

SPRING 2012

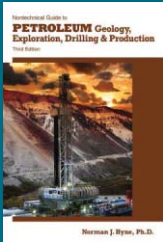
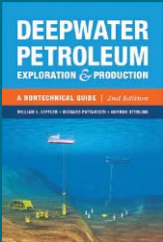
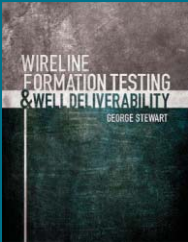
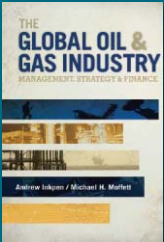
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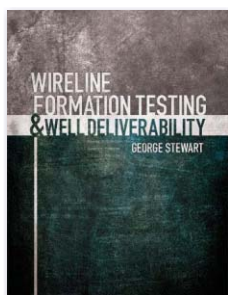
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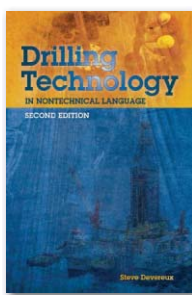
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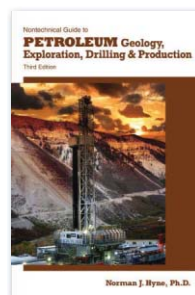
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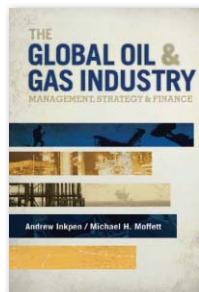
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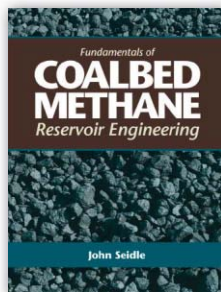
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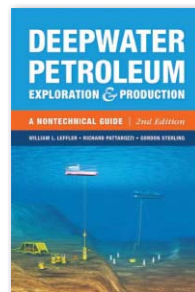
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## COMING SOON

**WIND POWER: THE INDUSTRY GROWS UP***by Rebecca L. Busby***\$79.00 US** ISBN 1-59370-244-2 ISBN13 978-1-59370-244-1

In her timely and well-documented new book, author Rebecca Busby provides a balance, comprehensive view of the wind power industry.

*See page 3 for more information.***THE OIL & GAS INDUSTRY: A NONTECHNICAL GUIDE***by Joseph Hilyard***\$79.00 US** ISBN 1-59370-254-X ISBN13 978-1-59370-254-0

Joseph Hilyard's 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.

*See page 8 for more information.***OIL SANDS, HEAVY OIL & BITUMEN: FROM RECOVERY TO REFINERY***by Dwijen K. Banerjee***\$79.00 US** ISBN 1-59370-260-4 ISBN13 978-1-59370-260-1

Author Dwijen Banerjee has written an important educational tool for anyone in the petroleum industry—whether upstream, downstream, or pipeline—who would like to learn the fundamentals of the most commonly known unconventional oils: oil sands, heavy oil, and bitumen.

*See page 7 for more information.***THE WORLD ENERGY DILEMMA***by Louis W. Powers***\$69.00 US** ISBN 1-59370-271-X ISBN13 978-1-59370-271-7

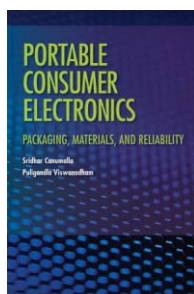
Former Saudi Aramco chief petroleum engineer Lou Powers offers insights into the major oilfields of Saudi Arabia, and whether these historic reserves can continue to deliver the petroleum that drives the global economy.

*See page 7 for more information.*

new titles

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1



### PORTABLE CONSUMER ELECTRONICS: PACKAGING, MATERIALS, AND RELIABILITY

by Sridhar Camumalla and  
Puliganella Viswanadham

\$89.00 us ISBN 1-59370-125-X ISBN13 978-1-59370-125-3

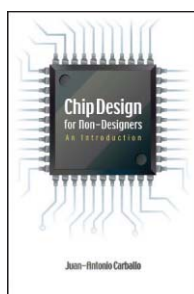
Portable consumer electronic devices have experienced exponential growth in recent years. Although the reliability implications and performance criteria of these products are significantly different from electronic hardware of the past, no single volume has covered the materials, design, and reliability aspects of these products until the publication of this new book.

Written by two noted leaders of the electronics industry, *Portable Consumer Electronics* provides a comprehensive account of the key aspects of packaging for portable consumer electronic devices, including first- and second-level packaging; printed wiring board technology; assembly technology; reliability statistics and engineering; and failure analysis. *Portable Consumer Electronics: Packaging, Materials, and Reliability* will be beneficial to practicing engineers, product development managers, technologists, and designers involved in the electronics industry.

#### Contents:

Introduction • Packaging challenges • Printed wiring board technology • Component technologies/first level packaging • Interconnect technologies at the second level • Printed wiring boards assembly • Essentials of reliability statistics • Reliability of electronic assemblies • Failures and prevention • Future trends in portable electronic products • References • Appendices • The authors • Index

■ 454 Pages/Hardcover/2010



### CHIP DESIGN FOR NON-DESIGNERS: AN INTRODUCTION

by Juan-Antonio Carballo, Ph.D.

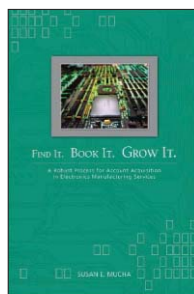
\$79.00 us ISBN 1-59370-106-3 ISBN13 978-1-59370-106-2

*Chip Design for Non-Designers: An Introduction* provides a practical introduction to modern chip design methodologies. It is intended for manufacturing-oriented and other non-design professionals with an interest in the pre-tape-out design side. The book concentrates on functional, logic, circuit, and layout design using state-of-the-art methods and tools. More focus is given to the most popular design styles, including semi-custom design. Many practical and useful examples are included throughout and are excellent guides toward a direct use of the concepts.

#### Contents:

The chip design flow • Specifying a chip • System-Level design • RTL/Logic-Level design • Circuit and layout • Design • Conclusions • Exercises

■ 178 Pages/Hardcover/2008



### FIND IT. BOOK IT. GROW IT. A ROBUST PROCESS FOR ACCOUNT ACQUISITION IN ELECTRONICS MANUFACTURING SERVICES

by Susan E. Mucha

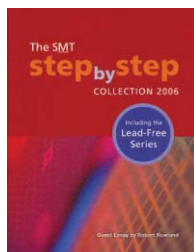
\$69.00 us ISBN 1-59370-111-X ISBN13 978-1-59370-111-6

In her authoritative book, Susan E. Mucha explores in great detail the entire account acquisition process of companies in the electronics manufacturing services (EMS) industry. EMS companies face the challenges of a 12- to 18-month sales cycle, low margins and geographically scattered customer bases making it difficult to grow the business and reach target markets. Growing the business requires a differentiation strategy and a focused process for maintaining mindshare within a diverse target market. Calling upon her 20 years' experience in the industry, Mucha maps the process of building a differentiated brand while creating a repeatable, consistent sales process, and addresses strategies for account retention and growth.

#### Contents:

Part One: Building a brand • Understanding competitive advantage in EMS offerings • Analyzing a company's strengths and weaknesses • Marketing strategy and tactics • Part Two: Creating a robust selling process • Account acquisition dynamics • Optimizing the sales process • Critical elements in closing accounts • Part Three: Growing existing accounts • Basic tools for building sustaining account relationships • Developing an account growth planning model • Part Four: Implementing the process • Selling is as process-driven as manufacturing

■ 240 Pages/Hardcover/2008



### THE SMT STEP-BY-STEP COLLECTION 2006

by PennWell Corp.

\$25.00 us ISBN 1-59370-087-3 ISBN13 978-1-59370-087-4

*The SMT Step-by-Step Series* columns are a mainstay for surface mount assembly readers. Written by prominent industry leaders, each column addresses a critical step in the manufacturing process, from the initial design stages through final rework. This technology-driven series represents the most advanced research and creative solutions for one of the most complex and capital intensive industries in the world economy.

In addition to the step series, SMT also includes its lead-free series of columns published in 2005. As the world prepares for lead-free manufacturing and the enactment of the Restrictions on Hazardous Materials directive, massive changes are happening for the surface mount assembly sector. The inclusion of these articles represents a year's worth of counsel, technology and research at a critical time for the industry.

