

Process Economics Program Ihs

14th International Symposium on Process Systems Engineering, Volume 49 brings together the international community of researchers and engineers interested in computing-based methods in process engineering. The conference highlights the contributions of the PSE community towards the sustainability of modern society and is based on the 2021 event held in Tokyo, Japan, July 1-23, 2021. It contains contributions from academia and industry, establishing the core products of PSE, defining the new and changing scope of our results, and covering future challenges. Plenary and keynote lectures discuss real-world challenges (globalization, energy, environment and health) and contribute to discussions on the widening scope of PSE versus the consolidation of the core topics of PSE. Highlights how the Process Systems Engineering community contributes to the sustainability of modern society Establishes the core products of Process Systems Engineering Defines the future challenges of Process Systems Engineering

Catalysts are required for a variety of applications and industrialists and academics are increasingly challenged to find cost effective and environmentally benign catalysts to use. This volume looks at modern approaches to catalysis and reviews the extensive literature on areas such as electrochemical promotion of catalysis, biodiesel-based metals on emission control devices, deoxygenation of fatty acids and transitioning rationally designed catalytic materials to real world catalysts produced on a commercial scale.

Winner of the Lillian Smith Book Award Winner of the Los Angeles Times Book Prize Finalist for the National Book Award The Nation's "Most Valuable Book" "[A] vibrant intellectual history of the radical right."—The Atlantic "This sixty-year campaign to make libertarianism mainstream and eventually take the government itself is at the heart of Democracy in Chains. . . . If you're worried about what all this means for America's future, you should be."—NPR An explosive exposé of the right's relentless campaign to eliminate unions, suppress voting, privatize public education, stop action on climate change, and alter the Constitution. Behind today's headlines of billionaires taking over our government is a secretive political establishment with long, deep, and troubling roots. The capitalist radical right has been working not simply to change who rules, but to fundamentally alter the rules of democratic governance. But billionaires did not launch this movement; a white intellectual in the embattled Jim Crow South did. Democracy in Chains names its true architect—the Nobel Prize-winning political economist James McGill Buchanan—and dissects the operation he and his colleagues designed over six decades to alter every branch of government to disempower the majority. In a brilliant and engrossing narrative, Nancy MacLean shows how Buchanan forged his ideas about government in a last gasp attempt to preserve the white elite's power in the wake of *Brown v. Board of Education*. In response to the widening of American democracy, he developed a brilliant, if diabolical, plan to undermine the ability of the majority to use its numbers to level the playing field between the rich and powerful and the rest of us. Corporate donors and their right-wing foundations were only too eager to support Buchanan's work in teaching others how to divide America into "makers" and "takers." And when a multibillionaire on a messianic mission to rewrite the social contract of the modern world, Charles Koch, discovered Buchanan, he created a vast, relentless, and multi-armed machine to carry out Buchanan's strategy. Without Buchanan's ideas and Koch's money, the libertarian right would not have succeeded in its stealth takeover of the Republican Party as a delivery mechanism. Now, with Mike Pence as Vice President, the cause has a longtime loyalist in the White House, not to mention a phalanx of Republicans in the House, the Senate, a majority of state governments, and the courts, all carrying out the plan. That plan includes harsher laws to undermine unions, privatizing everything from schools to health care and Social Security, and keeping as many of us as possible from voting. Based on ten years of unique research, *Democracy in Chains* tells a chilling story of right-wing academics and big money run amok. This revelatory work of scholarship is also a call to arms to protect the achievements of twentieth-century American self-government.

Polyurethanes

Sustainable Strategies for the Upgrading of Natural Gas: Fundamentals, Challenges, and Opportunities

Hearings Before a Subcommittee of the Committee on Appropriations, House of Representatives, Ninety-eighth Congress, First Session

Who Killed Higher Education?

