

Science And Technology

This thoughtful and engaging text challenges the widely held notion of science as somehow outside of society, and the idea that technology proceeds automatically down a singular and inevitable path. Through specific case studies involving contemporary debates, this book shows that science and technology are fundamentally part of society and are shaped by it. Draws on concepts from political sociology, organizational analysis, and contemporary social theory. Avoids dense theoretical debate. Includes case studies and concluding chapter summaries for students and scholars.

The Editors take pleasure in presenting Volume 13 of this annual review series, consisting, as usual, of authoritative reviews of timely developments in the technical fields of nuclear engineering, science, and technology. No one in the community we try to serve in a post Harrisburg era will need convincing of the relevance of the first two items to be mentioned from the volume. Instrumentation for two-phase flow measurements, by Banerjee and Ahey, has applicability in the engineering research labor atory and to power reactors; the U. S. LWR still remains the dominant power reactor type and seems likely to retain its hold if only through the capital of existing plants this century. Messrs. Bohm, Closs, and Kuhn, however, have a longer time scale to respect as they view us the prospects of nuclear waste disposal from a European viewpoint. They bring out nicely the political aspects that cannot be divorced from technical considerations in this area, or in the more militant terms of confrontation, in this arena, perhaps. We are pleased to carry in this volume two complementary papers on mathematical methods in nuclear engineering.

In 2004, an ad hoc committee was charged with preparing this third report examining the most senior S&T appointments to federal government positions and updating the accompanying list of the most urgent S&T presidential appointments. Sufficient changes have occurred since the National Academies 2000 report on presidential appointmentsâ€including the 2001 terrorist attacks, the anthrax deaths, the reorganization of homeland-security activities in the federal government, new developments in S&T, and concerns about the politicization of S&T decision making and adviceâ€to warrant this new edition. In contrast with previous reports on the subject, this one covers not only presidential appointments to top S&T leadership positions but also the appointment of scientists, engineers, and health professionals to serve on federal advisory committees that focus on science-based policy or on the review of research proposals. The committee recognizes that other areas of federal responsibility are as important as S&T, but S&T appointments are the only ones within its purview.

Here is the complete source of information on egg handling, processing, and utilization. Egg Science and Technology, Fourth Edition covers all aspects of grading, packaging, and merchandising of shell eggs. Full of the information necessary to stay current in the field. Egg Science and Technology remains the essential reference for everyone involved in the egg industry. In this updated guide, experts in the field review the egg industry and examine egg production practices, quality identification and control, egg and egg product chemistry, and specialized processes such as freezing, pasteurization, desugarization, and dehydration. This updated edition explores new and recent trends in the industry and new material on the microbiology of shell eggs, and it presents a brand-new chapter on value-added products. Readers can seek out the most current information available in all areas of egg handling and discover totally new material relative to fractionation of egg components for high value, nonfood uses. Contributing authors to Egg Science and Technology present chapters that cover myriad topics, ranging from egg production practices to nonfood uses of eggs. Some of these specific subjects include: handling shell eggs to maintain quality at a level for customer satisfaction trouble shooting problems during handling chemistry of the egg, emphasizing nutritional value and potential nonfood uses merchandising shell eggs to maximize sales in refrigerated dairy sales cases conversion of shell eggs to liquid, frozen, and dried products value added products and opportunities for merchandising egg products as consumers look for greater convenience Egg Science and Technology is a must-have reference for agricultural libraries. It is also an excellent text for upper-level undergraduate and graduate courses in food science, animal science, and poultry departments and is an ideal guide for professionals in related food industries, regulatory agencies, and research groups.

