

The Petroleum Industry A Nontechnical Guide

The Prize recounts the panoramic history of oil -- and the struggle for wealth power that has always surrounded oil. This struggle has shaken the world economy, dictated the outcome of wars, and transformed the destiny of men and nations. The Prize is as much a history of the twentieth century as of the oil industry itself. The canvas of this history is enormous -- from the drilling of the first well in Pennsylvania through two great world wars to the Iraqi invasion of Kuwait and Operation Desert Storm. The cast extends from wildcatters and rogues to oil tycoons, and from Winston Churchill and Ibn Saud to George Bush and Saddam Hussein. The definitive work on the subject of oil and a major contribution to understanding our century, The Prize is a book of extraordinary breadth, riveting excitement -- and great importance.

Over the last several decades, the petroleum industry has experienced significant changes in resource availability, petro-politics, and technological advancements dictated by the changing quality of refinery feedstocks. However, the dependence on fossil fuels as the primary energy source has remained unchanged. Refinery Feedstocks addresses the problems of changing feedstock availability and properties; the refining process; and solids deposition during refining. This book will take the reader through the various steps that are necessary for crude oil evaluation and refining including the potential for the use of coal liquids, shale oil, and non-fossil fuel materials (biomass) as refinery feedstocks. Other features: Describes the various types of crude oil and includes a discussion of extra heavy oil and tar sand bitumen Includes basic properties and specifications of crude oil and the significance in refinery operations This book is a handy reference for engineers, scientists, and students who want an update on crude oil refining and on the direction the industry must take to assure the refinability of various feedstocks and the efficiency of the refining processes in the next fifty years. Non-technical readers, with help from the extensive glossary, will also benefit from reading this book.

This set gives a broad introductory overview of the entire petroleum marine industry and how it is affected by the world petroleum markets. Volume 1: Oil: An introduction to shipping Why tanker owners? Pre-Onassis era Onassis era Post-Onassis era - creating and dealing with the surplus Refinery operation Tanker demand Tanker design and employment patterns Forecasting tanker rates Oil pollution liability LGP carriers LNG carriers.

Originally published in 1987 this book presents a comprehensive survey of the global natural gas industry: it looks at the problems of supply, the pattern of demand, the economics of the industry and how the industry in the 1980s was being affected by changes in other energy sectors. As a key commodity in the world economy the supply of natural gas is increasingly affecting and changing international relations between importer and supplier countries: the siberian natural gas pipeline which supplies Soviet gas to Western Europe is a key example of the impact of natural gas on international relations and one which is discussed in the book.

Standard Handbook of Petroleum and Natural Gas Engineering:

From Prospect to Pipeline

Best Practices, Tools, and Case Studies

The Petroleum Shipping Industry: Operations and practices

Elements of Petroleum Geology

This book covers "how oil & gas is formed ; how to find commercial quantities ; how to drill, evaluate, and complete a well ; all the way through production and improved oil recovery." - back cover.

A totally understandable view of pipeline inception, planning, construction, start-up, and operation.

Now in its sixth edition, this guide to the oil industry, written in non-technical language, is a must-read for anyone involved in or curious about the oil industry. Engineers, executives, managers and laypersons will all find this to be a valuable, entertaining and informative guide that presents a practical study of the operations involved in oil exploration, drilling and production. Since the book's original publication in 1958, this handy volume has taught thousands about this constantly evolving industry that is so important for our everyday energy needs. A true must have!

This revised edition has been updated to reflect changes in the petroleum industry since the publication of the first edition in 1984. It is a useful introduction to the subject of oil and gas production for all, from beginning engineering and petroleum geology students to accountants and other nontechnical professionals.

Nontechnical Guide to Petroleum Geology, Exploration, Drilling, and Production

The Oil Curse

A Sourcebook for Understanding the Extractive Industries

Oil, Gas, and Mining

The Global Oil and Gas Industry

Joseph Hilyard's timely new book provides a broad perspective on the oil and gas industry, with primary attention to the United States. It takes the reader on a tour of the operations used to find and evaluate resources, and then to produce, store and deliver oil and gas. The book's main focus is primarily on the equipment and processes used in exploring new resources; evaluating promising formations; drilling wells; managing oil and gas production; converting oil and gas into products; and transporting oil and gas. Separate chapters address the evolution and current structure of the petroleum industry; oil and gas trading; and challenges likely to face the oil and gas industry in coming years. Three appendices define key industry terminology; suggest further reading on selected topics; and identify organizations that can provide more information.