Industrial Organic Chemicals

A Directory for the Congress

Federal Evaluations

Energy and feedstock materials for the chemical industry are in increasing demand and, with constraints related to the availability and use of oil, the energy and chemical industry is undergoing considerable changes. In recent years, major restructuring has occurred in the oil, petrochemical, and chemical industry, with increasing attention devoted to the use of natural gas, methane in particular, as a chemical feedstock rather than just as a fuel. The conversion of remote natural gas into liquid fuels or other transportable chemicals is a challenge to industrial catalysis. Few processes exist so far with the major ones involving the conversion of natural gas to synthesis gas by steam reforming, CO₂ reforming, or partial oxidation, followed by the syntheses of methanol, hydrocarbons (Fischer-Tropsch synthesis), or ammonia. In this book, a comprehensive overview of the field of processing natural gas is given, through a series of chapters written by leading scientists and engineers in the field. New developments are discussed and current work relevant to the area is shown by a series of recent works by researchers working in this and related fields.

The Research in the History of Economic Methodology (RHETM) 34A, includes original research from preeminent scholars in the field.

Chemical Engineering Design, Second Edition, deals with the application of chemical engineering principles to the design of chemical processes and

equipment. Revised throughout, this edition has been specifically developed for the U.S. market. It provides the latest US codes and standards, including API, ASME and ISA design codes and ANSI standards. It contains new discussions of conceptual plant design, flowsheet development, and revamp design; extended coverage of capital cost estimation, process costing, and economics; and new chapters on equipment selection, reactor design, and solids handling processes. A rigorous pedagogy assists learning, with detailed worked examples, end of chapter exercises, plus supporting data, and Excel spreadsheet calculations, plus over 150 Patent References for downloading from the companion website. Extensive instructor resources, including 1170 lecture slides and a fully worked solutions manual are available to adopting instructors. This text is designed for chemical and biochemical engineering students (senior undergraduate year, plus appropriate for capstone design courses where taken, plus graduates) and lecturers/tutors, and professionals in industry (chemical process, biochemical, pharmaceutical, petrochemical sectors). New to this edition: Revised organization into Part I: Process Design, and Part II: Plant Design. The broad themes of Part I are flowsheet development, economic analysis, safety and environmental impact and optimization. Part II contains chapters on equipment design and selection that can be used as supplements to a lecture course or as essential references for students or practicing engineers working on design projects. New discussion of conceptual plant design, flowsheet development and revamp design. Significantly increased coverage of capital cost estimation, process costing and economics. New chapters on equipment selection, reactor design and solids handling processes. New sections on fermentation, adsorption, membrane separations, ion exchange and chromatography. Increased coverage of batch processing, food, pharmaceutical and biological processes. All equipment chapters in Part II revised and updated with current information. Updated throughout for latest US codes and standards, including API, ASME and ISA design codes and ANSI standards. Additional worked examples and homework problems. The most complete and up to date coverage of equipment selection. 108 realistic commercial design projects from diverse industries. A rigorous pedagogy assists learning, with detailed worked examples, end of chapter exercises, plus supporting data and Excel spreadsheet calculations plus over 150 Patent References, for downloading from the companion website. Extensive instructor resources: 1170 lecture slides plus fully worked solutions manual available to adopting instructors.

Hearing Before the Subcommittee on Economic Development, Public Buildings, and Emergency Management of the Committee on Transportation and Infrastructure, House of Representatives, One Hundred Eleventh Congress, Second Session, April 29, 2010

International Research Centers Directory

hearings before a subcommittee of the Committee on Appropriations, United States Senate, Ninety-eighth Congress, first session

32nd European Symposium on Computer Aided Process Engineering

Handbook of Industrial Polyethylene and Technology

Department of the Interior and Related Agencies Appropriations for 2002

Science, Technology, Markets, and Trends

Who Killed Higher Education?: Maintaining White Dominance in a Desegregating Era offers a probing and unvarnished look at the causes of the substantial state defunding of public higher education over the last six decades. With the pandemic and cuts to social services, these challenges have only deepened, especially creating real dilemmas for first-generation, minoritized students seeking to complete a college education. Through extensive analysis of trends in public higher education funding, the book documents and lays bare the ways in which elite, neoliberal decision-makers launched a multi-pronged and attack on public higher education. It highlights the confluence of the enrollment of an increasingly diverse cohort of students in college with the efforts of conservative white legislatures to diminish funding support for public higher education. Who Killed Higher Education? is an important resource for students in courses on higher education, and diversity in education. It will also provide instruction for boards of trustees, institutional leaders, faculty and key campus constituencies in developing long-term strategies that ensure the access and success of a diverse and talented student body.

