Greek Fire, Poison Arrows, and Scorpion BombsThe TB12 MethodThe Myth of Silent Spring100 Chemical MythsDeath of a whistleblower and Cochrane's moral collapsePractical Numerical Methods for Chemical EngineersThe Alchemy of UsThe Emperor's New DrugsTestosteroneThe Myth of EvilImmunotherapyThe Myths of Safe PesticidesAn Introduction to Dust ExplosionsTwin Mythconceptions50 Great Myths of Popular PsychologyGarden MythsThe Gendered BrainThe Great Pheromone MythDepression Delusion, Volume OneCitrusThe Pharmaceutical MythOur Chemical SelvesTextile ChemicalsThe Poison SquadHow Glass Changed the WorldThe Myth of the Moral Brain100 Chemical MythsDrug TruthsA Closer Look at Silicon - Chemistry Book for Elementary | Children's Chemistry BooksThe Myth of the Paperless OfficeThe Myth of the Chemical CureThe American Psychiatric Publishing Textbook of PsychiatryThe Bitterest PillsParallel MythsThe Excellent PowderInformation is BeautifulThe Myth of the Chemical CureThe Attribute of WaterEnvironmental IllnessNeurobiology of Chemical Communication

Greek Fire, Poison Arrows, and Scorpion Bombs

Professor Peter C. Gøtzsche co-founded the Cochrane Collaboration in 1993 and has become one of the most respected academics of his time. His career has exposed malfeasance in the pharmaceutical industry, human clinical trials and drug regulatory agencies, empowering Cochrane to evolve into one of the world's most trusted scientific institutions. However, in September 2018, he was unceremoniously expelled after what can only be described as a show trial that left the rest of the world wondering what happened. Gøtzsche fought to uphold Cochrane's original values of transparency, rigorous science, free scientific debates, and collaboration. But instead of maintaining scientific integrity, Cochrane's leadership had become consumed with managing the charity like a business, promoting its brand and products and demanding the censorship of dissenting views. For the first time, Gøtzsche pulls back the covers on this unscrupulous process, giving us all access to secret recordings, which reveal how his own organisation betrayed him and mislead millions of people after Cochrane cowered to the threats and intimidation from his critics. This is the fascinating story about institutional corruption in one of the world's most venerated charities, which ultimately led to the worst show trial in academia you can imagine.

The TB12 Method

This book overturns the idea that psychiatric drugs work by correcting chemical imbalance and analyzes the professional, commercial and political vested interests that have shaped this view. It provides a comprehensive critique of research on drugs including antidepressants, antipsychotics and mood stabilizers.

The Myth of Silent Spring

Since its publication in 1962, Rachel Carson's book Silent Spring has often been

celebrated as the catalyst that sparked an American environmental movement. Yet environmental consciousness and environmental protest in some regions of the United States date back to the nineteenth century, with the advent of industrial manufacturing and the consequent growth of cities. As these changes transformed people's lives, ordinary Americans came to recognize the connections between economic exploitation, social inequality, and environmental problems. As the modern age dawned, they turned to labor unions, sportsmen's clubs, racial and ethnic organizations, and community groups to respond to such threats accordingly. The Myth of Silent Spring tells this story. By challenging the canonical "songbirds and suburbs" interpretation associated with Carson and her work, the book gives readers a more accurate sense of the past and better prepares them for thinking and acting in the present.

100 Chemical Myths

"A comprehensive look at WMD's antecedents, from flamethrowers of the Peloponnesian War to plague-bearing booby traps. Rich and entertaining."
-Newsweek Featuring a new introduction by the author. Flamethrowers, poison gases, incendiary bombs, the large-scale spreading of disease are these terrifying agents and implements of warfare modern inventions? Not by a long shot. Weapons of biological and chemical warfare have been in use for thousands of years, and Greek Fire, Poison Arrows & Scorpion Bombs, Adrienne Mayor's fascinating exploration of the origins of biological and unethical warfare draws extraordinary connections between the mythical worlds of Hercules and the Trojan War, the accounts of Herodotus and Thucydides, and modern methods of war and terrorism. Greek Fire, Poison Arrows & Scorpion Bombs will catapult readers into the dark and fascinating realm of ancient war and mythic treachery-and their devastating consequences.