The 3rd edition of The Science and Technology of Rubber provides a broad survey of elastomers with special emphasis on materials with a rubber-like elasticity. As in the 2nd edition, the emphasis remains on a unified treatment of the material: exploring topics from the chemical aspects such as elastomer synthesis and curing, through recent theoretical developments and characterization of equilibrium and dynamic properties, to the final applications of rubber, including tire engineering and manufacturing. Many advances have been made in polymer and elastomers research over the past ten years since the 2nd edition was published. Updated material stresses the continuous relationship between the ongoing research in synthesis, physics, structure and mechanics of rubber technology and industrial applications. Special attention is paid to recent advances in rubber-like elasticity theory and new processing techniques for elastomers. This new edition is comprised of 20% new material, including a new chapter on environmental issues and tire recycling. - Explores new applications of rubber within the tire industry, from new filler materials to "green tires" (a tire that has yet to undergo curing and vulcanization) - 30% of the material has been revised from the previous edition with the addition of 20% new material, including a chapter on the environment - A mixture of theory, experiments, and practical procedures will offer value to students, practitioners, and research & development departments in industry.

Science and Technology explores questions around the central concepts of STEM fields: How do we interact with science and technology on a daily basis? Is technology surpassing biology? What are the ethics of science and technology? Does technology rule our economy? How is the internet changing society? Readings by biologists, climate scientists, journalists, ethicists, novelists, engineers, and others take up these questions and more. Questions and assignments for each selection provide a range of activities for students. The Bedford Spotlight Reader Series is an exciting line of single-theme readers, each reflecting Bedford's trademark care and quality. An editorial board of a dozen compositionists at schools with courses focusing on specific themes assists in the development of the series. Each reader collects thoughtfully chosen selections sufficient for an entire writing course—about 35 pieces—to allow instructors to provide carefully developed, high-quality instruction at an affordable price. Bedford Spotlight Readers are designed to help students from all majors make sustained inquiries from multiple perspectives, opening up topics such as borders, food, gender, happiness, humor, language, monsters, music, subcultures, and sustainability, to critical analysis. The readers are flexibly arranged in thematic chapters, with each chapter focusing in depth on a different facet of the central topic. The instructor resource tab of each reader's catalog page includes instructor support with sample syllabi and additional teaching resources.

"Read this book to learn, but also to honour the man. We shall never see his like again." - Sunday Times See the world. Then make it better. "I am 94. I've had an extraordinary life. It's only now that I appreciate how extraordinary. As a young man, I felt I was out there in the wild, experiencing the untouched natural world - but it was an illusion. The tragedy of our time has been happening all around us, barely noticeable from day to day - the loss of our planet's wild places, its biodiversity, I have been witness to this decline. A Life on Our Planet is my witness statement, and my vision for the future. It is the story of how we came to make this, our greatest mistake - and how, if we act now, we can yet put it right. We have one final chance to create the perfect home for ourselves and restore the wonderful world we inherited. 'All we need is the will to do so.'

For the most current, comprehensive resource in this rapidly evolving field, look no further than the Revised Edition of the Handbook of Science and Technology Studies. This masterful volume is the first resource in more than 15 years to define, summarize, and synthesize this complex multidisciplinary, international field. Tightly edited with contributions by an internationally recognized team of leading scholars, this volume addresses the crucial contemporary issues—both traditional and nonconventional—social studies, political studies, and humanistic studies in this changing field. Containing theoretical essays, extensive literature reviews, and detailed case studies, this remarkable volume clearly sets the standard for the field. It does nothing less than establish itself as the benchmark, one that will carry the field well into the next century.

[Comprehensive Semiconductor Science and Technology](#)

[Handbook of Zeolite Science and Technology](#)

[Women, Science, and Technology](#)

[Green Science and Technology](#)

[Science and Technology](#)

[A Bedford Spotlight Reader](#)

[Science and Technology Policy](#)

[Big Questions from Tiny Mortals about Death](#)

[A Life on Our Planet](#)

[5th Tokyo Conference on Advanced Catalytic Science and Technology](#)

[Measurement and Statistics on Science and Technology](#)

[Handbook of Oil Spill Science and Technology](#)

