Magyar, and Penny Brothers discuss the crucial contributions that chemists can make in meeting global energy needs. Letters to a Young Chemist gives students and professionals alike a unique window into the real world of chemistry. Entertaining, informative, and full of honest and inspiring advice, it serves as a helpful guide throughout your education and career. "The different chapters describe both the wonders of the molecular world and the practical benefits afforded by chemistry ... and if any girl out there thinks that chemistry is a man's world, this book should be a good antidote." —Marye Anne Fox, Chancellor of the University of California, San Diego, and winner of the 2009 US National Medal of Science "Letters to a Young Chemist offers significant ammunition for motivating young people to consider chemistry as a career. ... This book should also be required reading for all faculty members who teach chemistry in high schools, colleges, and universities." —Stephen J. Lippard, Arthur Amos Noyes Professor of Chemistry, Massachusetts Institute of Technology, and winner of the 2006 US National Medal of Science

Invisible Hands

**OUR FRAGILE WORLD: Challenges and Opportunities for Sustainable Development - Volume II
Dynamics in Action**

Final Causality in Nature and Human Affairs

The School Science Review

The first half of the title of this book may delude the uninitiated reader. The term "Jahn-Teller effect," taken literally, refers to a special effect inherent in particular molecular systems. Actually, this term implies a new approach to the general problem of correlations between the structure and properties of any molecular polyatomic system, including solids. Just such a new approach, or concept (in some sense, a new outlook or even a new way of thinking), which leads not to one special effect but to a series of different effects and laws, is embodied in the many (~ 4000) studies devoted to the investigation and application of the Jahn-Teller effect. The term "vibronic interactions" seems to be most appropriate to the new concept, and this explains the origin of the second half of the title. The primary objective of this book is to present a systematic development of the concept of vibronic interactions and its applications, and to illustrate its possibilities and significance in modern chemistry. In the first three chapters (covering about one-third of the book) the theoretical background of the vibronic concept and Jahn-Teller effect is given. The basic ideas are illustrated fully, although a comprehensive presentation of the theory with all related mathematical deductions is beyond the scope of this book. In the last three chapters the applications of theory to spectroscopy, stereochemistry and crystal chemistry, reactivity, and catalysis, are illustrated by a series of effects and laws.

The Difference Engineer

Part A, Philosophical, Theoretical, and Biological Dimensions

Principles of Modern Chemistry

General Chemistry

Intentional Behavior as a Complex System

Program Report - National Science Foundation