Death of a whistleblower and Cochrane's moral collapse

Garden Myths examines over 120 horticultural urban legends. Turning wisdom on its head, Robert Pavlis dives deep into traditional garden advice and debunks the myths and misconceptions that abound. He asks critical questions and uses science-based information to understand plants and their environment. Armed with the truth, Robert then turns this knowledge into easy-to-follow advice. - Is fall the best time to clean the garden? - Do bloom boosters work?- Will citronella plants reduce mosquitoes in the garden?- Do pine needles acidify soil?- Should tomatoes be suckered?- Should trees be staked at planting time? - Can burlap keep your trees warm in winter?- Will a pebble tray increase humidity for houseplants? "Garden Myths is a must-read for anyone who wants to use environmentally sound practices. This fascinating and informative book will help you understand plants better, reduce unnecessary work, convince you to buy fewer products and help you enjoy gardening more."

Practical Numerical Methods for Chemical Engineers

An enlightening history of the concept of evil in Western culture

The Alchemy of Us

Glass production is thought to date to ~2500 BC and had found numerous uses by the height of the Roman Empire. Yet the modern view of glass-based chemical apparatus (beakers, flasks, stills, etc.) was quite limited due to a lack of glass durability under rapid temperature changes and chemical attack. This "brief" gives an overview of the history and chemistry of glass technology from its origins in antiquity to its dramatic expansion in the 13th century, concluding with its impact on society in general, particularly its effect on chemical practices.

The Emperor's New Drugs

"For more than 50 years, researchers have identified pheromones as the triggers for a wide range of mammalian behaviors and endocrine responses. In this book, [author] rejects this idea and states bluntly that, in contrast to insects, mammals do not have pheromones. [book title] directly challenges ideas about the role chemicals play in mammalian behavior and reproductive processes."--Book jacket.

Testosterone

Contains state-of-the-art information on environmental aspects of 2,500 chemicals currently used in the textile industry worldwide. Explanatory texts preceding the extended tables present comprehensive overviews of the processes presently in use, as well as of important and relevant governmental regulations. Data sheet for each chemical spans relevant physical, chemical, biological and toxicological data. Textile engineers and specialists involved in the risk assessment and control of these chemicals will find the overview given on each chemical, its field of application and its function in the production make this volume a valuable tool for their frequent reference.

The Myth of Evil

50 Great Myths of Popular Psychology uses popular myths as a vehicle for helping students and laypersons to distinguish science from pseudoscience. Uses common myths as a vehicle for exploring how to distinguish factual from fictional claims in popular psychology Explores topics that readers will relate to, but often misunderstand, such as 'opposites attract', 'people use only 10% of their brains', and 'handwriting reveals your personality' Provides a 'mythbusting kit' for evaluating folk psychology claims in everyday life Teaches essential critical thinking skills through detailed discussions of each myth Includes over 200 additional psychological myths for readers to explore Contains an Appendix of useful Web Sites for examining psychological myths Features a postscript of remarkable psychological findings that sound like myths but that are true Engaging and accessible writing style that appeals to students and lay readers alike

Immunotherapy

A drug-pushing pharmaceutical sales representative turned nutritionist takes you on a journey to understand why prescription pharmaceuticals fail to meet our

health expectations. This book provides a clear view behind the pharmaceutical smoke and mirrors to reveal the true path to healthy living, free of disease. When we acknowledge food as our best source of nutrition, we can regenerate organs, resolve symptoms and embrace a long lasting health. It's that simple. In order to address the underlying causes of any health challenge, we must take a deeper look into the history and application of effective whole-food nutrition. That is what The Pharmaceutical Myth reveals. Your health and the health of your family will never be the same.

The Myths of Safe Pesticides

Environmental illness: certain health professionals and clinical ecologists claim it impacts and inhibits 15 percent of the population. Its afflicted are led to believe environmental illness (EI) originates with food, chemicals, and other stimuli in their surroundings -as advocates call for drastic measures to remedy the situation. What if relief proves elusive-and the patient is sent on a course of ongoing, costly and ineffective ""treatment""? Several hundred individuals who believed they were suffering from EI have been evaluated or treated by Herman Staudenmayer since the 1970s. Staudenmayer believed the symptoms harming his patients actually had psychophysiological origins-based more in fear of a hostile world than any suspected toxins contained in the environment. Staudenmayer's years of research, clinical work-and successful care-are now summarized in Environmental Illness: Myth & Reality. Dismissing much of the information that has attempted to defend EI and its culture of victimization, Staudenmayer details the alternative diagnoses and treatments that have helped patients recognize their true conditions-and finally overcome them, often after years of prolonged suffering.