■ 123 Pages/Softcover/2006



## **WIND POWER: THE INDUSTRY GROWS UP**

by Rebecca L. Busby

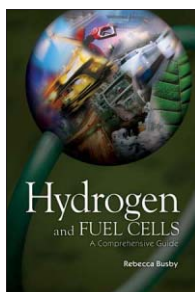
\$79.00 US ISBN 1-59370-244-2 ISBN13 978-1-59370-244-1

In her timely new book, best-selling author Rebecca Busby provides a balanced, comprehensive view of the wind power industry. Dr. Jon G. McGowan recommends this well-written and well-documented book as "required reading for people who want to obtain an initial overview of this most interesting energy field."

### **Contents:**

Overview: how wind power works • Components: what's a wind turbine made of? • Wind power system design: combining strength and flexibility • Small wind power: traditional systems and alternative designs • Assessment: mapping and measuring the world's wind • Wind farms: developing and operating wind power plants • Wind power integration: striking a new balance • Transmission and storage: facilitating wind power integration • Offshore wind: entering the mainstream • Advanced technologies: R&D, testing, and new twists on old ideas • The global wind industry: markets, business, and government policy • Environmental and economic issues: wind power grows up

■ Approx. 390 Pages/Hardcover/6x9/Coming Soon!



## **HYDROGEN AND FUEL CELLS: A COMPREHENSIVE GUIDE**

by Rebecca L. Busby

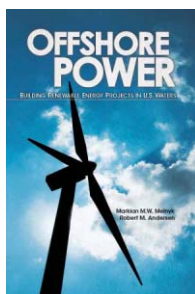
\$69.00 US ISBN 1-59370-043-1 ISBN13 978-1-59370-043-0

This timely book explains why hydrogen has emerged as an essential area for research and technology development worldwide. It explores the forces driving the market for hydrogen-powered fuel cells, as well as the technical and economic barriers that could derail a transition toward hydrogen energy systems. The book reviews hydrogen's history, and discusses current and future applications for hydrogen fuel cells. It also explains in concise language how hydrogen is produced, stored, and transported, and it discusses the economics of these activities and their environmental impact. The book's appendices provide more technical details, such as cost calculations.

### **Contents:**

Concept and vision • Drivers and barriers • Fundamentals and background • Applications and markets • Production and supply • Storage and safety • Transportation and distribution • Appendices

■ 445 Pages/Hardcover/2005



## **OFFSHORE POWER: BUILDING RENEWABLE ENERGY PROJECTS IN U.S. WATERS**

by Markian M.W. Melnyk  
and Robert M. Andersen

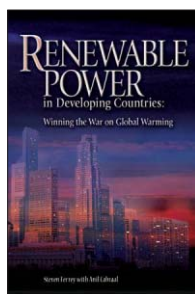
\$89.00 US ISBN 1-59370-211-6 ISBN13 978-1-59370-211-3

As the United States seeks ways to meet the ever-increasing power needs of its large coastal population areas, there's a growing focus on the plentiful renewable energy resources located just offshore. In their insightful book, energy experts Markian Melnyk and Robert Andersen outline the important new offshore options available to a nation on the threshold of a green revolution. The experience gained by early offshore oil and gas prospectors, as well as by more recent developers of European offshore wind, wave, and tidal energy projects, provide a wealth of knowledge that can be readily transferred to North American marine energy projects. Whether you're a developer, financial backer, or regulator, *Offshore Power* charts a course for long-term deployment of marine renewable energy facilities, and creates a compelling picture of a greener future.

### **Contents:**

Acronyms and abbreviations • Stepping off dry land: The case for offshore renewable energy • An unfamiliar environment: Offshore conditions and energy resources • Marvelous machines: Harvesting nature's offshore energy crop • Carving out a piece of the shelf: Project siting decisions • Acquiring rights to project sites: MMS and offshore renewables; FERC and hydrokinetics • Action and its impacts: Project review under the National Environmental Policy Act • Nature and machine coexisting offshore: Federal protections for natural and cultural resources • Still more permits: The roles of other federal and state agencies reviewing proposed offshore projects • Renewable energy goodwill: Managing the public consultation process • Connecting to the grid: Adapting to intermittent renewable energy supplies • Working the numbers: Financing and insuring offshore renewable energy projects • Cultivating disruptive change: The economic challenge of offshore renewable energy • Notes • Index • About the authors

■ 496 Pages/Hardcover/2009



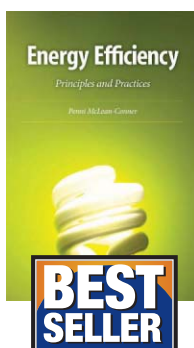
## **RENEWABLE POWER IN DEVELOPING COUNTRIES: WINNING THE WAR ON GLOBAL WARMING**

by Steven Ferrey with Anil Cabraal

\$75.00 US ISBN 1-59370-050-4 ISBN13 978-1-59370-050-8

This book documents how six developing Asian countries are taking head on electric power development and global warming issues with successful alternative energy programs. As the world looks to transition into new sources of fuel, this book should be a top-read for utility managers, energy professionals, independent power developers and university professors. The book provides a template for nations, policy makers, international investors, and developers to consult to implement renewable energy in the economies where it is most essential and it covers hot-button issues of global warming, renewable energy, and international development in an easy-to-read format. It includes more than 20 comparative tables, a conclusion of the best practices for renewable energy programs, and a list of acronyms, abbreviations, and definitions used in the text.

■ 363 Pages/Hardcover/2005



### ENERGY EFFICIENCY: PRINCIPLES AND PRACTICES

by Penni McLean-Conner

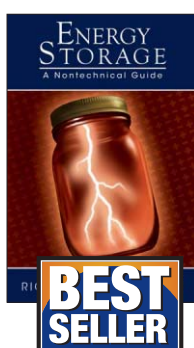
\$69.00 us ISBN 1-59370-178-0 ISBN13 978-1-59370-178-9

The latest book by Penni McLean-Conner, *Energy Efficiency: Principles and Practices*, is an outline for utilities, government agencies and power generators for educating consumers on conservation, better resource management, and a smaller carbon footprint. These techniques are not only of interest to the modern consumer, but also can maximize opportunities for demand side management. Demand side management programs are effective methods for reducing peak demand of electricity, helping to curb escalating electricity prices for consumers, allowing power generators greater control of the electrical loads and promoting overall conservation of stretched resources. This book offers proven strategies for creating, delivering and maximizing demand side management, truly a smart approach for your organization!

#### Contents:

Part One: Create a DSM culture • Build the business case for DSM • Understand the DSM life cycle • Influence policy to support DSM investment • Part Two: Deliver DSM to consumers • Market barriers and assessment • Residential energy efficiency • Commercial and industrial energy efficiency • Demand response • Distributed generation • Part Three: Optimize DSM performance • Participate in organizations that advance DSM • Evaluate programs • Position for the future

■ 212 Pages/Hardcover/2009



### ENERGY STORAGE: A NONTECHNICAL GUIDE

by Richard Baxter

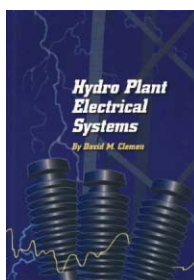
\$69.00 us ISBN 1-59370-027-X ISBN13 978-1-59370-027-0

*Energy Storage: A Nontechnical Guide* is a complete resource on the operation of energy storage technologies and how they interact in the marketplace today. Baxter explains new opportunities for these technologies, detailed descriptions of the technologies and their market applications, and business opportunities energy storage technologies can expect throughout the industry. The book explains how, and under what conditions, energy storage technologies can become a vital component of the electric power industry.

#### Contents:

Storage and the electric power industry • Storage in other energy markets • Electricity storage technologies • Applications • Renewable energy and storage • Energy storage and the future • Our new energy future

■ 302 Pages/Hardcover/2005



### HYDRO PLANT ELECTRICAL SYSTEMS

by David M. Clemen

\$79.00 us ISBN 0-9651765-3-3 ISBN13 978-0-9651765-3-8

Practical and easy to read, this compact volume provides the industry's most comprehensive guide to electrical equipment and control systems. Filled with helpful checklists and references, *Hydro Plant Electrical Systems* is an indispensable tool for engineers as well as operations and maintenance personnel.