An increasingly important and often overlooked issue in science and technology policy is recognizing the role that philanthropies play in setting the direction of research. In an era where public and private resources for science are strained, the practices that foundations adopt to advance basic and applied research needs to be better understood. This first-of-its-kind study provides a detailed assessment of the current state of science philanthropy. This examination is particularly timely, given that science philanthropies will have an increasingly important and outsized role to play in advancing responsible innovation and in shaping how research is conducted. Philanthropy and the Future of Science and Technology surveys the landscape of contemporary philanthropic involvement in science and technology by combining theoretical insights drawn from the responsible research and innovation (RRI) framework with empirical analysis investigating an array of detailed examples and case studies. Insights from interviews conducted with foundation representatives, scholars, and practitioners from a variety of sectors add real-world perspective. A wide range of philanthropic interventions are explored, focusing on support for individuals, institutions, and networks, with attention paid to the role that science philanthropies play in helping to establish and coordinate multi-sectoral funding partnerships. Novel approaches to science philanthropy are also considered, including the emergence of crowdfunding and the development of new institutional mechanisms to advance scientific research. The discussion concludes with an imaginative look into the future, outlining a series of lessons learned that can guide how new and established science philanthropies operate and envisioning alternative scenarios for the future that can inform how science philanthropy progresses over the coming decades. This book offers a major contribution to the advancement of philanthropic investment in science and technology. Thus, it will be of considerable interest to researchers and students in public policy, public administration, political science, science and technology studies, sociology of science, and related disciplines.

Integration of Science and Technology with Development: Caribbean and Latin American Problems in the Context of the United Nations Conference on Science and Technology for Development discusses the science and technology (S&T) problems in developing countries of the Western hemisphere. This book is organized into five part encompassing 20 chapters. The five parts deal with the issues arising from the basic propositions of the United Nations Conference on Science and Technology for Development (UNCSTD), such as the problems involving building up S&T capability, infrastructure and technology transfer, technological problems in the Caribbean. Other issues discussed include the science and technology policies in Latin America, and the UNCSTD symposium preparations. The book ends with a presentation of a brief debate on the topics of research on science and technology in Latin America and the Caribbean, and with a report of the Symposium.

Each entry gives short to lengthy biographical information. Subject and name index.

With over 11,000 authoritative and up-to-date entries, this best-selling dictionary covers all branches of psychology including psychoanalysis and psychiatry. Clear, concise descriptions for each entry offer extensive coverage of key areas including cognition, sensation and perception, emotionand motivation, learning and skills, language, mental disorder, and research methods. Entries are extensively cross-referenced for ease of use, and cover word origins and derivations as well as definitions. Over 80 illustrations complement the text. In addition to the alphabetical entries, the dictionary also includes appendices covering over 800 commonly used abbreviations and symbols, as well as a list of phobias and phobic stimuli, with definitions. Now containing a list of recommended web links, accessible via the Dictionary of Psychologywebsite, this dictionary is loaded with more useful and up-to-date information than any other dictionary of its kind. Comprehensive and jargon-free, the Dictionary of Psychology is an invaluable work of reference for students of psychology and related disciplines, professionals, and the generalreader with an interest in the workings of the mind.

I was asked recently to prepare an independent background report on the subject of priority assessment in science and technology policy for the Australian Science and Technology Council. The Council (while not necessarily endorsing this book) suggested that a wider audience could be interested in the type of material contained in my report and kindly gave me permission to publish the material in my own right. The present book contains this and other material, some of which was presented at a seminar on National Science Policy: Implications for Government Departments arranged by the Department of Science and the Environment. Additional ideas were developed in response to comments on the manuscript by referees, as a result of discussions with Professor John Metcalfe and Dr Peter Stubbs of Manchester University, a conversation with Dr Keith Hartley of the University of York and in the wake of a communication from Dr Ken Tucker, Assistant Director, Bureau of Industry Economics, Australia. Science and technology policy affects and concerns everyone of us if for no other reason than its interdependent world from the economic, social and environmental values pills generated by science and technology. We must face the problems and promises inherent in new and existing science and technology whether we like it or not. Not surprisingly this book finds that all industrialized countries seem to be facing similar economic and social problems.

Risk analysis and prevention. Oil properties oil physical properties. Oil composition and properties. Oil analysis. oil behavior. Modelling. oil spill on land. Effects of oil. Natural dispersion. Cold region spills. Case studies.