An Introduction to Dust Explosions

A challenging reappraisal of the history of antipsychotics, revealing how they were transformed from neurological poisons into magical cures, their benefits exaggerated and their toxic effects minimized or ignored.

Twin Mythconceptions

Testosterone is neither the biological essence of manliness nor even the "male sex hormone." It doesn't predict competitiveness or aggressiveness, strength or sex drive. Rebecca Jordan-Young and Katrina Karkazis pry testosterone loose from more than a century of misconceptions that undermine science while making social fables seem scientific.

50 Great Myths of Popular Psychology

Everyday exposures to common chemicals found in homes, schools, and workplaces are having devastating long-term and inter-generational consequences on human health. At the same time, the risks associated with these exposures (and the burdens of managing them) rest disproportionately on the shoulders of women. Written by leading researchers in science, law, and public policy, the chapters in Our Chemical Selves critically examine the system that manufactures the

chemicals as well as the social, political, and gender relations that enable harmful chemicals to continue being produced and consumed. This book demonstrates the urgent need to revise existing approaches to the regulation of toxic substances in Canada.

Garden Myths

The #1 New York Times bestseller by Tom Brady, six-time Super Bowl champion and one of the NFL's 100 Greatest Players of All Time. Revised, expanded, and updated, the first book by Tampa Bay Buccaneers and former New England Patriots quarterback Tom Brady—who continues to play at an elite level into his forties—a gorgeously illustrated and deeply practical "athlete's bible" that reveals Brady's revolutionary approach to enhanced quality of life and performance through recovery for athletes of all abilities and ages. In this new edition of The TB12 Method, Tom Brady further explains and details the revolutionary training, conditioning, and wellness system that has kept him atop the NFL at an age when most players are deep into retirement. Brady—along with the expert Body Coaches at TB12, the performance lifestyle brand he cofounded in 2013—explain the principles and philosophies of pliability, a paradigm-shifting fitness concept that focuses on a more natural, healthier way of exercising, training, and living. Filled with lessons from Brady's own training regimen, The TB12 Method provides stepby-step guidance on how develop and maintain one's own peak performance while dramatically decreasing injury risks. This illustrated, highly visual manual also offers more effective approaches to functional strength & conditioning, proper hydration, supplementation, cognitive fitness, restorative sleep, and nutritious, easy-to-execute recipes to help readers fuel-up and recover. Brady steadfastly believes that the TB12 approach has kept him competitive while extending his career, and that it can make any athlete, male or female, in any sport and at any level achieve his or her own peak performance. With instructions, drills, photos, indepth case studies that Brady himself has used, along with personal anecdotes and experiences from his legendary career, The TB12 Method gives you a better way to train and get results with Tom Brady himself as living proof.

The Gendered Brain

Its previous edition hailed as "the best reference for the majority of practicing psychiatrists" (Doody's Book Reviews) and a book that "more than any other, provides an approach to how to think about psychiatry that integrates both the biological and psychological" (JAMA), The American Psychiatric Publishing Textbook of Psychiatry has been meticulously revised to maintain this preeminence as an accessible and authoritative educational reference and clinical compendium. It combines the strengths of its three editors -- Robert Hales in clinical and community psychiatry, Stuart Yudofsky in neuropsychiatry, and new co-editor Glen Gabbard in psychotherapy -- in recruiting outstanding authors to summarize the latest developments in psychiatry and features 101 contributors, 65 of whom are new to this edition. The book boasts a new interior design, with more figures and color throughout to aid comprehension. Each chapter ends with 5-10 key points, 5-10 recommended readings, and helpful Web sites not only for the clinician but also for patients and family members. The book also includes complimentary access to the full text online. Online benefits include powerful searching, electronic