Provides details on exploration and drilling, including problems, techniques and evaluating/completing a well and, finally, production. As well as examining exploration, drilling and production methods, the book also covers basic language used in the petroleum industry.

This authoritative text has been re-written and expanded to include additional chapters on methyl tertiary butyl ether and higher alcohols. Read it cover to cover, chapter by chapter as the subject comes up in your business, use it as an encyclopedia, or as a primer on petrochemical economics. Packed with diagrams and tables, it is the only source you will need to get a clear understanding of this complex topic. Each chapter includes exercises and 'in a nutshell' chapter reviews. Contents: What you need to know about organic chemistry Benzene Toluene and the xylenes Cyclohexane Olefins plants, ethylene, and propylene The hydrocarbon family Cumene and phenol Ethylbenzene and styrene Ethylene dichloride and vinyl chloride Propylene oxide and propylene glycol Methanol and synthesis gas Other alcohols Formaldehyde and acetaldehyde Ketones Acrylonitrile, acrylic acid, and acrylates Maleic anhydride Alpha olefins Nature of polymers Thermoplastics Resins and fibers

Fundamentals of Petroleum Refining presents the fundamentals of thermodynamics and kinetics, and it explains the scientific background essential for understanding refinery operations. The text also provides a detailed introduction to refinery engineering topics, ranging from the basic principles and unit operations to overall refinery economics. The book covers important topics, such as clean fuels, gasification, biofuels, and environmental impact of refining, which are not commonly discussed in most refinery textbooks. Throughout the source, problem sets and examples are given to help the reader practice and apply the fundamental principles of refining. Chapters 1-10 can be used as core materials for teaching undergraduate courses. The first two chapters present an introduction to the petroleum refining industry and then focus on feedstocks and products. Thermophysical properties of crude oils and petroleum fractions, including processes of atmospheric and vacuum distillations, are discussed in Chapters 3 and 4. Conversion processes, product blending, and alkylation are covered in chapters 5-10. The remaining chapters discuss hydrogen production, clean fuel production, refining economics and safety, acid gas treatment and removal, and methods for environmental and effluent treatments. This source can serve both professionals and students (on undergraduate and graduate levels) of Chemical and Petroleum Engineering, Chemistry, and Chemical Technology. Beginners in the engineering field, specifically in the oil and gas industry, may also find this book invaluable. Provides balanced coverage of fundamental and operational topics Includes spreadsheets and process simulators for showing trends and simulation case studies Relates processing to planning and management to give an integrated picture of refining

The Political Economy of Natural Gas

The Oil & Gas Industry

The Petroleum Industry

Oil

Hydraulic Fracturing Explained

This text explains the how's and why's of the pipeline industry. It was written for those not directly involved in pipeline operations - legal, supply, accounting, finance, and human resource specialists, and people who service and sell equipment to pipeline companies. But even engineers and expert pipeliners can gain insights from the book's depth and broad perspective.

A prominent linchpin in world politics and in security policies world over, oil and gas have tremendous value in both, the political and economical sectors of global relations, business establishments and policy. Regardless of whether one is a novice to a given field, or a well accomplished veteran in the field, there is a need for the continued engagement with the basics that underlie the core subjects. With that in mind, the Fundamentals of Oil and Gas is a perfect primer for the first-timer in the field, while also a copious text to help a seasoned veteran stay abreast with the nuances of the world of Oil and Gas.

Countries that are rich in petroleum have less democracy, less economic stability, and more frequent civil wars than countries without oil. What explains this oil curse? And can it be fixed? In this groundbreaking analysis, Michael L. Ross looks at how developing nations are shaped by their mineral wealth--and how they can turn oil from a curse into a blessing. Ross traces the oil curse to the upheaval of the 1970s, when oil prices soared and governments across the developing world seized control of their countries' oil industries. Before nationalization, the oil-rich countries looked much like the rest of the world; today, they are 50 percent more likely to be ruled by autocrats--and twice as likely to descend into civil war--than countries without oil. The Oil Curse shows why oil wealth typically creates less economic growth than it should; why it produces jobs for men but not women; and why it creates more problems in poor states than in rich ones. It also warns that the global thirst for petroleum is causing companies to drill in increasingly poor nations, which could further spread the oil curse. This landmark book explains why good geology often leads to bad governance, and how this can be changed.

Sets forth the many technical procedures involved in refining. Included are a new chapter on simple and complex refineries, and a revised chapter on gasoline blending, including current information on alcohol blending components.