#### Contents:

Introduction • Hydroelectric generator basics • Testing generators before commissioning • Scheduled inspection outages for hydroelectric generators • Transformers at hydroelectric plants • Factory and field testing of liquid-immersed transformers • Inspection and maintenance testing of liquid-immersed transformers • International test standards for transformers • Dry transformers at hydroelectric plants • Controls and protective relaying • Testing unit control switchboards in the factory and field • Surge protection • Batteries at hydropower plants • Uninterruptible power supply systems • Bus systems • Low-voltage switchgear for hydropower plants • Start-up and commissioning of a hydroelectric project • Sources • Index

■ 194 Pages/Hardcover/1999 - Published by HCI Publications



### THE GUIDE TO HYDROPOWER MECHANICAL DESIGN

by ASME Hydro Power Technical Committee

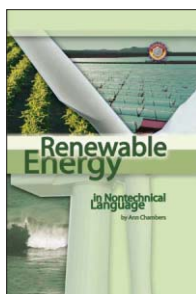
\$125.00 us ISBN 0-9651765-0-9 ISBN13 978-0-9651765-0-7

*The Guide to Hydropower Mechanical Design* draws on the insights and experience of more than 40 of the world's leading hydro experts to provide a careful and thorough overview of existing "best practices." The result is a comprehensive reference for individuals who design hydropower facilities, maintain and procure equipment, or produce and distribute electricity.

#### Contents:

Introduction • Basic considerations • Hydraulic turbines • Governors • Major valves • Trashracks and cleaning devices • Gates • Lifting equipment • Auxiliary systems • Equipment for environmental control • Equipment layout considerations • Hydraulic transients • Inspection and testing • Maintenance and operation considerations • Appendix • Index

■ 275 Pages/Hardcover/1996 - Published by HCI Publications



## RENEWABLE ENERGY IN NONTECHNICAL LANGUAGE

by Ann Chambers

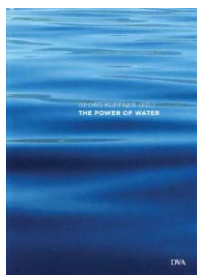
\$69.00 US ISBN 1-59370-005-9 ISBN13 978-1-59370-005-8

This thorough review of renewable energy trends and technologies includes applications and examinations of regulations, with implications for future advances. Readers get a complete overview of renewable technologies and options, a quick understanding of issues affecting the popularity and installation of these technologies, and a broad knowledge of industry trends and terminology. Chambers has again crafted an easy-to-read-and-understand general overview of technology and applications, with information that keeps it interesting and relevant to real world business needs.

### Contents:

Introduction • Solar and PV • Wind energy • Bioenergy • Geothermal energy • Hydroelectric • Fuel cells • Appendix A: Industry contact list • Appendix B: Renewable energy glossary

■ 244 Pages/Hardcover/2003



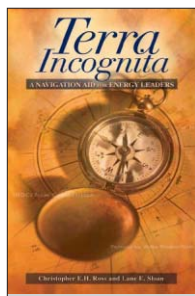
## THE POWER OF WATER

by Georg Kuffner (Ed.)

\$75.00 US ISBN 3-421-04214-4 ISBN13 978-3-421-04214-9

The power of water draws on a diverse range of technical and stakeholder views to provide an understandable and comprehensive overview of technical applications, social and economic implications, as well as on the central role of hydro power in an ecological, and sustainable fuel mix for energy generation of the future.

■ 272 Pages/Hardcover/2006 - Published by HCI Publications



## TERRA INCOGNITA: A NAVIGATION AID FOR ENERGY LEADERS

by Christopher E.H. Ross and Lane E. Sloan

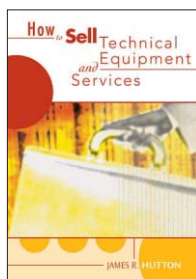
\$89.00 US ISBN 1-59370-109-8 ISBN13 978-1-59370-109-3

*Terra Incognita* addresses the transition in energy supplies and shift from conventional oil as the strategic energy source. It identifies the leadership challenges ahead and summarizes the lessons learned from interviews with more than 20 energy company CEOs and senior leaders. The structure of the book follows the planning cycle of strategic assessment (Chapters 1-4), strategy development (Chapters 5-7), and strategy implementation (Chapters 8-10) through a leadership perspective focused directly on the energy industry.

### Contents:

Energy strategic leadership framework • Learning from the past • New global competitors—rise of national oil companies • The resource dilemma • Society's evolving expectation • Persuasive investor value proposition • Evaluating strategic choices • Setting the direction • Executing the strategy • Leading in turbulent times • Next generation energy leaders

■ 544 Pages/Hardcover/2007



## HOW TO SELL TECHNICAL EQUIPMENT AND SERVICES

by James R. Hutton

\$69.00 US ISBN 1-59370-066-0 ISBN13 978-1-59370-066-9

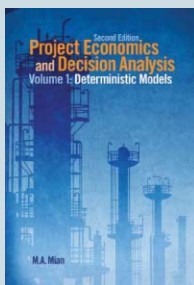
In this book, author James R. Hutton shares his decades of experience in the petroleum industry to help readers master the challenge of industrial sales. In *How to Sell Technical Equipment and Services*, Hutton covers the many aspects involved in B2B sales, emphasizing product knowledge as the key to success. Hutton breaks down the process into separate chapters covering more than 60 different topics ranging from identifying the decision makers and gathering intelligence, to handling unpleasant customers and introducing new products. Sales professionals, sales managers, and senior executives in all industries will find the information found in this book to be invaluable.

### Contents:

Fundamental requirements • Preparing for the sale • Making the pitch • Closing the deal • Follow up • Troubleshooting difficult situations • Appendix A: Sales do's and don'ts

■ 517 Pages/Softcover/2005

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**PROJECT ECONOMICS AND DECISION ANALYSIS, VOLUME 1: DETERMINISTIC MODELS, 2ND EDITION**

by M.A. Mian

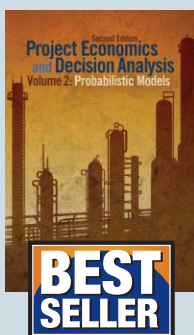
\$99.00 US ISBN 1-59370-208-6 ISBN13 978-1-59370-208-3

In this new second edition, M. A. Mian has expanded and updated the first volume of *Project Economics and Decision Analysis* by incorporating new advancements and clarifying concepts to facilitate their understanding. New to the second edition of *Project Economics and Decision Analysis, Volume 1* is a section on netback pricing and indexed netback pricing. Additionally, the new edition expands the weighted average cost of capital (WACC) concept for better comprehension and to recognize its weakness in practice. The concept of unit technical cost, also known as long-run marginal cost (LRMC), has been expanded as well to aid with its calculation and application.

**Contents:**

Introduction • The time value of money • Before-tax cash flow models • After-tax cash flow model • International petroleum economics • Capital budgeting techniques • Investment selection decision making • Appendixes • Index

■ 482 Pages/Hardcover/2011



**PROJECT ECONOMICS AND DECISION ANALYSIS, VOLUME 2: PROBABILISTIC MODELS, 2ND EDITION**

by M.A. Mian

\$99.00 US ISBN 1-59370-209-4 ISBN13 978-1-59370-209-0

In *Volume 2: Probabilistic Models*, M.A. Mian presents the *concepts* of decision analysis, incorporating risk and uncertainty as applied to capital investments. In the expanded and updated second edition of *Volume 2*, Mian integrates new advancements and clarifies concepts to facilitate their understanding. Each topic is introduced, followed by a brief discussion related to its application in practice and a solved example. Includes a companion CD with applications, spreadsheets, and tables that expand the practical application of the book's material.

**Contents:**

Introduction • Statistics and probability concepts • Expected value and decision trees • Incorporating attitudes toward risk • Determining venture participation • Simulation in decision analysis • Appendixes

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by Charlotte J. Wright and Rebecca A. Gallun

\$99.00 US ISBN 1-59370-137-3 ISBN13 978-1-59370-137-6

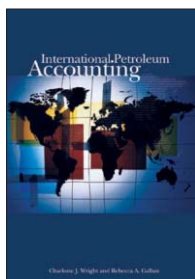


An excellent training manual and professional reference packed with examples, diagrams, and appendices. The scope of this text is simply unmatched. The book has been completely updated to reflect the current issues facing oil and gas producers operating in both U.S. and international locations. Inside you'll find: A new chapter on asset retirement obligations and asset impairment; an added section on project, analysis and investment decision making; updated coverage of asset exchanges and fair value reporting requirements; thorough discussion of oil and gas pricing and marketing arrangements; and updated examples and homework problems.