bookmarking, and access by username and password from wherever you have Web access -- especially convenient for times when the print copy of your textbook is not where you are. The online version is accompanied by a downloadable PowerPoint presentation, which contains a wealth of material to enhance classroom presentation, study, and clinical use. Among the improvements to this edition's content: • Of the text's 44 chapters, 23 either feature new topics or have new authors, making this the most completely revised edition yet. • New basicscience chapters on cellular and molecular biology of the neuron and on neuroanatomy for the psychiatrist conveniently distill essential information on the biological foundations of psychiatric disorders for clinicians. • A new chapter on human sexuality and sexual dysfunctions, and another new chapter on treatment of gay, lesbian, bisexual, and transgender patients, equips clinicians to address the entire spectrum of sexual issues and their attendant mental health concerns. • New chapters on nonpharmacological somatic treatments, supportive psychotherapy, and combination psychotherapy and pharmacotherapy augment the section on psychiatric treatments. • A new chapter on the assessment of dangerousness -- an individual's propensity to commit violent acts -- presents helpful guidelines for appropriately evaluating and minimizing the risk of violence in both outpatient and inpatient settings. Why The American Psychiatric Publishing Textbook of Psychiatry will be your first choice among comprehensive psychiatry textbooks: • Complimentary Access to the Full Text Online -- Online benefits include powerful searching, electronic bookmarking, and download to PDA. • PowerPoint Presentation -- Online version is accompanied by a downloadable PowerPoint presentation, which contains a wealth of material to help you enhance classroom presentation, study, and in clinical use. • Self-Assessment -- An interactive online Self-Assessment allows you to assess your knowledge of each chapter, with links back to the textbook when more study is needed. • Summary Points -- Each chapter ends with 5-10 key points, 5-10 recommended readings, and helpful web sites not only for the clinician but also for referral to patients and family members. • Co-Editor Glen O. Gabbard, M.D. -- As the third Co-Editor, Dr. Gabbard adds depth and perspective to psychotherapeutic approaches. • Chapter Authors -- Partnership of senior and junior faculty brings fresh insights tempered by wisdom and experience. • Peer-Reviewed -- Rigorously peer reviewed and updated to reflect the rapidly changing profession. • Disclosure of Interest Statements -- Disclosure from each chapter author assures you that potential biases have been removed. • Comprehensive But Concise -- Inclusion of essential information eases information overload. • Better Layout -- Larger type for text makes book easier to read and color figures are provided throughout the text. It's no wonder that this text has established itself as both a leading scholarly reference and an indispensable clinical resource. The American Psychiatric Publishing Textbook of Psychiatry is a proven teaching tool and an essential component of every practitioner's library.

The Great Pheromone Myth

100 Chemical Myths deals with popular yet largely untrue misconceptions and misunderstandings related to chemistry. It contains lucid and concise explanations cut through fallacies and urban legends that are universally relevant to a global audience. A wide range of chemical myths are explored in these areas; food, medicines, catastrophes, chemicals, and environmental problems. Connections to popular culture, literature, movies, and cultural history hold the reader's interest

whilst key concepts are beautifully annotated with illustrations to facilitate the understanding of unfamiliar material. Chemical Myths Demystified is pitched to individuals without a formal chemistry background to fledgling undergraduate chemists to seasoned researchers and beyond.

Depression Delusion, Volume One

Preventable dust explosions continue to occur in industry in spite of significant research and practice efforts worldwide over many years. There is a need for effective understanding of the unique hazards posed by combustible dust. This book describes a number of dust explosion myths – which together cover the main source of dust explosion hazards – the reasons they exist and the corresponding scientific and engineering facts that mitigate these circumstances. An Introduction to Dust Explosions describes the main erroneous beliefs about the origin and propagation of dust explosions. It offers fact-based explanations for their occurrence and the impact of such events and provides a critical guide to managing and mitigating dust explosion risks. Designed to prevent accidents, injury, loss of life and capital damage An easy-to-read, scientifically rigorous treatment of the facts and fictions of dust explosions for those who need to – or ought to – understand dust explosions, their occurrence and consequences Enables the management and mitigation of these critical industrial hazards

Citrus

Andre Leu challenges conventional farming methods by refuting the myths that surround the use and understanding of pesticides. He exposes the dangers of these chemicals and advocates organic practices as the most viable for farming in the 21st Century.

The Pharmaceutical Myth

Laszlo traces the spectacular rise and spread of citrus across the globe, from southeast Asia in 4000 BC to modern Spain and Portugal, whose explorers inroduced the fruit to the Americas. This book explores the numerous roles that citrus has played in agriculture, horticulture, cooking, nutrition, religion, and art.