This book provides a comprehensive and up-to-date review of recent trends of green science and technology. Worldwide deterioration of environment and global warming threaten our lifestyle and the survival of all creatures. In order to weather these problems, we need to construct a multidisciplinary approach involving the fusion of various advanced researches. The book begins with an overview on fundamental research about generation and utilization of renewable energy, protection of the earth's ecosystem for better coexistence with nature, development of artificial intelligence-based agriculture and molecular recognitionbased welfare and covers a wide range of innovative research on green science and technology.

Science is a living, organic activity, the meaning and understanding of which have evolved incrementally over human history. This book, the first in a roughly chronological series, explores the development of the methodology and major ideas of science, in historical context, from ancient times to the decline of classical civilizations around 300 A.D. It includes details specific to the histories of specialized sciences including astronomy, medicine and physics—along with Roman engineering and Greek philosophy. It closely describes the contributions of such individuals as Pythagoras, Hippocrates, Socrates, Plato, Aristotle, Alexander the Great, Euclid, Archimedes, Ptolemy, Seneca, Pliny the Elder, and Galen.

[Science and Technology in World History](#)

[High-Pressure Science and Technology](#)

[The Lives and Achievements of 1195 Great Scientists from Ancient Times to the Present. Chronologically Arranged](#)

[Rice Science and Technology](#)

[Will My Cat Eat My Eyeballs?](#)

[Integration of Science and Technology with Development](#)

[Science and Technology Behind Nanomulsion](#)

[Issues in Philosophies of Science and Technology](#)

[Ensuring the Best Presidential and Federal Advisory Committee Science and Technology Appointments](#)

[The Handbook of Science and Technology Studies](#)

[Fun Step-by-step Preschool Projects about Science, Technology, Engineering, Art, and Math!](#)

[Handbook of Public Communication of Science and Technology](#)

The fourth edition of an authoritative overview, with all new chapters that capture the state of the art in a rapidly growing field.

A Time Magazine Must-Read Book of 2020
A Best Book of the Season: BuzzFeed
* Bustle
* San Francisco Chronicle
A Best Book of the Year: NPR's Book Concierge
* Washington Independent Review of Books
"A fascinating and beautifully written love letter to water. I was enchanted by this book." —Rebecca Skloot, bestselling author of The Immortal Life of Henrietta Lacks
An immersive, unforgettable, and eye-opening perspective on swimming—and on human behavior itself. We swim in freezing Arctic waters and piranha-infested rivers to test our limits. We swim for pleasure, for exercise, for healing. But humans, unlike other animals that are drawn to water, are not natural-born swimmers. We must be taught. Our evolutionary ancestors learned for survival; now, in the twenty-first century, swimming is one of the most popular activities in the world. Why We Swim is propelled by stories of Olympic champions, a Baghdad swim club that meets in Saddam Hussein's palace pool, modern-day Japanese samurai swimmers, and even an Icelandic fisherman who improbably survives a wintry six-hour swim after a shipwreck. New York Times contributor Boris Tsal, a swimmer herself, dives into the deep, from the San Francisco Bay to the South China Sea, investigating what it is about water that seduces us, despite its dangers, and why we come back to it again and again.

This beryllium treatise was made possible by the expertise and hard work of members of the Joint US-UK Working Group on Beryllium (JOWOG 22), which was set up in the 1960s to allow a controlled exchange of technical information on the science and application of beryllium between the two countries. The leading roles in JOWOG 22 of Dr. Lee Roberts of the Lawrence Livermore Laboratory and Dr. Geoffrey Ellis of the Atomic Weapons Research Establishment (A WRE) at Aldermaston are particularly noteworthy. Excerpts from so me of the material in this book were presented at an international conference "Beryllium 77" in London in October 1977. The conference, which was superbly organized by Dr. John Martin and his co workers at A WRE, was sponsored by the Metals Society and the Institut ion of Metallurgists, and was particularly instructive in revealing the unexpectedly strong position of the USSR in some aspects of beryllium physical metallurgy and ductility improvement. Advance publicity for this book was also provided by presentations at the AIME 1977 annual meeting in Atlanta, Georgia. The presentations were co-sponsored by the Metal lurgy and Non-Ferrous Metals Committees at the request of committee members John E. Smugersky and Gilbert J. London. D. Webster G. J. London vii Contents 1 • Introduction

STEAM Play & Learn is an introduction to STEAM topics (science, technology, engineering, arts, and math) for preschoolers with fun, interactive, easy-to-follow, step-by-step activities.