Volume 2 of the updated and extended 3rd edition of this work focuses on the chemistry and technology of rigid polyurethanes. Recent developments in obtaining polyols from renewable resources and the field of rigid polyurethanes have been included. This book is of interest to chemists and engineers in industry and academia as well as anyone working with polyols for the manufacture of PUs.

Encyclopedia of Sustainable TechnologiesElsevier

How to Start a Phenolic resin production Business, How to start a successful Phenolic resin business, How to Start Phenolic resin production Industry in India, Industrial production of phenol formaldehyde resin, Industrial production of phenol resin

ESCAPE-32

Natural Gas Processing from Midstream to Downstream

The Deep History of the Radical Right's Stealth Plan for America

Introduction to Health Care Economics & Financial Management

Chemicals and Fuels from Bio-Based Building Blocks

Catalysis for Clean Energy and Environmental Sustainability

This book, cohesively written by an expert author with supreme breadth and depth of perspective on polyurethanes, provides a comprehensive overview of

all aspects of the science and technology on one of the most commonly produced plastics. Covers the applications, manufacture, and markets for polyurethanes, and discusses analytical methods, reaction mechanisms, morphology, and synthetic routes Provides an up-to-date view of the current markets and trend analysis based on patent activity and updates chapters to include new research Includes two new chapters on PU recycling and PU hybrids, covering the opportunities and challenges in both

Zeolites and Zeolite-like Materials offers a comprehensive and up-to-date review of the important areas of zeolite synthesis, characterization, and applications. Its chapters are written in an educational, easy-to-understand format for a generation of young zeolite chemists, especially those who are just starting research on the topic and need a reference that not only reflects the current state of zeolite research, but also identifies gaps and opportunities. The book demonstrates various applications of zeolites in heterogeneous catalysis and biomass conversion and identifies the endless possibilities that exist for this class of materials, their structures, functions, and future applications. In addition, it demonstrates that zeolite-like materials should be regarded as a living body developing towards new modern applications, thereby responding to the needs of modern technology challenges, including biomass conversion, medicine, laser techniques, and nanomaterial design, etc. The book will be of interest not only to zeolite-focused researchers, but also to a broad scientific and non-scientific audience. Provides a comprehensive review of the literature pertaining to zeolites and zeolite-like materials since 2000 Covers the chemistry of novel zeolite-like materials such as Metal-Organic Frameworks (MOFs), Covalent Organic Frameworks (COFs), hierarchical zeolite materials, new mesoporous and composite zeolite-like micro/mesoporous materials Presents essential information of the new zeolite-like structures, with a balanced coverage of the most important areas of the zeolite research (synthesis, characterization, adsorption, catalysis, new applications of zeolites and zeolite-like materials) Contains chapters prepared by known specialists who are members of the International Zeolite Association

Contains an inventory of evaluation reports produced by and for selected Federal agencies, including GAO evaluation reports that relate to the programs of those agencies.

Background, Plenary Session, and Action Plan

Department of the Interior and Related Agencies Appropriations for 1984

Department of the Interior and related agencies appropriations for fiscal year 1984

IHS Alcoholism/substance Abuse Prevention Initiative

The Oxford Handbook of Industrial Hubs and Economic Development

The Future of the Public's Health in the 21st Century

The Dynamics of Green Innovation in B2B Industries

An accessible, contemporary introduction to the methods for determining cause and effect in the social sciences "Causation versus correlation has been the basis of arguments--economic and otherwise--since the beginning of time. Causal Inference: The Mixtape uses legit real-world examples that I found genuinely thought-provoking. It's rare that a book prompts readers to expand their outlook; this one did for me."--Marvin Young (Young MC) Causal inference encompasses the tools that allow social scientists to determine what causes what. In a messy world, causal inference is what helps establish the causes and effects of the actions being studied--for example, the impact (or lack thereof) of increases in the minimum wage on employment, the effects of early childhood education on incarceration later in life, or the influence on economic growth of introducing malaria nets in developing regions. Scott Cunningham introduces students and practitioners to the methods necessary to arrive at meaningful answers to the questions of causation, using a range of modeling techniques and coding instructions for both the R and the Stata programming languages.