Our Chemical Selves

100 Chemical Myths deals with popular yet largely untrue misconceptions and misunderstandings related to chemistry. It contains lucid and concise explanations cut through fallacies and urban legends that are universally relevant to a global audience. A wide range of chemical myths are explored in these areas; food, medicines, catastrophes, chemicals, and environmental problems. Connections to popular culture, literature, movies, and cultural history hold the reader's interest whilst key concepts are beautifully annotated with illustrations to facilitate the understanding of unfamiliar material. Chemical Myths Demystified is pitched to individuals without a formal chemistry background to fledgling undergraduate chemists to seasoned researchers and beyond.

Textile Chemicals

It's the world's most successful public health insecticide, saving millions upon millions of lives from preventable, insect-borne diseases. Yet despite decades of use and thousands of studies on its effects, DDT remains the world's most misunderstood chemical. Orchestrated, well-financed, earnest, but myth-based campaigns forced most countries to ban DDT without scientific justification. These campaigns created a climate of irrational fear and ignorant prejudice around DDT and have condemned millions of the world's most vulnerable people to death. The Excellent Powder dispels these myths and sets the record straight. It reviews the fascinating history of this chemical that changed the world. It analyzes the scientific evidence and explains how and why DDT safely protects millions from the threat of malaria and other diseases. Finally, it documents how many activists choose to ignore this evidence, and how their ignorant prejudices continues to undermine disease control programs. "DDT has been the main agent in eradicating malaria and of having saved at least 2 billion people in the world without causing the loss of a single life by poisoning from DDT alone." World Health Organization, 1969 "The ban on DDT, founded on erroneous or fraudulent reports . . . has caused millions of deaths " 7 Gordon Edwards, scientist & entomologist, 2004

The Poison Squad

An argument that moral functioning is immeasurably complex, mediated by biology but not determined by it.

How Glass Changed the World

Twin Mythconceptions: False Beliefs, Fables, and Facts about Twins sheds new light on over 70 commonly held ideas and beliefs about the origins and development of identical and fraternal twins. Using the latest scientific findings from psychology, psychiatry, biology, and education, the book separates fact from fiction. Each idea about twins is described, followed by both a short answer about the truth, and then a longer, more detailed explanation. Coverage includes embryology of twins, twin types, intellectual growth, personality traits, sexual orientation of twins, marital relationships, epigenetic analyses, and more. Five appendices cover selected topics in greater depth, such as the frequency of different twin types and the varieties of polar body twin pairs. This book will inform and entertain behavioral and life science researchers, health professionals, twins, parents of twins, and anyone interested in the fascinating topic of twins. Identifies common misunderstandings about twins Provides scientific answers to questions about twins Encompasses the biology, psychology, genetics, and personality of twins Includes discussion of identical, fraternal same-sex, and fraternal opposite-sex twins Allows for quick answers to common questions and more detailed explanations

The Myth of the Moral Brain

This book features the latest advances and future trends in water science and technology. It also discusses the scientific popularization and quantitative

resolution of a variety of mysterious properties of water and ice from the perspective of hydrogen-bond cooperativity in response to stimuli such as chemical contamination, electrification, magnetification, mechanical compression, molecular undercoordination, and thermal excitation. Anomalies include the floating of ice, the Hofmeister effect in solutions, regelation of ice, slipperiness of ice, water's tough skin, the Mpemba paradox, and the floating bridge. It also addresses the superfluidity of microchannels, hydrogen bond potentials, nanodroplet and bubble thermodynamics, quasisolidity and supersolidity, controlling superhydrophobicity-superhydrophilicity transition, and high-pressure ice formation. The target audience for this book includes students, senior scholars, engineers and practitioners in the area of physical chemistry, biology, as well as aqueous and colloid solutions.

100 Chemical Myths

This is another attempt of InTechOpen to continue the dissemination of international knowledge and experience in the field of immunology. The present book includes a number of modern concepts of specialists and experts in the field of immunotherapy, covering the major topics and analyzing the history, current stage, and future ideas of application of modern immunomodulation. It is always a benefit, but also a compliment, to gather a team of internationally distinguished authors and to motivate them to reveal their expertise for the benefit of medical science and health practice. On behalf of all readers, immunologists, immunogeneticists, biologists, oncologists, microbiologists, virologists, hematologists, chemotherapists, health-care experts, as well as students and medical specialists, also on my personal behalf, I would like to extend my gratitude and highest appreciation to InTechOpen for giving me the unique chance to be the editor of this exclusive book.