**Contents:**

A profile of upstream oil and gas operations • Introduction to oil and gas accounting • Nondrilling exploration costs – successful efforts • Acquisition costs of unproved property – successful efforts • Drilling and development costs – successful efforts • Proved property cost disposition – successful efforts • Full cost accounting • Accounting for production activities • Accounting for asset retirement obligations and asset impairment • Accounting for revenue from oil and gas sales • Basic oil and gas tax accounting • Joint interest accounting • Conveyances • Oil and gas disclosures • Accounting for international petroleum operations • Analysis of oil and gas companies' financial statements

■ 784 Pages/Hardcover/2008



**INTERNATIONAL PETROLEUM ACCOUNTING**

by Charlotte J. Wright and Rebecca A. Gallun

\$99.00 US ISBN 1-59370-016-4 ISBN13 978-1-59370-016-4



A companion text to PennWell's popular *Fundamentals of Oil & Gas Accounting*, this book illustrates various aspects of accounting in international petroleum operations. Discussions cover the broad differences between U.S. and international operations and accounting as well as the global movement toward conversion to International Accounting Standards Board standards. Also included are overviews of petroleum tax regimes encountered around the world. Whereas *Fundamentals of Oil & Gas Accounting* gives in-depth coverage of petroleum accounting theory and is written for university study, *International Petroleum Accounting* is a practical application text with field examples for current business applications.

■ 750 Pages/Hardcover/2004

energy catalog | SPRING 2012 | [www.pennwellbooks.com](http://www.pennwellbooks.com)

UPCOMING  
TITLE

## **OIL SANDS, HEAVY OIL & BITUMEN: FROM RECOVERY TO REFINERY**

by *Dwijen K. Banerjee*

\$79.00 US ISBN 1-59370-260-4 ISBN13 978-1-59370-260-1

Unlike conventional oil resources, "unconventional oil" resources have been known to exist only for the last few decades and are available in limited areas of the world. The most commonly known "unconventional oils"—oil sands, heavy oil, and bitumen—are found primarily in the western United States, Canada, and Venezuela. Only recently has serious consideration has been given to North American resources for meeting the increasing demands for transportation fuel. Dr. Banerjee discusses the importance of these unconventional oils and provides an introduction for those beginning their journey in the still unexplored unconventional hydrocarbon resources of the world. This new book is an important educational tool for anyone in the petroleum industry—whether upstream, downstream, or pipeline—who would like to learn the fundamentals of the most commonly known unconventional oils: oil sands, heavy oil, and bitumen.

### **Contents:**

Illustrations • Introduction • The chemistry of bitumen • Analytical techniques • Recovery to refinery • Bitumen production and recovery • Transportation of heavy oil/bitumen • Upgrading of heavy oil/bitumen • Potential heavy oil—upgrading technologies • Upgrader project scenarios and the future of clean-bitumen technology • Challenges facing conventional refineries using unconventional oil • Final thought—going green • Appendix A: Glossary • Appendix B: Various fractions of petroleum crude oil • Appendix C: Additional reading • Appendix D: Collaborators

■ *Approx. 265 Pages/Hardcover/6x9/Coming Soon!*

UPCOMING  
TITLE

## **THE WORLD ENERGY DILEMMA**

by *Louis W. Powers*

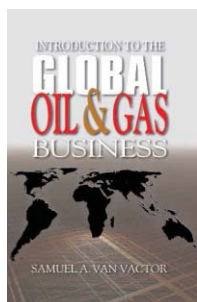
\$69.00 US ISBN 1-59370-271-X ISBN13 978-1-59370-271-7

With political turmoil in the Middle East contributing to price volatility and production problems, many experts have questioned if this critical region can continue to supply petroleum for the global economy. Former Saudi Aramco chief petroleum engineer Lou Powers offers insider viewpoints on the major oilfields of Saudi Arabia, and how cutting-edge technology is expanding and extending the production life of the world's largest petroleum reserves. Readers will gain access to a world few understand, yet depend upon for their everyday needs.

### **Contents:**

Executive summary: the world energy dilemma • My career takes off • Assignment Kingsville • At Humble's Houston HQ • East Texas' major oil, gas fields • Return to Kingsville • East & South Texas • Saudi Arabia • Saudi Arabia's major oil fields • Assessing the Saudi situation • Case studies of an independent consultant • Pricing and the new technology • From schemes to scams • A travelling man • The U.S. energy debate • America's energy plan • Epilogue family man

■ *Approx. 250 Pages/Hardcover/6x9/Coming Soon!*



## **INTRODUCTION TO THE GLOBAL OIL & GAS BUSINESS**

by *Samuel A. Van Vactor*

\$69.00 US ISBN 1-59370-214-0 ISBN13 978-1-59370-214-4

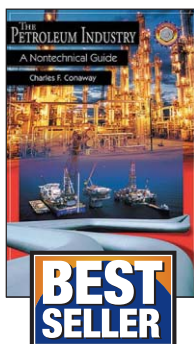
To the casual observer, the oil business seems constant and unchanging. The familiarity of the oil industry's retail outlets masks extraordinary changes in how the industry engages in its four primary sectors of activity: finding and producing crude oil, transportation, refining, and marketing.

In his new book, noted energy economist Dr. Samuel A. Van Vactor chronicles the oil industry's transformation over the last century and discusses the future of an industry that has been pronounced dead or dying by its critics on numerous occasions since the early development of coal and the steam engine. New professionals, industry executives, government officials, and academicians will find *Introduction to the Global Oil & Gas Business* a concise introduction to the industry and an invaluable source of information.

### **Contents:**

The demand and supply of oil • Oil pricing • Energy commodity markets • The new industry structure • Energy security • Organizing principals • Alternatives to oil • List of acronyms • Bibliography

■ *184 Pages/Hardcover/2010*



### **THE PETROLEUM INDUSTRY: A NONTECHNICAL GUIDE**

by *Charles F. Conaway*

\$79.00 us ISBN 0-87814-763-2 ISBN13 978-0-87814-763-2

Everything from upstream to downstream is covered in this nontechnical overview of the petroleum industry. Organized in a natural chronology, the text begins with the geology and origins of oil and gas formation and moves through the techniques used to find, drill, produce, refine, and market oil. This text also includes a glossary of industry terms and buzzwords.

#### **Contents:**

How the earth was formed • Petroleum origins, accumulation, and exploration • Contracts and regulations • Reservoir performance • Drilling • Formation evaluation • Well completion • Field appraisal and development • Artificial lift • Surface facilities • Petroleum downstream

■ 289 Pages/Hardcover/1999



### **THE OIL & GAS INDUSTRY: A NONTECHNICAL GUIDE**

by *Joseph Hilyard*

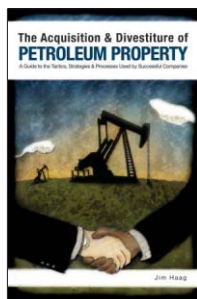
\$79.00 us ISBN 1-59370-254-X ISBN13 978-1-59370-254-0

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.

#### **Contents:**

Origins of oil and gas • Oil overview • Natural gas overview • Searching for and evaluating oil and gas • Drilling and completion: Onshore • Drilling and completion: Offshore • Managing oil and gas production • Transporting oil • Transporting natural gas by pipeline • Transporting natural gas as LNG • Converting oil into products • Converting natural gas into products • Petroleum industry structure • Petroleum trading • Emerging challenges for the petroleum industry • Appendix A: Terms, abbreviations, and acronyms • Appendix B: Further reading • Appendix C: Organizations, agencies, and professional societies

■ Approx. 390 Pages/Hardcover/6x9/Coming Soon!



### **THE ACQUISITION AND DIVESTITURE OF PETROLEUM PROPERTY**

by *Jim Haag*

\$69.00 us ISBN 1-59370-045-8 ISBN13 978-1-59370-045-4

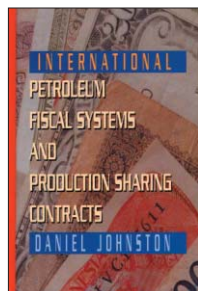
This book explains the actions that will lead to success in acquiring or divesting oil and gas producing assets. The path to maximizing value and minimizing mistakes is presented. Necessary resources are noted, emphasizing best practices in evaluations and negotiations.