Publisher Description

This text presents basic concepts of economics and tools for financial management in the health care arena, including budgeting, breakeven analysis, financial reporting, business plan preparation, and grant writing. The text includes practical case examples drawn from actual health care settings to relate theory to real-world practice. A sample grant proposal and unique grant writing chapter will prepare students for this critical aspect of management. A free, back-of-book CD-ROM provides sample worksheets for analyzing budgets and determining breakeven points, cost-benefit, and cost-effectiveness, as well as sample budgets. Students can use the worksheets to apply their own data and complete their own analyses.

Petrochemicals and Refining Processes - Volume 2

Causal Inference

Mihail Ionescu: Polyols for Polyurethanes. Volume 2

Democracy in Chains

Proceedings of the NATO Advanced Study Institute, held in Vilamoura, Portugal, July 6 - 18, 2003

A Directory

Definitive Guide to Manufacturing, Properties, Processing, Applications and Markets Set

This handbook provides an exhaustive description of polyethylene. The 50+ chapters are written by some of the most experienced and prominent authors in the field, providing a truly unique view of polyethylene. The book starts with a historical discussion on how low density polyethylene was discovered and how it provided unique opportunities in the early days. New catalysts are presented and show how they created an expansion in available products including linear low density polyethylene, high density polyethylene, copolymers, and polyethylene produced from metallocene catalysts. With these different catalysts systems a wide range of structures are possible with an equally wide range of physical properties. Numerous types of additives are presented that include additives for the protection of the resin from the environment and processing, fillers, processing aids, anti-fogging agents, pigments, and flame retardants. Common processing methods including extrusion, blown film, cast film, injection molding, and thermoforming are presented along with some of the more specialized processing techniques such as rotational molding, fiber processing, pipe extrusion, reactive extrusion, wire and cable, and foaming processes. The business of polyethylene including markets, world capacity, and future prospects are detailed. This handbook provides the most current and complete technology assessments and business practices for polyethylene resins.

This book is part of a two-volume work that offers a unique blend of information on realistic evaluations of catalyst-based synthesis processes using green chemistry principles and the environmental sustainability applications of such processes for biomass conversion, refining, and petrochemical production. The volumes provide a comprehensive resource of state-of-the-art technologies and green chemistry methodologies from researchers, academics, and chemical and manufacturing industrial scientists. The work will be of interest to professors, researchers, and practitioners in clean energy catalysis, green chemistry, chemical engineering and manufacturing, and environmental sustainability. This volume focuses on catalyst synthesis and green chemistry applications for petrochemical and refining processes. While most books on the subject focus on catalyst use for conventional crude, fuel-oriented refineries, this book emphasizes recent transitions to petrochemical refineries with the goal of evaluating how green chemistry applications can produce clean energy through petrochemical industrial means. The majority of the chapters are contributed by industrial researchers and technicians and address various petrochemical processes, including hydrotreating, hydrocracking, flue gas treatment and isomerization catalysts.

Encyclopedia of Sustainable Technologies provides an authoritative assessment of the sustainable technologies that are currently available or in development. Sustainable technology includes the scientific understanding, development and application of a wide range of technologies and processes and their environmental implications. Systems and lifecycle analyses of energy systems, environmental management, agriculture, manufacturing and digital technologies provide a comprehensive method for understanding the full sustainability of processes. In addition, the development of clean processes through green chemistry and engineering techniques are also described. The book is the first multi-volume reference work to employ both Life Cycle Analysis (LCA) and Triple Bottom Line (TBL) approaches to assessing the wide range of technologies available and their impact upon the world. Both approaches are long established and widely recognized, playing a key role in the organizing principles of this valuable work. Provides readers with a one-stop guide to the most current research in the field Presents a grounding of the fundamentals of the field of sustainable technologies Written by international leaders in the field, offering comprehensive coverage of the field and a consistent, high-quality scientific standard Includes the Life Cycle Analysis and Triple Bottom Line approaches to help users understand and assess sustainable technologies

Oversight Hearing Before the Committee on Interior and Insular Affairs, House of Representatives, One Hundred Second Congress, First Session ... Hearing Held in Bismarck, ND, December 19, 1991