How do we objectively measure scientific activities? What proportion of economic activities should a society devote to research and development? How can public-sector and private-sector research best be directed to achieve social goals? Governments and researchers from industrial countries have been measuring science and technology for more than eighty years. This book provides the first comprehensive account of the attempts to measure science and technology activities in Western countries and the successes and shortcomings of statistical systems. Godin guides readers through the historical moments that led to the development of statistics on science and technology and also examines the socio-political dynamics behind social measurement. This enlightening account will be of interest to students and academics investigating science measurement as well as policy makers working in this burgeoning field.

Continuing the tradition of excellence established by the first edition, the Second Edition of Applied Wetlands Science and Technology provides the fundamentals for delineating, identifying, and regulating wetlands. It covers functions and values, ecological assessments, and how to minimize negative impacts on wetlands. The book also presents essential information on wetland creation, enhancement, restoration, and monitoring. Selected management topics include designing and managing wetlands for wildlife, managing coastal marshes, and wetlands education. Three new chapters in the Second Edition: Wetlands Mitigation Banking-discusses the purpose, policy, and technology of mitigation banking Watershed Management-covers the most current remediation technology as it pertains to wetlands Managing Global Wetlands-describes the classification and management of wetlands throughout the world Written by wetland professionals, this indispensable guide furnishes extensive information on how wetlands function, how they can be protected, and how they can be managed. Recognizing that each and every situation is unique and requires a tailored approach, Applied Wetlands Science and Technology, Second Edition focuses on providing guidelines for effective decision making.

High pressure has become a basic variable in many areas of science and engineering. It extends from disciplines of geophysics and astrophysics through chemistry and physics to those of modern biology, electrical and chemical engineering. This breadth has been recognized for some time, but it was not until the early 1960's that an international group of scientists and engineers established the Association Internationale for Research and Advancement of High Pressure Science and Technology (AIRAPT) for bringing these various aspects of high pressure together at an international conference. The first AIRAPT International High Pressure Conference was held in 1965 in France and has been convened at approximately two to three year intervals since that time. The past four AIRAPT International High Pressure Conferences have been held in Germany, Scotland, Japan and the U.S.S.R. Since the first meeting of this kind, our understanding of high pressure behavior of physical systems has increased greatly.

Comprehensive yet accessible, this key handbook provides an up-to-date overview of the fast growing and increasingly important area of 'public communication of science and technology', from both research and practical perspectives. As well as introducing the main issues, arenas and professional perspectives involved, it presents the findings of earlier research and the conclusions previously drawn. Unlike most research books on this topic, this unique volume couples an overview of the practical problems faced by practitioners with a thorough review of relevant literature and research. The practical Handbook format ensures it is a student-friendly resource, but its breadth of scope and impressive contributors means that it is also ideal for practitioners and professionals working in the field. Combining the contributions of different disciplines (media and journalism studies, sociology and history of science), the perspectives of different geographical and cultural contexts, and by selecting key contributions from appropriate and well-respected authors, this original text provides an interdisciplinary as well as a global approach to public communication of science and technology.

[Guide to Mitigating Spacecraft Charging Effects](#)

[Science and Technology in the National Interest](#)

[Science and Technology of Rubber](#)

[Applied Adhesive Bonding in Science and Technology](#)

[Science and Other Cultures](#)

[Caribbean and Latin American Problems in the Context of the United Nations Conference on Science and Technology for Development](#)

[Science and technology IV](#)

[A Dictionary of Psychology](#)

[Advances in Nuclear Science and Technology](#)

[Encyclopedia of Science and Technology](#)

[A Reader in Feminist Science Studies](#)

Focuses on developments in rice storage, quality, processing and utilization, emphasizing their importance to growers, technologists and consumers. This work also provides insight into future advances and examines starch gelatinization in rice during the cooking process.