#### **Contents:**

Successful company profiles • Motivating factors • Non-motivating factors • Seller evaluation • Marketing options • The divestment process • The acquisition process • Unique lifecycle risks • Valuation methodologies • Determining the price • Like-kind exchanges • New field discoveries • Constructing the offer • Preferential rights • Bonding protection • Negotiating the agreement • Due diligence • Government approvals • Corporate sales 'programs' • Industry activity • Accountability • Lessons learned • Website references • Case histories

■ 193 Pages/Hardcover/2005

"PennWell Customer Service is excellent. Even during Christmas vacation they replied quickly to my queries. I wish to rate them to the top as compared to other service providers. Even the quality of packing is excellent." - **M.A. Mohan**



## INTERNATIONAL PETROLEUM FISCAL SYSTEMS AND PRODUCTION SHARING CONTRACTS

by Daniel Johnston

\$99.00 US ISBN 0-87814-426-9 ISBN13 978-0-87814-426-6

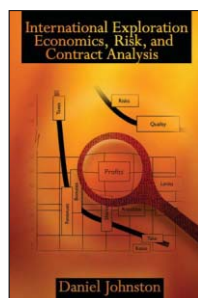


In this book, Daniel Johnston covers everything including historical development of contracts, terminology of accounting and negotiations, threshold field size analysis, arithmetic behind contract terms, and more.

### Contents:

Petroleum fiscal systems • Concessionary systems • Production-sharing contracts • Risk service contracts • Threshold field size analysis • Global market for exploration acreage • Production-sharing contract outline • Accounting principles • Double taxation • Commentary

■ 325 Pages/Hardcover/1994



## INTERNATIONAL EXPLORATION ECONOMICS, RISK, AND CONTRACT ANALYSIS

by Daniel Johnston

\$99.00 US ISBN 0-87814-887-6 ISBN13 978-0-87814-887-5

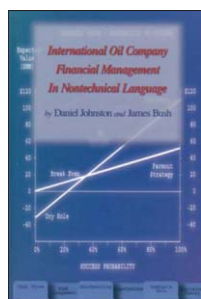


International exploration and production is challenging and exciting. Negotiating with governments and understanding the dynamics of their fiscal systems and/or production sharing contracts can mean the difference between success and failure. Long-time industry consultant, negotiator and lecturer, Daniel Johnston, provides an extremely clear and practical perspective on: international exploration economics and risk analysis, petroleum fiscal system analysis and design, contract negotiations, economic, financial and accounting aspects of production sharing contracts and royalty/tax systems.

### Contents:

International petroleum fiscal systems: production sharing contracts • State-of-the-art in petroleum fiscal system analysis • Thinking of going international? • Trends and issues in foreign PSCs • Current developments • The international gas industry • Alignment of interests • The ideal system • Economic modeling/auditing art and science – part I • Economic modeling/auditing – art and science – part II • Finger-on-the-pulse • Kashagan and Tengiz • The bidding dilemma • Government take – not a perfect statistic • The value of reserves in-the-ground, effective royalty rate (ERR), booking barrels, ROR systems and “R factors”, maximum efficient rate (MER) • Example contracts and/or fiscal systems from around the world

■ 479 Pages/Hardcover/2003



## INTERNATIONAL OIL COMPANY FINANCIAL MANAGEMENT IN NONTECHNICAL LANGUAGE

by James Bush and Daniel Johnston

\$69.00 US ISBN 0-87814-597-4 ISBN13 978-0-87814-597-3

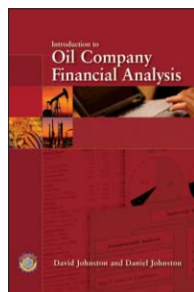


This text addresses the decision-making element of petroleum company management. It is a practical guide to all facets of modern financial management and strategic planning in today's oil and gas companies. Includes tables, figures, graphs, and an extensive glossary.

### Contents:

Oil industry financial accounting • Integrated management system • Competitive comparison • Cost management • Capital budgeting and investment theory • Cash flows in the oil industry • Capital structure • Financial reporting and investor/stockholder relations • Econometrics

■ 327 Pages/Hardcover/1998



## INTRODUCTION TO OIL COMPANY FINANCIAL ANALYSIS

by David Johnston and Daniel Johnston

\$89.00 US ISBN 1-59370-044-X ISBN13 978-1-59370-044-7

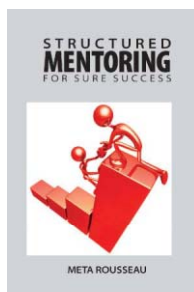


Basic principles are widely understood in the financial industry, but the terminology and analytical techniques can vary greatly. This book is written for the nonfinancial shareholders, managers, and oil company employees interested in the forces that influence stock values. The bottom line in any company is expressed in the language of finance. This book explains financial concepts in a nontechnical, practical way so that nonfinancial professionals and others may understand and appreciate this aspect of the business. When the first edition of this book was written, companies disclosed substantially less information than what is available today. This additional information allows a better understanding of the financial status and health of a company. But there is still room for improvement.

### Contents:

Fundamentals of valuation • Accounting systems • Financial analysis • Common stock • Competitive comparisons • Segment analysis • Value of oil reserves-in-the-ground • Restructuring • Legal & tax • Valuation of bonds & preferred stock

■ 447 Pages/Hardcover/2005



## STRUCTURED MENTORING FOR SURE SUCCESS

by Meta Rousseau

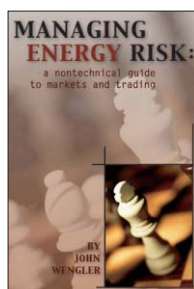
\$59.00 us ISBN 1-59370-173-X ISBN13 978-1-59370-173-4

Sustained success and steady growth require organizations to develop and retain a core of culture, relationships, and critical knowledge and skills. Capitalizing on the strength of disciplines such as competency-based training and knowledge management, structured mentoring programs enable organizations to reach these goals and offer their employees opportunities for professional development and career advancement that would not otherwise be possible. In her book, Meta Rousseau discusses a unique approach to structured mentoring aimed at the timely, effective, and reliable transfer of corporate culture, strategic relationships, and knowledge.

### Contents:

Toward greater clarity • Structured mentoring—more than goals and objectives • Purpose, relationship, scope, and complexity • Mentorship teams • Key practices and tools • Development, implementation, and improvement • Lessons learned • Glossary

■ 168 Pages/Hardcover/2008



## MANAGING ENERGY RISK: A NONTECHNICAL GUIDE TO MARKETS AND TRADING

by John Wengler

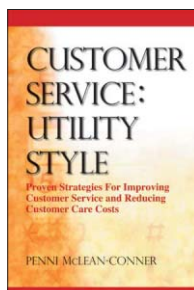
\$69.00 us ISBN 0-87814-794-2 ISBN13 978-0-87814-794-6

How does the manager master this complex process, with its myriad experts, personalities, and systems? John Wengler identifies these issues, discusses and analyzes them, and in checklist fashion prioritizes for managers what they must do to succeed despite risks as diverse as price, trader, and credit. Written in plain English, the text is directed at upper management at all electric utilities, natural gas firms, oil companies, and industrial end-users served by the energy complex.

### Contents:

Foreword by Jeffrey Roark, Southern Energy • Editor's Note by Dragana Pilipovic, SAVA • The "Top Ten Checklist" of things to do • The bull, the bear, and the spark spread • Risk management policies and procedures • Starting with your risk-return strategy • The risk roster: personalities and specialties • Energy risk boot camp: "must know" concepts for managers and directors • The deal process: from the desk to delivery • The portfolio process: starting with what have we got? and what do we want? • Measuring risk: how might our portfolio change? • Hedging: navigating toward our portfolio objectives • Critical path IT issues • Looking forward: the next ten management issues • Appendix • Glossary • Index

■ 393 Pages/Hardcover/2001



## CUSTOMER SERVICE: UTILITY STYLE

by Penni McLean-Conner

\$69.00 us ISBN 1-59370-053-9 ISBN13 978-1-59370-053-9

Successful utility customer service leaders are providing great service while reducing costs. This primer for customer service leaders at all levels outlines successful techniques for creating a customer focused culture, taking costs out of the business and maximizing technology, processes and efficiency. Readers of this book will find easy to implement, proven best practices combined with thoughtful discussions on current strategies and innovations. Additionally insights and case studies from successful utility leaders will amplify the challenges of successfully implementing these best practices.

### Contents:

Part One: Create a customer focused culture • Build a high performance team • Hire, train and retain your best customer service professionals • Discover the magic of customer complaints • Listen and respond to the voice of the customer • Offer new services and products to meet your customers' needs • Part Two: Take costs out of the business • Reduce unbilled losses in your meter to cash cycle • Outsourcing • Reduce bad debt • Create effective channel management • Part Three: Maximize technology, processes and efficiency • Map, measure and benchmark your key customer service processes • Complete a Health Check on your Customer Information System (CIS) • Apply technology to enhance customer service • Successfully implement these and other best practices

■ 250 Pages/Hardcover/2005



## INTERNATIONAL PETROLEUM FISCAL SYSTEMS ANALYSIS

by Daniel Johnston

1200.00 us ISBN 0-87814-822-1 ISBN13 978-0-87814-822-6

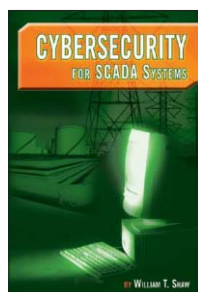


This report collects public information that is obscure and difficult to gather, making it a great value and timesaver. It is an excellent reference that depicts the diversity of petroleum exploration and development & production contract terms around the world. Nowhere else will you find this information collected in one place.