Ullmann's Polymers and Plastics, 4 Volume Set

Proposed Fiscal Year 2011 Budgets for Regional Economic Development Commissions, Priorities and Impacts on Regional Economics and Employment

Products and Processes

Modern Applications of High Throughput R&D in Heterogeneous Catalysis

14th International Symposium on Process Systems Engineering

Catalysis

An up-to-date and two volume overview of recent developments in the field of chemocatalytic and enzymatic processes for the transformation of renewable material into essential chemicals and fuels. Experts from both academia and industry discuss catalytic processes currently under development as well as those already in commercial use for the production of bio-based commodity chemicals. As such, they cover drop-in commodity chemicals and fuels, as well as bio-based monomers and polymers, such as acrylic acid, glycols, polyesters and polyolefins. In addition, they also describe reactions applied to waste and biomass valorization and integrated biorefining strategies. With its comprehensive coverage of the topic, this book is an indispensable reference for chemists working in the field of catalysis, industrial chemistry, sustainable chemistry, and polymer synthesis.

This eBook covers the application of high-throughput R&D to both fundamental and applied catalysis including catalyst synthesis, characterization, and testing in various reactor types. Chapters include topics such as applications ranging from optimizations of established industrial catalysts to the discovery of innovative new materials, examples of the development of innovative parallel characterization methods, and cases of real catalyst testing in small scale reactor systems. Readers will also find chapters that cover commodity chemicals produced in continuous gas phase processes as well as fine chemicals produced in liquid phase batch reactors. The potential of industrial chemicals production from biorenewable feedstocks is also presented. The steadily improving high throughput workflows are today being applied to relevant reactions and targets such as hydrotreating, Deacon oxidation, Fischer-Tropsch, propene dehydrogenation, C4 oxidation, methane coupling, exhaust gas catalysis, bio-based Nylon, fuel cells and vitamins. The topics presented in this eBook have been contributed by researchers from academia as well as industry, making this eBook a well-balanced reference, which could be of particular interest to professional, industrial or service R&D labs.

A group history of the Austrian School of Economics, from the coffeehouses of imperial Vienna to the modern-day Tea Party The Austrian School of Economics--a movement that has had a vast impact on economics, politics, and society, especially among the American right--is poorly understood by supporters and detractors alike. Defining themselves in opposition to the mainstream, economists such as Ludwig von Mises, Friedrich Hayek, and Joseph Schumpeter built the School's international reputation with their work on business cycles and monetarism.

theory. Their focus on individualism--and deep antipathy toward socialism--ultimately won them a devoted audience among the upper echelons of business and government. In this co biography, Janek Wasserman brings these figures to life, showing that in order to make sense of the Austrians and their continued influence, one must understand the backdrop against their philosophy was formed--notably, the collapse of the Austro-Hungarian Empire and a half-century of war and exile.

A Systems Approach to Explain the Diffusion of Bioplastics

Including a Symposium on Austrian Economics in the Postwar Era

Department of the Interior and Related Agencies Appropriations for 2002: Justification of the budget estimates