Fundamentals of Investing in Oil and Gas

How Oil and Gas Can Be Environmentally Sustainable

Fundamentals of Petroleum Refining

Petroleum Refining for the Non-technical Person

Dictionary of Petroleum Exploration, Drilling & Production

Oil, Gas, and Mining: A Sourcebook for Understanding the Extractive Industries provides developing countries with a technical understanding and practical options around oil, gas, and mining sector development issues. A central premise of the Sourcebook is that good technical knowledge can better inform political, economic, and social choices with respect to sector development and the related risks and opportunities. The guidance provided by the Sourcebook assumes a broad set of overarching principles, all centered on good governance and directed at achieving positive and broadly based sustainable development outcomes. This Sourcebook is rich in presenting options to challenges, on the understanding that contexts and needs vary, and that there is much to be gained from appreciating the lessons learned from a broad set of experiences.

This updated second edition of Oil & Gas Production in Nontechnical Language is an excellent introduction for anyone from petroleum engineers and geologists new to their careers to financial, marketing, legal, and other professionals and their staffs interested in the industry. E&P service company personnel will find it particularly beneficial in understanding the roles played by their clients. Not only does it cover production fundamentals, but it backs up to give the necessary upstream background--geology, origins of oil and gas, and ownership and land rights--as well as surface operations and even production company strategy development.

An overview of the natural gas process from wellhead to burnertip, from exploration to futures trading, and the latest issues of co-generation and other product use.

This book provides a comprehensive understanding of each aspect of offshore operations including conventional methods of operations, emerging technologies, legislations, health, safety and environment impact of offshore operations. The book starts by coverage of notable offshore fields across the globe and the statistics of present oil production, covering all types of platforms available along with their structural details. Further, it discusses production, storage and transportation, production equipment, safety systems, automation, storage facilities and transportation. Book ends with common legislation acts and comparison of different legislation acts of major oil/gas producing nations. The book is aimed at professionals and researchers in petroleum engineering, offshore technology, subsea engineering, and Explores the engineering, technology, system, environmental, operational and legislation aspects of offshore production systems Covers most of the subsea engineering material in a concise manner Includes legislation of major oil and gas producing nations pertaining to offshore operations (oil and gas) Incorporates case studies of major offshore operations (oil and gas) accidents and lessons learnt Discusses environment impact of offshore operations

Refinery Feedstocks

How Petroleum Wealth Shapes the Development of Nations

Petrochemicals in Nontechnical Language

Drilling Technology in Nontechnical Language

Project Finance for the International Petroleum Industry

Petroleum engineering now has its own true classic handbook that reflects the profession's status as a mature major engineering discipline. Formerly titled the Practical Petroleum Engineer's Handbook, by Joseph Zaba and W.T. Doherty (editors), this new, completely updated two-volume set is expanded and revised to give petroleum engineers a comprehensive source of industry standards and engineering practices. It is packed with the key, practical information and data that petroleum engineers rely upon daily. The result of a fifteen-year effort, this handbook covers the gamut of oil and gas engineering topics to provide a reliable source of engineering and reference information for analyzing and solving problems. It also reflects the growing role of natural gas in industrial development by integrating natural gas topics throughout both volumes. More than a dozen leading industry experts-academia and industry-contributed to this two-volume set to provide the best , most comprehensive source of petroleum engineering information available.

A thorough update with more than 8,000 new definitions and entries. Covering everything in the upstream oil and gas sector, this new second edition also covers land, legal, accounting and finance terms. Written in easy-to-understand language with more than 100 illustrations, the second edition of Dr. Hyne's dictionary offers the ultimate reference book for anyone regardless of technical background. This overview of project finance for the oil and gas industry covers financial markets, sources and providers of finance, financial structures, and capital raising processes. About US\$300 billion of project finance debt is raised annually across several capital intensive sectors--including oil and gas, energy, infrastructure, and mining--and the oil and gas industry represents around 30% of the global project finance market. With over 25 year's project finance experience in international banking and industry, author Robert Clews explores project finance techniques and their effectiveness in the petroleum industry. He highlights the petroleum industry players, risks, economics, and commercial/legal arrangements. With petroleum industry projects representing amongst the largest industrial activities in the world, this book ties together concepts and tools through real examples and aims to ensure that project finance will continue to play a central role in bringing together investors and lenders to finance these ventures. Combines the theory and practice of raising long-term funding for capital intensive projects with insights about the appeal of project finance to the international oil and gas industry Includes case studies and examples covering projects in the Arctic, East Africa, Latin America, North America, and Australia Emphasizes the full downstream value chain of the industry instead of limiting itself to upstream and pipeline project financing Highlights petroleum industry players, risks, economics, and commercial and legal arrangements