### Contents:

Country/system listing (130 countries/352 regimes and contracts) • Abbreviations, acronyms and symbols • Introduction • Example of database format • Example analysis format and definitions • Example production sharing contract – and analysis • World petroleum fiscal system statistics

■ 380 Pages/3-Ring Binder/2001



## CYBERSECURITY FOR SCADA SYSTEMS

by William T. Shaw

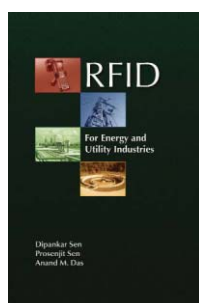
\$89.00 US ISBN 1-59370-068-7 ISBN13 978-1-59370-068-3

SCADA technology quietly operates in the background of critical utility and industrial facilities nationwide. This important tool efficiently manages utility assets, refineries and other critical industrial segments, but protecting SCADA networks from cyber attacks, hackers and even physical assault is becoming a test of will, cleverness and determination. *Cybersecurity for SCADA Systems* provides a high-level overview of this unique technology, with an explanation of each market segment. Readers will understand the vital issues and learn strategies for decreasing or eliminating system vulnerabilities. Suitable for the non-technical management level personnel as well as IT personnel without SCADA experience.

### Contents:

Section 1: Introduction to SCADA systems • The technological evolution of SCADA systems • Remote terminal units • Telecommunications technologies • Supervisory control applications • Operator interface • Conventional information technology security • Section 2: Cybersecurity principles, processes, and technologies • Identifying cybersecurity vulnerabilities • Classifying cyber attacks and cyber threats • Physical security • Operational security • Electronic/systems security • Electric utility industry-specific cybersecurity issues • Section 3: Industrial sectors • Water/wastewater industry-specific cybersecurity issues • Pipeline industry-specific cybersecurity issues • The emerging cyber threat to SCADA systems • Section 4: SCADA Security Architectures • Commercial hardware and software vulnerabilities • Traditional security features of SCADA systems • Eliminating the vulnerabilities of SCADA systems • Appendices • Index

■ 562 Pages/Hardcover/2006



## RFID FOR ENERGY & UTILITY INDUSTRIES

by Dipankar Sen, Prosenjit Sen and Anand Das

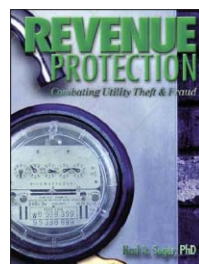
\$89.00 US ISBN 1-59370-105-5 ISBN13 978-1-59370-105-5

Although radio frequency identification (RFID) has been used for decades, the technology is just now gaining momentum in the energy industry. Power plants can employ RFID for everything from security for the workforce, tracking fuel consumption, and even monitoring plant exhaust. The applications for RFID are endless, and the technology is applicable in nearly every field. Lead authors Dipankar Sen, Prosenjit Sen and Anand Das bring years of entrepreneurial experience with RFID technology to this primer for plant foremen, system engineers and those decision-makers looking to enhance operational efficiency.

### Contents:

RFID technology • Wireless networking technologies • Application of RFID and wireless technologies for mobile asset management • Application of RFID and wireless technologies for fixed asset labeling and locating • RFID and wireless applications for asset management in the water utility • RFID and wireless applications for asset management in the electric utility • RFID and wireless applications for asset management in the natural gas industry • Appendix A Evaluating the business proposition of an RFID project • Appendix B Industry acronyms and abbreviations

■ 286 Pages/Hardcover/2009



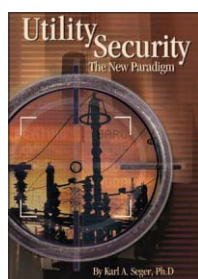
## REVENUE PROTECTION: COMBATING UTILITY THEFT AND FRAUD

by Karl Seger, PhD

\$79.00 US ISBN 1-59370-039-3 ISBN13 978-1-59370-039-3

Energy theft is more common than most think. It costs consumers billions of dollars every year in the United States alone. Karl Seger explains how a utility can establish a revenue protection program or evaluate and improve an existing one. This how-to book includes a number of appendices with sample web pages, investigative reports, and more. Dr. Seger outlines a program to help identify customer fraud and billing errors. Seger's advice applies to those associated with both large and small utilities.

■ 239 Pages/Hardcover/2005



## UTILITY SECURITY: THE NEW PARADIGM

by Karl A. Seger, Ph.D.

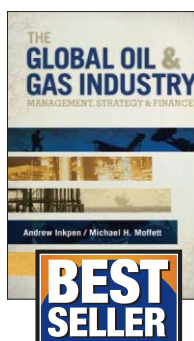
\$79.00 US ISBN 0-87814-882-5 ISBN13 978-0-87814-882-0

In response to recent security concerns, Dr. Seger addresses the real threats to utility systems and provides a step-by-step approach to assessing vulnerabilities and developing and implementing security countermeasures. Included in the book are threat assessment and security checklists, a vulnerability/countermeasure matrix, and sample security and workplace violence prevention policies.

### Contents:

Section 1: New paradigm threats • September 11, 2001 • The threat from extremists • Conventional threats • Section 2: Managing threats • The risk management process • Protecting information • Protecting networks and computer systems • Physical security and access control • Protecting employees and physical assets • Special threats • Threat response plan • Crisis management • Appendices • Helpful website addresses • Index

■ 238 Pages/Hardcover/2003



### THE GLOBAL OIL & GAS INDUSTRY: MANAGEMENT, STRATEGY & FINANCE

by Andrew Inkpen and Michael H. Moffett

\$89.00 us ISBN 1-59370-239-6 ISBN13 978-1-59370-239-7

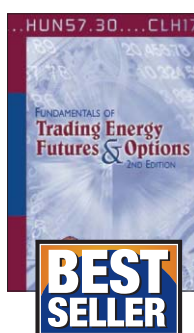


Despite its size and importance, a surprising lack of basic knowledge exists about the oil and gas industry. With their timely new book, authors Andrew Inkpen and Michael H. Moffett have written a nontechnical book to help readers with technical backgrounds better understand the business of oil and gas. They describe and analyze the global oil and gas industry, focusing on its strategic, financial, and business aspects and addressing a wide range of topics organized around the oil and gas industry value chain, starting with exploration and ending with products sold to consumers. *The Global Oil & Gas Industry* is a single source for anyone interested in how the business of the world's largest industry actually works: business executives, students, government officials and regulators, professionals working in the industry, and the general public.

#### Contents:

The global oil and gas industry • Nationalism, national oil companies, and the curse of oil • Access, leasing, and exploration • Developing oil and gas projects • Production of oil and gas • Fiscal regimes • Financing and financial performance • Natural gas • Liquefied natural gas (LNG) • The market for crude oil • Transportation • Refining • Sales and marketing of petroleum products • Petrochemicals • The future of the global oil and gas industry • Index • About the authors

■ 600 Pages/Hardcover/6x9/September 2011



### FUNDAMENTALS OF TRADING ENERGY FUTURES & OPTIONS, 2ND EDITION

by Steven Errera & Stewart L. Brown

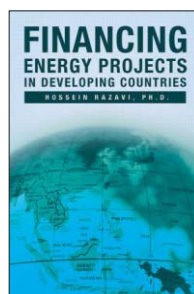
\$79.00 us ISBN 0-87814-836-1 ISBN13 978-0-87814-836-3

In this second edition of their best-selling primer, authors Errera and Brown explain how exchange traded futures and options markets work, and how companies can successfully use the markets in their overall strategy to increase profitability. They cover everything from market mechanics, hedging, spread trading, and technical trading to history and growth of the markets. Also included is an extensive appendix detailing contract specifications for 13 energy futures/options contracts.

#### Contents:

Futures and options contracts and markets • Market mechanics • Behavior of commodity futures prices • Speculation and spread trading • Hedging • Introduction to options on futures • Energy options strategies • Technical factors • History and growth • Economic implications of energy futures and options • Appendices (contract specifications) • Glossary

■ 247 Pages/Hardcover/2002



### FINANCING ENERGY PROJECTS IN DEVELOPING COUNTRIES

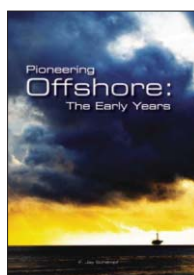
by Hossein Razavi, Ph.D.