Best-selling author and mortician Caitlin Doughty answers real questions from kids about death, dead bodies, and decomposition.

This book brings together scientists and provides the reader with a comprehensive overview of some recent developments in the field of adhesive bonding with the contributions of internationally recognized authors. This book is divided into three sections: "Structural Adhesive Bonding," "Wood Adhesive Bonding," and "Adhesive Bonding in Medical Applications." Each section presents an important review and some applications of the adhesive bonding in various different disciplines. I hope that the book published in open access will help researchers to benefit from it.

Unsteady-state operations of catalytic reactors provide plentiful opportunities for research and commercial realization of efficient heterogeneous catalytic processes. Forced unsteady state conditions generate unique distributions of process parameters and catalyst states often unattainable with traditional, steady-state operation. The unsteady-states can be created by periodic changes in input flow parameters, such as changes in inlet temperature and composition, catalyst circulation through reaction and regeneration zones, or periodic flow reversals through fixed catalyst bed. This can result in increased productivity, selectivity, capital savings and operating cost reduction (higher energy efficiency). Efficient environmental technologies for treatment of toxic emissions, acid rain and greenhouse gas emissions can also be developed using the unsteady-state concept. The Proceedings communicate recent progress in these areas of research and promote future development. The aims are to establish relations between academia, industry, engineers and scientists from all over the world, to stimulate new catalytic technologies as well as fundamental research, and to create new concepts for the development of effective catalytic systems. It presents the most up-to-date research in catalysis. - contains the most recent developments in catalytic research - includes research finding as well as their application to industry - a thorough source of information on the latest developments of industrial catalysis in Japan

[Science and Technology in World HistoryAn Introduction](#)[HU Press

First published in 2003. Routledge is an imprint of Taylor & Francis, an informa company.

This book covers new micro-/nanoeulsion systems in technology that has developed our knowledge of emulsion stability. The emulsion system is a major phenomenon in well-qualified products and has extensive usages in cosmetic industry, food industry, oil recovery, and mineral processes. In this book, readers will find recent studies, applications, and new technological developments on fundamental properties of emulsion systems.

This reader provides an introduction to the gendering of science and the impact women are making in laboratories around the world. The republished essays included in this collection are both personal tales from women scientists and essays on the nature of science itself, covering such controversial issues like the under-representation of women in science, reproductive technology, sociobiology, evolutionary theory, and the notion of objective science.

[Priorities of Governments](#)

[Asimov's Biographical Encyclopedia of Science and Technology](#)

[From Biotechnology to the Internet](#)

[My Witness Statement and a Vision for the Future](#)

[Science and Technology in World History, Volume 1](#)

[Volume 1: Physical Properties and Material Synthesis / Volume 2: Applications and Mechanical Properties](#)

[The Ancient World and Classical Civilization](#)

[Science and Technology in Society](#)

[An Introduction](#)

[Sustainability Science and Technology](#)

[Applied Wetlands Science and Technology, Second Edition](#)

[Can Science and Technology Save China?](#)

Sustainability Science and Technology: An Introduction explains the root causes of global failures in natural and human systems, as well as the most readily available technological solutions. The book dispels risky scientific and technological ideas that further complicate the current environmental and socioeconomic predicaments. It also bridges gaps among scientific and technological fields and systematically translates current findings for a wide technical and public audience. Written at a level accessible to all, the story is told one bite-sized chapter at a time, about the size of a scientific journal article. The chapters are self-contained, each grappling with a large topic. This provides more in-depth coverage of a topic than a standard encyclopedia article and promotes the widest possible dialog around sustainability issues and their solutions. Case studies from all continents and all technological development levels expound viable solutions for each of the planetary systems: water, soils, and atmosphere. In turn, the wider socioeconomic context of sustainable science and technology is examined. One of the first books to address the full scope of sustainability, it sets the stage for discussion and sustainability(re)training) across professional divides. The editor and contributors take a balanced approach that is neither too technical nor too focused on any particular field. They highlight global and regional perspectives and the linkages between different planetary and human systems. The book helps you understand the thorny essence of sustainability issues—often fraught with ethical dilemmas, obsolete technologies, and lifestyle implications—and how to develop solutions to them.