This Handbook provides solutions to the fundamental issues associated with wells and reservoirs experiencing sanding problems, especially in deepwater environments. Sand Management is a massive challenge for the petroleum industry as it extends its exploration activities to new frontiers. Challenging ultra deepwater, High Pressure-High Temperature (HP-HT) and Arctic environments require engineers to drill more complex wells and manage more complex reservoirs, the majority of which are prone to massive sand production. Covering such fundamentals as how to maximize individual wells and field development performance, as well as how to minimize operational cost, non-productive time and guarantee flow assurance across the entire composite production system from reservoirs through the wellbore to the topside and flow lines, this handbook explains that the biggest challenge facing operators is the shortage of sand management personnel and helps companies realize the value of their assets. Reference for knowledge transfer and skills development in sand management for effective flow assurance Emphasis on HP-HT and deepwater environments Meets the needs of new and practising engineers alike

as well as non-technical personnel supporting the offshore industry

Machine Learning and Data Science in the Oil and Gas Industry

Integrated Sand Management For Effective Hydrocarbon Flow Assurance

An Introduction for Non-Technical People

The Hitchhiker's Guide to the Upstream Oil and Gas Industry

Offshore Operations and Engineering

The Petroleum Shipping Industry: A nontechnical overviewPennwell Corporation

Those in the petroleum industry as well as secondary users in banking, geology, and related fields for the logs created of oil wells will find this a useful guide. The second edition has been revised to reflect advances in logging techniques. The text contains many diagrams, photos, and sample logs for illustration as it describes topics that include the use and reading of logs, formation parameters, mud logging, resistivity management, porosity measurements, computer-generated log interpretations, and techniques for water saturated sites. Annotation c. Book News, Inc., Portland, OR.

Rocks mechanics legend Erle Donaldson, along with colleagues Waqi Alam and Nasrin Begum from the oil and gas consultant company Tetrahedron, have authored this handbook on updated fundamentals and more recent technology used during a common hydraulic fracturing procedure. Meant for technical and non-technical professionals interested in the subject of hydraulic fracturing, the book provides a clear and simple explanation of the technology and related issues to promote the safe development of petroleum reserves leading to energy independence throughout the world.

Annotation A consultant now for the industry after working within it in several capacities for many years, Conaway has developed over the past few years this manual for the Basic Petroleum Technology course he teaches for a training firm. His general precepts are that the better people understand the jobs of those around them, the more valuable they are to their companies, and that it is not hard to get a general understanding of even the most arcane technical jobs. He follows the course of the process, from geology and the origins of oil and gas formation through the techniques used to find, drill, and produce oil. He includes a glossary without pronunciations. Annotation copyrighted by Book News, Inc., Portland, OR.

Oil & Gas Production in Nontechnical Language

Well Logging in Nontechnical Language

Oil & Gas Pipelines in Nontechnical Language

Green Petroleum

This book has been written for laymen, for all those who would like to understand the business of oil and gas without having to read through the ballast of technical background. This book is easy to read and nearly free of technical jargon and mathematical formulas. To help with understanding, a glossary has been added as an appendix. The book is meant as an introduction to the large field of geology and upstream petroleum technology. It addresses investment people, students, accountants, non-technical managers in an oil company, journalists, and all those who want to obtain a quick immersion into the oil and gas industry. If you are in the oil and gas business and need to explain to someone outside the field - this is intended for you. If you are a non-technical person (e.g., accountant, lawyer) in an oil company or are considering studying geology or petroleum engineering, this is the fastest way to read up on the subject matter. For the seasoned professional who is familiar with the subject matter, this book may come in useful to explain aspects of the business to outsiders. A special effort has been made to point out the stochastic nature of exploration, the value of information and knowledge and the economic and historic back-drop on which all commercial oil and gas operations take place. This book does not claim to be complete and correct to the last detail. Indeed, some aspects have been drastically over-simplified to make them easier to understand. For further study and for those who want to know more, there is a large body of books, teaching videos and webinars on the Internet in addition to commercial libraries. In fact, every aspect of the oil business is so rich in detail and profound in science that it requires study and specialists' knowledge. The subject of every chapter could be a full career or profession.

For 45 years, William Leffler's Petroleum Refining in Nontechnical Language has been the go-to best seller for anyone needing to know the fundamentals of refining. Each chapter was carefully written in nontechnical language to give the reader a basic understanding of the refining industry.