Drug Truths

Dr. Harvey Washington Wiley set out to ensure food safety. The tasters were recognized for their courage, and became known as the poison squad.

A Closer Look at Silicon - Chemistry Book for Elementary | Children's Chemistry Books

A visual guide to the way the world really works Every day, every hour, every minute we are bombarded by information - from television, from newspapers, from the internet, we're steeped in it, maybe even lost in it. We need a new way to relate to it, to discover the beauty and the fun of information for information's sake. No dry facts, theories or statistics. Instead, Information is Beautiful contains visually stunning displays of information that blend the facts with their connections, their context and their relationships - making information meaningful, entertaining and beautiful. This is information like you have never seen it before - keeping text to a minimum and using unique visuals that offer a blueprint of modern life - a map of beautiful colour illustrations that are tactile to hold and easy to flick through but intriguing and engaging enough to study for hours.

The Myth of the Paperless Office

In the bestselling tradition of Stuff Matters and The Disappearing Spoon: a clever and engaging look at materials, the innovations they made possible, and how these technologies changed us. In The Alchemy of Us, scientist and science writer Ainissa Ramirez examines eight inventions—clocks, steel rails, copper communication cables, photographic film, light bulbs, hard disks, scientific labware, and silicon chips—and reveals how they shaped the human experience. Ramirez tells the stories of the woman who sold time, the inventor who inspired Edison, and the hotheaded undertaker whose invention pointed the way to the computer. She describes, among other things, how our pursuit of precision in timepieces changed how we sleep; how the railroad helped commercialize Christmas; how the necessary brevity of the telegram influenced Hemingway's writing style; and how a young chemist exposed the use of Polaroid's cameras to create passbooks to track black citizens in apartheid South Africa. These fascinating and inspiring stories offer new perspectives on our relationships with technologies. Ramirez shows not only how materials were shaped by inventors but also how those materials shaped culture, chronicling each invention and its consequences—intended and unintended. Filling in the gaps left by other books about technology, Ramirez showcases little-known inventors—particularly people of color and women—who had a significant impact but whose accomplishments have been hidden by mythmaking, bias, and convention. Doing so, she shows us the power of telling inclusive stories about technology. She also shows that innovation is universal—whether it's splicing beats with two turntables and a microphone or splicing genes with two test tubes and CRISPR.

The Myth of the Chemical Cure

This book answers the questions about the process and costs of pharmaceutical R & D in a compelling narrative focused on the discovery and development of important new medicines. It gives an insider's account of the pharmaceutical industry drug discovery process, the very real costs of misperceptions about the industry, the high stakes--both economic and scientific--of developing drugs, the triumphs that come when new compounds reach the market and save lives, and the despair that follows when new compounds fail. In the book, John LaMattina, former president of Pfizer Global Research and Development, weaves themes critical to a vital drug discovery environment in the context. This is a story that Dr. LaMattina is uniquely qualified to tell.

The American Psychiatric Publishing Textbook of Psychiatry

This latest 3rd edition expands the breadth of Practical Numerical Methods with over 100 VBA macros for extending Excel's power for engineering and scientific analysis. Engineers and scientists will find the enhanced coverage of computational tools applicable to a variety of problems in their own disciplines. ** The selection of software reflects Excel's status as the de facto computational tool used by practicing engineers. Engineers & scientists should become proficient at extending Excel's capabilities with VBA programming to boost their worksheets with time saving enhancements and powerful numerical techniques. ** Topics