The definitive guide to the modern body of spacecraftcharging knowledge—from first principles for the beginner tointermediate and advanced conceptsThe only book to blend the theoretical and practical aspects ofspacecraft charging, Guide to Mitigating Spacecraft ChargingEffects defines the environment that not only creates the aurora, but which also can have significant effects on spacecraft, such asdisruption of science measurements and solar arrays fromelectrostatic discharge (ESD). It describes in detail the physicalst the interaction phenomenon as well as how to constructspacecraft to enhance their survivability in the harsh environmentof space. Combining the authors' extensive experience in spacecraftcharging—and in their provision of design support to NASA,JPL, the commercial satellite market, and numerous otherprojects—this incredible book offers both a robust physicsbackground and practical advice for neophytes in the field andexperienced plasma physicists and spacecraft engineers. In addition to containing numerous equations, graphs, tables,references, and illustrations, Guide to Mitigating SpacecraftCharging Effects covers: Solar cell technology, especially higher voltage arrays, and thenev design approaches that are appropriate for them Information about the space plasma environment New analytic computer codes to analyze spacecraft charging Spacecraft anomalies and failures which emphasized designs thatare of greater importance than others Presents nearly one thousand entries and 750 illustrations on science and technology, with bibliographies after each entry and sidebars containing relevant facts.

Semiconductors are at the heart of modern living. Almost everything we do, be it work, travel, communication, or entertainment, all depend on some feature of semiconductor technology. Comprehensive Semiconductor Science and Technology captures the breadth of this important field, and presents it in a single source to the large audience who study, make, and exploit semiconductors. Previous attempts at this achievement have been abbreviated, and have omitted important topics. Written and Edited by a truly international team of experts, this work delivers an objective yet cohesive global review of the semiconductor world. The work is divided into three sections. The first section is concerned with the fundamental physics of semiconductors, showing how the electronic features and the lattice dynamics change drastically when systems vary from bulk to a low-dimensional structure and further to a nanometer size. Throughout this section there is an emphasis on the full understanding of the underlying physics. The second section deals largely with the transformation of the conceptual framework of solid state physics into devices and systems which require the growth of extremely high purity, nearly defect-free bulk and epitaxial materials. The last section is devoted to exploitation of the knowledge described in the previous sections to highlight the spectrum of devices we see all around us. Provides a comprehensive global picture of the semiconductor world Each of the work's three sections presents a complete description of one aspect of the whole Written and Edited by a truly international team of experts

The Handbook of Zeolite Science and Technology offers effective analyses ofsalient cases selected expressly for their relevance to current and prospective research. Presenting the principal theoretical and experimental underpinnings of zeolites, this international effort is at once complete and forward-looking, combining fundamental

[Publisher description](#)

[Can Science and Technology Save China?](#) assesses the intimate connections between science and society in China, offering an in-depth look at how an array of sciences and technologies are being made, how they are interfacing with society, and with what effects. Focusing on critical domains of daily life, the chapters explore how scientists, technicians, surgeons, therapists, and other experts create practical knowledges and innovations, as well as how ordinary people take them up as they pursue the good life. Editors Greenhalgh and Zhang offer a rare, up-close view of the politics of Chinese science-making, showing how everyday logics, practices, and ethics of science, medicine, and technology are profoundly reshaping contemporary China. By foregrounding the notion of "governing through science," and the contested role of science and technology as instruments of change, this timely book addresses important questions regarding what counts as science in China, what science and technology can do to transform China, as well as their limits and unintended consequences.

[Science and Technology in Catalysis](#)

[1920 to the Present](#)

[The Art, Science, and Technology of Pharmaceutical Compounding](#)

[Handbook of Science and Technology Studies](#)

[Egg Science and Technology](#)

[STEAM Play & Learn](#)

[Philanthropy and the Future of Science and Technology](#)

[Why We Swim](#)

[Beryllium Science and Technology](#)