Machine Learning and Data Science in the Oil and Gas Industry explains how machine learning can be specifically tailored to oil and gas use cases. Petroleum engineers will learn when to use machine learning, how it is already used in oil and gas operations, and how to manage the data stream moving forward. Practical in its approach, the book explains all aspects of a data science or machine learning project, including the managerial parts of it that are so often the cause for failure. Several real-life case studies round out the book with topics such as predictive maintenance, soft sensing, and forecasting. Viewed as a guide book, this manual will lead a practitioner through the journey of a data science project in the oil and gas industry circumventing the pitfalls and articulating the business value. Chart an overview of the techniques and tools of machine learning including all the non-technological aspects necessary to be successful. Gain practical understanding of machine learning used in oil and gas operations through contributed case studies. Learn change management skills that will help gain confidence in pursuing the technology. Understand the workflow of a full-scale project and where machine learning benefits (and where it does not).

Can "green petroleum" reverse global warming and bring down highgasoline prices? Written in non-technical language for the layperson, this book investigates and details how the oil and gas industry can "go green" with new processes and technologies, thus bringing the world's most important industry closer to environmental and economic sustainability.

The Prize

The Epic Quest for Oil, Money & Power

Oil and Gas Pipelines in Nontechnical Language, 2nd Edition

LNG

Oil Company Financial Analysis in Nontechnical Language

The demand for natural gas rises annually, straining existing suppliers, and emerging markets often aren't accessible by pipeline. Here in everyday language and real-world examples is the clear presentation of LNG as the most viable energy answer. Using even the most conservative estimates, demand for LNG internationally will double by 2020, and billions of dollars will be needed for the infrastructure investment. This straightforward explanation of a complex industry proves that LNG can deliver a critical link in the energy demands of international economies. With a proven track record of safety and reliability, the LNG industry stands ready to bridge the international gap between supply and demand in energy transport. Readers will realize the complexity of this industry, which involves an intricate link of critical companies, governments and stand-alone facilities.

Provides an explanation of financial statements with a practical approach to the analysis of an oil company. Tables, figures, worksheets and examples for analysis of virtually every aspect of an oil company are provided in detail. Financial quick-look techniques and rules of thumb are included.

'Oil: From Prospect to Pipeline' was the original non-technical book written about the oil and gas industry. A 'common-sense, brass tacks guide', this classic was originally published by Gulf Publishing Company in 1958 and has gone through four editions. With the oil and gas industry experiencing rapid new growth, this is an exciting time for newcomers to the field to get involved and this reprint of a Gulf classic is the perfect introduction. An interesting read for veterans of the industry and a valuable textbook for students, this guide provides a comprehensive overview of all production, plus: An Oil Dictionary; Abbreviation in oil reports; Typical legal forms; Overview of geological terminology and technical terms; And much more! This set gives a broad introductory overview of the entire petroleum marine industry and how it is affected by the world petroleum markets. Volume 2: Ship brokerage S&P and project brokerage Single voyage charters Timecharters Ship operation and international regulation Oil spill prevention and quality assurance Initiatives by classification societies, owners, and oil companies Flag and port state control Voyage costs: port charges Voyage costs: manning supplies & maintenance Operating costs: marine insurance Operating costs: the shore-based organization Owner's investment analysis of a vessel Banker's credit analysis of a vessel Mezzanine, lease, and equity financing.

Natural Gas in Nontechnical Language

Fundamentals of Oil & Gas Industry for Beginners

Petroleum Production in Nontechnical Language

Nontechnical Guide to Petroleum Geology, Exploration, Drilling & Production

Evaluation, Implementation, and Challenges

The intent of this book is to educate the reader about the vast complexities of the oil and gas industry and to motivate involvement in domestic oil and gas development, production and refinement. Explains the industry in non-technical language for an average person.

Elements of Petroleum Geology, Fourth Edition is a useful primer for geophysicists, geologists and petroleum engineers in the oil industry who wish to expand their knowledge beyond their specialized area. It is also an excellent introductory text for a university course in petroleum geoscience. This updated edition includes new case studies on non-conventional exploration, including tight oil and shale gas exploration, as well as coverage of the impacts on petroleum geology on the environment. Sections on shale reservoirs, flow units and containers, IOR and EOR, giant petroleum provinces, halo reservoirs, and resource estimation methods are also expanded. Written by a preeminent petroleum geologist and sedimentologist with decades of petroleum exploration in remote corners of the world. Covers information pertinent to everyone working in the oil and gas industry, especially geophysicists, geologists and petroleum reservoir engineers. Fully revised with updated references and expanded coverage of topics and new case studies.

Petroleum Production for the Nontechnical Person

An Overview of the Petroleum Industry

The Petroleum Shipping Industry: A nontechnical overview

Petroleum Refining in Nontechnical Language

A Nontechnical Guide