Federal Program Evaluations

Research Awards Index

Encyclopedia of Sustainable Technologies

Phenolic resins, also known as phenol-formaldehyde resins, are synthetic polymers that are produced from the reaction of phenol or substituted phenol with formaldehyde at high temperatures. These are widely used in wood adhesives, molding compounds, and laminates. The resins are flame-retardant, demonstrate high heat resistance, high tensile strength, and low toxicity, and generate low smoke. In the report, the phenolic resins market is segmented on the basis of product type, application, and region. Phenolic Resin Market size estimated to reach at USD 19.13 billion in 2026. Alongside, the market is anticipated to grow at a CAGR of 5.4% during the forecast period. The global phenolic resins market has experienced a notable growth and it has been projected that the global market will see stable growth during the forecast period. The high mechanical strengths, low toxicity, heat resistance, low smoke and other several properties has made the phenolic resins to make their use in the applications such as in laminations, wood adhesives, molding compound, construction, automobile and others. Growing demand of these applications has increased the production of phenolic resins to meet the current market demand. Also, phenolic resins is used in flame retardant which is very crucial for automobiles and aircrafts. This book basically deals with general reaction of phenols with aldehydes, the resoles, curing stages of resoles, kinetics of a stage reaction, chemistry of curing reactions, kinetics of the curing reaction, the novolacs, decomposition products of resites, acid cured resites, composition of technical resites, mechanisms of rubber vulcanization with phenolic resins, thermosetting alloy adhesives, vinyl phenolic structural adhesives, nitrile phenolic structural adhesives, phenolic resins in contact adhesives, chloroprene phenolic contact adhesives, nitrile phenolic contact adhesives, phenolic resins in pressure sensitive adhesives, rubber reinforcing resins, resorcinol formaldehyde latex systems, phenolic resin chemistry, bio-based phenolic resins, flexibilization of phenolic resins, floral foam (Phenolic Foam) with resin manufacturing, lignin-based phenol formaldehyde (LPF) resins, phenol formaldehyde resin, alkaline phenol formaldehyde resin, furfuryl alcohol phenol urea formaldehyde resin, phenol formaldehyde resin (Shell Sand Resin), phenol formaldehyde resin (Cold Box Resin), effluent treatment plant, standards and legislation, marketing of thermoset resins, process flow sheet, sample plant layout and photographs of machinery with supplier's contact details. A total guide of phenolic resins and entrepreneurial success in one of today's most lucrative resin industry. This book is one-stop guide to one of the fastest growing sectors, where opportunities abound for manufacturers, retailers, and entrepreneurs. This is the only complete handbook on Phenolic resins.

Industrialization supported by industrial hubs has been widely associated with structural transformation and catch-up. But while the direct economic benefits of industrial hubs are significant, their value lies first and foremost in their contribution as incubators of industrialization, production and technological capability, and innovation. The Oxford Handbook of Industrial Hubs and Economic Development adopts an interdisciplinary approach to examine the conceptual underpinnings, review empirical evidence of regions and economies, and extract pertinent lessons for policy researchers and practitioners on the key drivers of success and failure for industrial hubs. This Handbook illustrates the diverse and complex nature of industrial hubs and shows how they promote industrialization, economic structural transformation, and technological catch-up. It explores the implications of emerging issues and trends such as environmental protection and sustainability, technological advancement, shifts in the global economy, and urbanization.

The anthrax incidents following the 9/11 terrorist attacks put the spotlight on the nation's public health agencies, placing it under an unprecedented scrutiny that added new dimensions to the complex issues considered in this report. The Future of the Public's Health in the 21st Century reaffirms the vision of Healthy People 2010, and outlines a systems approach to assuring the nation's health in practice, research, and policy. This approach focuses on joining the unique resources and perspectives of diverse sectors and entities and challenges these groups to work in a concerted, strategic way to promote and protect the public's health. Focusing on diverse partnerships as the framework for public health, the book discusses: The need for a shift from an individual to a population-based approach in practice, research, policy, and community engagement. The status of the governmental public health infrastructure and what needs to be improved, including its interface with the health care delivery system. The roles nongovernment actors, such as academia, business, local communities and the media can play in creating a healthy nation. Providing an accessible analysis, this book will be important to public health policy-makers and practitioners, business and community leaders, health advocates, educators and journalists.

Fundamental Concepts with Practical Applications

Research Grants Index

Hearings Before a Subcommittee of the Committee on Appropriations, House of Representatives, One Hundred Seventh Congress, First Session

Zeolites and Zeolite-like Materials

Phenolic Resins Technology Handbook (2nd Revised Edition)

Chemical Engineering Design

Chemical Process Technology

With a focus on actual industrial processes, e.g. the production of light alkenes, synthesis gas, fine chemicals, polyethylene, it encourages the reader to think “out of the box” and invent and develop novel unit operations and processes. Reflecting today’s emphasis on sustainability, this edition contains new coverage of biomass as an alternative to fossil fuels, and process intensification. The second edition includes: New chapters on Process Intensification and Processes for the Conversion of Biomass Updated and expanded chapters throughout with 35% new material overall Text boxes containing case studies and examples from various different industries, e.g. synthesis loop designs, Sasol I Plant, Kaminsky catalysts, production of Ibuprofen, click chemistry, ammonia synthesis, fluid catalytic cracking Questions throughout to stimulate debate and keep students awake! Richly illustrated chapters with improved figures and flow diagrams Chemical Process Technology, Second Edition is a comprehensive introduction, linking the fundamental theory and concepts to the applied nature of the subject. It will be invaluable to students of chemical engineering, biotechnology and industrial chemistry, as well as practising chemical engineers. From reviews of the first edition: “The authors have blended process technology, chemistry and thermodynamics in an elegant manner... Overall this is a welcome addition to books on chemical technology.” – The Chemist “Impressively wide-ranging and comprehensive... an excellent textbook for students, with a combination of fundamental knowledge and technology.” – Chemistry in Britain (now Chemistry World)