\$89.00 us ISBN 1-59370-124-1 ISBN13 978-1-59370-124-6

An update to his comprehensive 1996 text on project finance in emerging economies, Hossein Razavi's authoritative book provides first-hand information and analysis of how multilateral, bilateral, and commercial financiers decide to support an energy project. It presents the major changes in the attitudes and orientations of these financiers as they have entered a competitive environment seeking opportunities to do more business in the energy sector of developing countries.

The reader is guided through the process of understanding the fundamentals of project financing, getting to know the financiers, and developing an acceptable project package. Finally, some real-world case studies demonstrate the intricacies of mobilizing funds for projects in various segments of the energy sector.

■ 484 Pages/Hardcover/2007



### PIONEERING OFFSHORE: THE EARLY YEARS

by F. Jay Schempff

\$49.00 us ISBN 0-9795633-0-5 ISBN13 978-0-9795633-0-0

The offshore petroleum industry has become a huge, distinct branch of the oil and gas industry in a relatively short time. Since its official beginnings only 50 years ago, the industry has taken astounding leaps in technical and commercial know-how. *Pioneering Offshore: The Early Years* takes over-water petroleum development from its beginnings in the late nineteenth century through the mid-1960s. In addition to the historical narrative, interwoven into *Pioneering Offshore* are stories from this time period obtained from in-depth interviews of more than 125 industry pioneers, providing a historical context for their contributions in the industry's advancement and in the development of its distinct technologies. As intended, *Pioneering Offshore* provides a narrative that, while as chronologically and historically accurate as possible, remains true also to the industry's human spirit. This book offers an intimate feel for the industry's early years and will be essential to grasping the enormous scope of the search for offshore oil and gas during subsequent decades.

#### Contents:

Book One: In the wet: The earliest pioneers • Book Two: Wading out with history • Book Three: The world offshore—deep and dangerous • Book Four: Old lessons and new: On-the-job training • Book Five: The international scene and observations • Acknowledgments and recommended reading • The Offshore Energy Center story

■ 253 Pages/Hardcover/2007



## INTERNATIONAL ENERGY MARKETS: UNDERSTANDING PRICING, POLICIES & PROFITS

by Carol Dahl

\$105.00 US ISBN 0-87814-799-3 ISBN13 978-0-87814-799-1

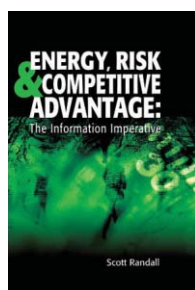


This book is designed to provide the economic skills to make better management or policy decisions relating to energy. It requires a facility with calculus and contains a toolbox of models along with institutional, technological and historical information for oil, coal, electricity, and renewable energy resources.

### Contents:

Energy lessons from the past for the future • Perfect competition and the coal industry • Natural monopoly and electricity generation • Deregulation and privatization of electricity generation • Monopoly, dominant firm and OPEC • Market structure, transaction costs economics and U.S. natural gas markets • Externalities and energy pollution • Public goods and global warming • Monopsony - Japan and the Asia Pacific LNG market • Game theory and the European natural gas market • Allocating fossil fuel production over time and oil leasing • Computing energy costs and supply • Oil refining, energy transportation, and linear programming • Energy futures and options markets for managing risk • Energy and information technologies • Managing in the multinational world of energy • Glossary and abbreviator • Conversion charts

■ 587 Pages/Hardcover/2004



## ENERGY, RISK & COMPETITIVE ADVANTAGE: THE INFORMATION IMPERATIVE

by Scott Randall

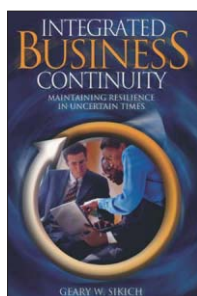
\$89.00 US ISBN 1-59370-134-9 ISBN13 978-1-59370-134-5

The focus of risk management is not only on minimizing the negative consequences of uncertain events, but also on providing competitive advantage. Neither threats nor opportunities can be effectively identified and assessed without good quality market intelligence. As companies integrate their corporate risk, strategy, and finance decisions, they are finding that corporate risk identification and assessment is only as good as the data in their system. Using the framework of enterprise risk management, market research, quality management, and strategic planning, author Scott Randall presents a timely and important new book about competitive advantage in the energy business, and how it can be gained using a cross-disciplinary integration of tools, techniques, and structure that yields reliable information.

### Contents:

The rise of enterprise risk management and the information imperative • Information integrity implementation—tools, techniques, and examples • Assessment • Disposition • The energy merchant of the 21st century creates alpha • Recommended template for stress test documentation • Acronyms and abbreviations

■ 303 Pages/Hardcover/2008



## INTEGRATED BUSINESS CONTINUITY: MAINTAINING RESILIENCE IN UNCERTAIN TIMES

by Geary W. Sikich

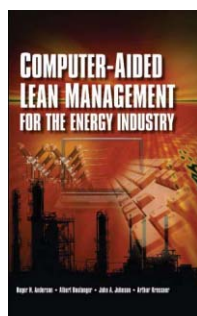
\$69.00 US ISBN 0-87814-865-5 ISBN13 978-0-87814-865-3

*Integrated Business Continuity: Maintaining Resilience In Uncertain Times* guides you step-by-step through developing and assessing an effective business continuity plan. Use the ideas of this book to keep your business on track in the event of both natural or man-made disasters.

### Contents:

Entering the age of uncertainty: what to expect • Critical infrastructures: opportunities and vulnerabilities • The underpinnings of business continuity • Your next "crisis:" identifying time-critical issues • The smoldering "crisis:" time-sensitive issues • The hibernating "crisis:" time-dependent issues • Business continuity: from inception to integration • Protecting your organization in the age of uncertainty • Knowledge management: effective communications in the "age of the instant" • The next wave: global vulnerabilities, local impacts • Concluding thoughts

■ 283 Pages/Hardcover/2003



## COMPUTER-AIDED LEAN MANAGEMENT FOR THE ENERGY INDUSTRY

by Roger N. Anderson, Albert Boulanger,  
John A. Johnson, and Arthur Kressner

\$89.00 US ISBN 1-59370-157-8 ISBN13 978-1-59370-157-4



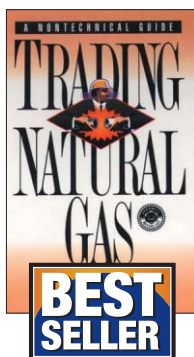
In this new look at energy business operations, an expert team of scientists and engineers provide a road map for transforming energy business capabilities to meet growth imperatives in an increasingly competitive global economy. Computer-aided lean management (CALM) methodology uses the common-sense approach of measuring the results of actions taken and using those measurements to drive greater efficiency. The authors also examine how CALM methodology will enable future electric power smart grids with the efficiencies necessary to serve urban expansion. Additionally, CALM

can serve the oil and gas industry as it deals with dwindling geological supplies and emerging renewable resource competitors. Developing the business capabilities of CALM will dramatically improve the business operations of all energy companies.

### Contents:

Introduction to CALM • History • Components • Systems engineering • IMP/IMS • Big picture • Additional tools • Oil and gas operations • Electric operations • Growth • Energy future

■ 394 Pages/Hardcover/2008



### TRADING NATURAL GAS: A NONTECHNICAL GUIDE

by Fletcher J. Sturm

\$79.00 us ISBN 0-87814-709-8 ISBN13 978-0-87814-709-0

This great "how to" book covers the various mechanics of natural gas trading, including the physical (cash) market for natural gas production, transportation, distribution, and consumption. The heart of the text is the definition and demonstration of financial trading tools and techniques. It closes with discussion of more complex structures of trading and the author's philosophy on how a risk management department should function within a natural gas trading company.

#### Contents:

The physical (cash) market • The financial market • Structured transactions • Hedging and trading instruments • Building a risk management model

■ 206 Pages/Hardcover/1997



### POWER PLANT CONSTRUCTION MANAGEMENT: A SURVIVAL GUIDE

by Peter G. Hessler

\$99.00 us ISBN 1-59370-029-6 ISBN13 978-1-59370-029-4

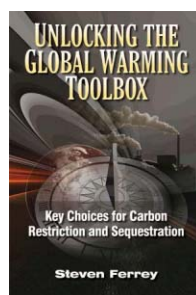


With the focus on return on investment and new technologies, the power industry today is much different than it was years ago. A unique set of management skills is necessary to supervise construction or retrofitting of a power generation plant, given today's bottom-line emphasis on environment, fuel efficiency, up-to-date technical features, and the industry's loss of experienced craftsmen and supervisory personnel. This book explains the power of economics behind the industry and how to manage the finances of work activities.