include an introduction to modeling, documentation, Excel & VBA, root-finding for linear & nonlinear systems of equations, multivariate optimization, experimental uncertainty propagation & analysis, least-squares regression & model validation, interpolation, integration, and ordinary & partial differential equations. ** A companion web site has links to digital files for downloading up to 200 illustrations & examples & the refined PNM3Suite workbook with VBA user-defined functions, macros, & user forms for advanced numerical techniques. Practice problems are also available from the web site (https://www.d.umn.edu/ rdavis/PNM/PNMExcelVBA3/). Example files & macros are ready to be modified by users for their own needs. ** Chapter 1 includes a brief introduction to chemical reaction engineering that provides some background needed for problems involving mass & energy balances with reactions. ** The next two chapters introduce frequently overlooked features of Excel and VBA for engineering programming to apply numerical methods in Excel, as well as document results. The remaining chapters present powerful numerical techniques using Excel & VBA, including: ** General Methods: Sub & User-defined Function Procedures, Pseudorandom Number Generation, Sorting, Formula Graphing & Evaluation, Random Sampling, User forms ** Linear Equations: Gaussian Elimination with Maximum Column Pivoting, Error Correction, Crout Reduction, Thomas algorithm for tridiagonal & Cholesky's method for symmetric matrices, Matrix functions, Jacobi & Gauss-Seidel Iteration, Wegstein & Steffenson's version of Aitkin's Delta Square methods, Power method for Eigenproblems ** Nonlinear Equations: Ordinary Fixed-Point Iteration, Bisection, Secant, Regula Falsi, Newton & Quasi-Newton, Continuation (homotopy), Goal Seek, Solver, Bairstow's method for polynomial roots ** Derivative Approximation: Finite Difference, Richardson's extrapolation, Jacobian, Sensitivity Analysis, Lagrange polynomials, splines ** Uncertainty Analysis: litter method for the Law of Propagation of Uncertainty, Monte Carlo with Latin-Hypercube sampling, Jack knife for regression parameter uncertainty ** Optimization: Graphical, Quadratic with acceleration, Powell, Golden Section, Luuslaakola, Solver (for linear and nonlinear programming), Parameter Scaling ** Leastsquares Regression: multivariate linear models, Gauss-Newton, Levenberg-Marguardt, and Monte Carlo for nonlinear regression with parameter uncertainty, Rational Least Squares, Weighting ** Interpolation: Linear, Newton Divided Difference, Lagrange, Rational, Stineman, Cubic Spline, Constrained Splines, Bivariate 2-D, Data Smoothing ** Integration: Trapezoid, Improper, Midpoint, Romberg, Adaptive Gauss-Kronrod & Simpson, Splines, multiple integrals with Simpson, Kronrod, & Monte Carlo methods ** Initial-Value ODEs: Taylor Series, improved & modified Euler, implicit Trapezoidal for stiff problems, fixed & variable single step 4-5 order Runge-Kutta, Cash-Karp & Dormand-Prince, Adams-Bashforth-Moulton multi-step methods ** Boundary Value ODEs and PDEs: Shooting, Finite Difference, Collocation on Finite Elements, Quasilinearization, Method of Lines, semi-implicit Crank-Nicholson methods ** Tables for quick reference of Excel, VBA, and custom functions & macros for numerical m

The Bitterest Pills

Intraspecific communication involves the activation of chemoreceptors and subsequent activation of different central areas that coordinate the responses of the entire organism—ranging from behavioral modification to modulation of hormones release. Animals emit intraspecific chemical signals, often referred to as

pheromones, to advertise their presence to members of the same species and to regulate interactions aimed at establishing and regulating social and reproductive bonds. In the last two decades, scientists have developed a greater understanding of the neural processing of these chemical signals. Neurobiology of Chemical Communication explores the role of the chemical senses in mediating intraspecific communication. Providing an up-to-date outline of the most recent advances in the field, it presents data from laboratory and wild species, ranging from invertebrates to vertebrates, from insects to humans. The book examines the structure, anatomy, electrophysiology, and molecular biology of pheromones. It discusses how chemical signals work on different mammalian and non-mammalian species and includes chapters on insects, Drosophila, honey bees, amphibians, mice, tigers, and cattle. It also explores the controversial topic of human pheromones. An essential reference for students and researchers in the field of pheromones, this is also an ideal resource for those working on behavioral phenotyping of animal models and persons interested in the biology/ecology of wild and domestic species.