32nd European Symposium on Computer Aided Process Engineering: ESCAPE-32 contains the papers presented at the 32nd European Symposium of Computer Aided Process Engineering (ESCAPE) event held in Toulouse, France. It is a valuable resource for chemical engineers, chemical process engineers, researchers in industry and academia, students and consultants for chemical industries who work in process development and design. Presents findings and discussions from the 32nd European Symposium of Computer Aided Process Engineering (ESCAPE) event

In this book a quantitative, dynamic model is developed to explain and explore the diffusion of green new products in a business-to-business (B2B) context. Considering the case of emerging bioplastics, this goal is reached through a mixed-methods design, combining qualitative and quantitative methods over three phases. After an interview study with key-value chain actors an experimental vignette technique is applied to further study relevant factors in the micro (firm) level adoption process. Integrating the empirical findings, the diffusion model is developed and simulated at the macro (industry) level using a System Dynamics (SD) approach. Results explain the underlying dynamics and critical conditions for adoption to become self-sustaining.

Principles, Practice and Economics of Plant and Process Design

Indian Health and Tribal Economic Development

Maintaining White Dominance in a Desegregating Era

Resources in Education

The Marginal Revolutionaries

A comprehensive review of the current status and challenges for natural gas and shale gas production, treatment and monetization technologies Natural Gas Processing from Midstream to Downstream presents an international perspective on the production and monetization of shale gas and natural gas. The authors review techno-economic assessments of the midstream and downstream natural gas processing technologies. Comprehensive in scope, the text offers insight into the current status and the challenges facing the advancement of the midstream natural gas treatments. Treatments covered include gas sweetening processes, sulfur recovery units, gas dehydration and natural gas pipeline transportation. The authors highlight the downstream processes including physical treatment and chemical conversion of both direct and indirect conversion. The book also contains an important overview of natural gas monetization processes and the potential for shale gas to play a role in the future of the energy market, specifically for the production of ultra-clean fuels and value-added chemicals. This vital resource: Provides fundamental chemical engineering aspects of natural gas technologies Covers topics related to upstream, midstream and downstream natural gas treatment and processing Contains well-integrated coverage of several technologies and processes for treatment and production of natural gas Highlights the economic factors and risks facing the monetization technologies Discusses supply chain, environmental and safety issues associated with the emerging shale gas industry Identifies future trends in educational and research opportunities, directions and emerging opportunities in natural gas monetization Includes contributions from leading researchers in academia and industry Written for Industrial scientists, academic researchers and government agencies working on developing and sustaining state-of-the-art technologies in gas and fuels production and processing, Natural Gas Processing from Midstream to Downstream provides a broad overview of the current status and challenges for natural gas production, treatment and monetization technologies.

Your personal Ullmann's: Chemical and physical characteristics, production processes and production figures, main applications, toxicology and safety information are all to be found here in one single resource - bringing the vast knowledge of the Ullmann's

Encyclopedia to the desks of industrial chemists and chemical engineers. The ULLMANN'S perspective on polymers and plastics brings reliable information on more than 1500 compounds and products straight to your desktop Carefully selected "best of" compilation of 61 topical articles from the Encyclopedia of Industrial Chemistry on economically important polymers provide a wealth of chemical, physical and economic data on more than 1000 different polymers and hundreds of modifications Contains a wealth of information on the production and use of all industrially relevant polymers and plastics, including organic and inorganic polymers, fibers, foams and resins Extensively updated: more than 30% of the content has been added or updated since the launch of the 7th edition of the Ullmann's encyclopedia in 2011 and is now available in print for the first time 4 Volumes