Parallel Myths

An examination of why paper continues to fill our offices and a proposal for better coordination of the paper and digital worlds. Over the past thirty years, many people have proclaimed the imminent arrival of the paperless office. Yet even the World Wide Web, which allows almost any computer to read and display another computer's documents, has increased the amount of printing done. The use of email in an organization causes an average 40 percent increase in paper consumption. In The Myth of the Paperless Office, Abigail Sellen and Richard Harper use the study of paper as a way to understand the work that people do and the reasons they do it the way they do. Using the tools of ethnography and cognitive psychology, they look at paper use from the level of the individual up to that of organizational culture. Central to Sellen and Harper's investigation is the concept of "affordances"—the activities that an object allows, or affords. The physical properties of paper (its being thin, light, porous, opaque, and flexible) afford the human actions of grasping, carrying, folding, writing, and so on. The concept of affordance allows them to compare the affordances of paper with those of existing digital devices. They can then ask what kinds of devices or systems would make new kinds of activities possible or better support current activities. The authors argue that paper will continue to play an important role in office life. Rather than pursue the ideal of the paperless office, we should work toward a future in which paper and electronic document tools work in concert and organizational processes make optimal use of both.

The Excellent Powder

Barbie or Lego? Reading maps or reading emotions? Do you have a female brain or a male brain? Or is that the wrong question? On a daily basis we face deeply ingrained beliefs that our sex determines our skills and preferences, from toys and colours to career choice and salaries. But what does this mean for our thoughts, decisions and behaviour? Using the latest cutting-edge neuroscience, Gina Rippon unpacks the stereotypes that bombard us from our earliest moments and shows how these messages mould our ideas of ourselves and even shape our brains. Rigorous, timely and liberating, The Gendered Brain has huge repercussions for

women and men, for parents and children, and for how we identify ourselves. 'Highly accessible Revolutionary to a glorious degree' Observer

Information is Beautiful

This book overturns the idea that psychiatric drugs work by correcting chemical imbalance and analyzes the professional, commercial and political vested interests that have shaped this view. It provides a comprehensive critique of research on drugs including antidepressants, antipsychotics and mood stabilizers.

The Myth of the Chemical Cure

Perhaps you've heard about the element silicon. It has many industrial uses ranging from everyday products to the more complex solar cells and other solid-state devices. In this Chemistry Book for Elementary, you'll be learning all about silicon without the pressure of having to match the pace of your classmates. Self-paced learning is best because you can follow your own path to learning.

The Attribute of Water

Do antidepressants work? Of course—everyone knows it. Like his colleagues, Irving Kirsch, a researcher and clinical psychologist, for years referred patients to psychiatrists to have their depression treated with drugs before deciding to investigate for himself just how effective the drugs actually were. Over the course of the past fifteen years, however, Kirsch's research—a thorough analysis of decades of Food and Drug Administration data—has demonstrated that what everyone knew about antidepressants was wrong. Instead of treating depression with drugs, we've been treating it with suggestion. The Emperor's New Drugs makes an overwhelming case that what had seemed a cornerstone of psychiatric treatment is little more than a faulty consensus. But Kirsch does more than just criticize: he offers a path society can follow so that we stop popping pills and start proper treatment for depression.

Environmental Illness

Brain chemical imbalances have been widely promoted as existing in depression for the past 50 years. In this book, Terry Lynch reveals some shocking truths. Chemical imbalances have never been found to exist in depression. The story of the rise of this falsehood is presented, a falsehood that is more prevalent in modern times then the flat earth delusion was in the past. This falsehood meets psychiatry's own criteria for a delusion. Adhering to principles of logic and science, Terry Lynch illustrates the absurdity of this widely held belief. He includes many references of doctors, other mental health professionals, the media and influential individuals espousing this falsehood as a known fact. He also included statements made by prominent doctors, scientists, psychologists and others over the past fifty years, expressing great concern that this falsehood has been widely misrepresented as if it were a fact, not least by members of the medical profession. The book addresses why drug companies are withdrawing from psychiatric research, who are the big winners and losers, and whether doctors

have sufficient knowledge to justify their standing as THE foremost mental health experts. The author describes the major adverse consequences of the depression brain chemical imbalance delusion, and why this and other related mental health delusions must be removed from the mental health landscape, in the public interest. The author presents a better way of understanding and responding to depression, based on what is actually there, rather than on fanciful notions of brain chemical notions that have never been demonstrated to exist. "

Neurobiology of Chemical Communication

An entertaining and thought-provoking look at the common threads woven through the world's greatest myths -- and the central role they have played through time. From the Trade Paperback edition.

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