#### Contents:

Planning the process • Understanding the contractual commitments • The commercial side • Risk management • Summarizing the contractual responsibilities • Setting up the job site • Personnel • Controlling the quality • Safety • Managing the finances • Managing the site activities • Pulling it all together • Doing it overseas

■ 345 Pages/Hardcover/2005



### UNLOCKING THE GLOBAL WARMING TOOLBOX: KEY CHOICES FOR CARBON RESTRICTION AND SEQUESTRATION

by Steven Ferrey

\$89.00 us ISBN 1-59370-213-2 ISBN13 978-1-59370-213-7

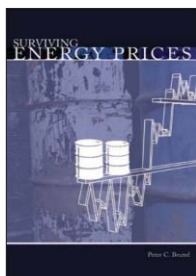


Focuses on the key options for designing and implementing equitable and goal-specific carbon regulation. This book is a regulatory toolkit holding the policy and legal implements necessary to shape the carbon future. It showcases the ongoing legal and regulatory issues that will be worked out both in the United States and in international programs for years, and highlights the lasting issues related to crafting successful carbon control. A must-have for those who would regulate carbon and those who would be subject to that regulation—policymakers, regulators, industry, nongovernmental organizations, and consumers.

#### Contents:

Opening the toolbox • The science underlying global warming • The critical role of electric power architecture and carbon • The tipping point: Time as the combatant • The Kyoto Protocol: The world carbon model • The European Union core of carbon control: Compared and contrasted with recent U.S. experience • The regional greenhouse gas initiative: The original U.S. regulation • Golden state carbon: California GHG regulation • Regional and voluntary U.S. carbon programs • The Kyoto critique: The urgency of international redesign • The fulcrum on leverage on global warming: Role of the courts • The new carbon-attuned smart grid: Beyond simple poles and wires • Carbon leakage and the commerce clause • Carbon allowance auction: Regulatory and legal issues • Legal additionality requirements for carbon offsets • Offsetting carbon: Creating credits from renewable power and conservation • The feed-in tariff for renewable energy: Where it works and where it encounters legal impediments • Renewable portfolio standards for renewable power • The successful architecture to transform renewable power • Into the woods • The final analysis: The conclusion on carbon

■ 324 Pages/Hardcover/2010



### SURVIVING ENERGY PRICES

by Peter Beutel

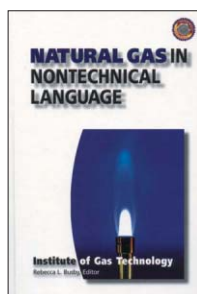
\$69.00 us ISBN 1-59370-241-8 ISBN13 978-1-59370-241-0

In his book, *Surviving Energy Prices*, energy advisor Peter Beutel delivers a concise and comprehensive look at what companies should know to avoid harm from swift and vicious changes in energy prices. This book distills a lifetime of trading experience into simple, easy-to-understand concepts that can get these companies off the baseline and into the game.

#### Contents:

The new volatility • Understanding hedging • Different kinds of risk • Wet barrel programs • Understanding futures and options • When to use futures and options • Bank swaps and inventory financing • Timing • Fundamental analysis • Technical analysis • Seasonal tendencies and market psychology • Treating adages, good and bad

■ 197 Pages/Softcover/2005



## NATURAL GAS IN Nontechnical Language

by *Institute of Gas Technology*

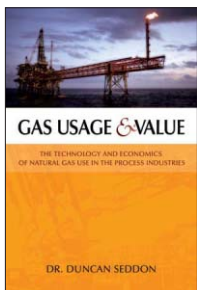
\$79.00 US ISBN 0-87814-738-1 ISBN13 978-0-87814-738-0

An overview of the natural gas process from wellhead to burntip, from futures trading to exploration, and the latest cogeneration issues and other product use.

### Contents:

Origins and history of natural gas • Exploration principles, tools, and techniques • Drilling, production and processing • Gas transmission pipeline network • Natural gas storage • Gas distribution systems • Uses for natural gas • Regulatory history of the gas industry • Gas marketing and sales • Future supply and demand for natural gas • Glossary

■ 170 Pages/Hardcover/1999



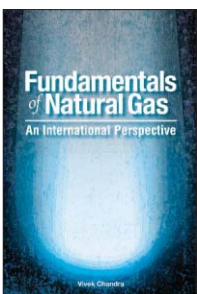
## GAS USAGE & VALUE

by *Dr. Duncan Seddon*

\$99.00 US ISBN 1-59370-073-3 ISBN13 978-1-59370-073-7

*Gas Usage & Value* addresses issues concerning the development and sale of natural gas resources. The text reviews the world's gas reserves and outlines the principal issues affecting composition and the cost of producing well head gas to make a specification product or extract particular components; operation and cost of gas plants; and the cost of transporting the gas to an end-user. Separate chapters deal with the use of gas in the downstream process industries. Gas usages for various technologies are described and alternatives are critically compared. Costs for the downstream process industries are described on a self-consistent basis that allows comparison of alternatives. Estimates are presented for each technology on the cost of production as the gas price changes. Case studies are included to illustrate variations or specific points of relevance.

■ 344 Pages/Hardcover/2006



## FUNDAMENTALS OF NATURAL GAS: AN INTERNATIONAL PERSPECTIVE

by *Vivek Chandra*

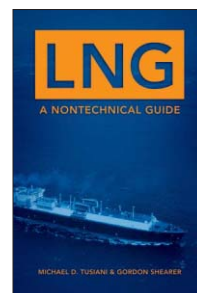
\$69.00 US ISBN 1-59370-088-1 ISBN13 978-1-59370-088-1

Natural gas has been called "the prince of hydrocarbons": an abundant resource that is versatile and competitive with other fuels and popular throughout the world. The advent of newer technologies that can deliver natural gas to worldwide markets, coupled with its reputation as a clean-burning, efficient energy source, make natural gas the international "fuel of the future."

### Contents:

The basics • Transport and storage • Gas usage • Contracts and project development • World trade • Conclusion • Appendix A: Unit conversions • Appendix B: LNG projects existing as of 2006 • Appendix C: LNG projects expected complete 2006-2012 • Appendix D: LNG contracts schematic

■ 212 Pages/Hardcover/2006



## LNG: A Nontechnical Guide

by *Michael D. Tusiani and Gordon Shearer*

\$79.00 US ISBN 0-87814-885-X ISBN13 978-0-87814-885-1

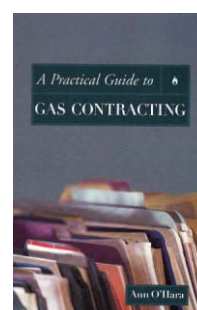
The demand for natural gas rises annually, straining existing supplies, and emerging markets often aren't accessible by pipeline. Using everyday language and real-world examples, authors Michael D. Tusiani and Gordon Shearer present LNG as the most viable energy answer. Their straightforward explanation of a complex industry proves that LNG can deliver a critical link in the energy demands of international economies.

Readers will realize the complexity of this industry, which involves an intricate link of critical companies, governments, and stand-alone facilities. *LNG: A Nontechnical Guide* will be a valuable reference for energy industry leaders, investment bankers, and professors specializing in energy.

### Contents:

The liquefied natural gas industry • The evolution of the global gas and LNG markets • The LNG chain: project nature of the LNG business • Upstream natural gas • The liquefaction plant • LNG tankers • LNG import terminals • The evolution of the industry • Orchestration and financing of an LNG project • LNG projects • The economics of an LNG project • Upstream gas supply agreements • LNG sales and purchase contracts • LNG tanker contracts • LNG shipping conventions and regulations • Import-related project siting and regulatory issues • LNG import terminal use agreements • Conclusion: The future of LNG • Units of measurement • Glossary

■ 458 Pages/Hardcover/2007



## A PRACTICAL GUIDE TO GAS CONTRACTING

by *Ann O'Hara*

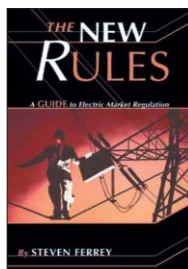
\$69.00 US ISBN 0-87814-764-0 ISBN13 978-0-87814-764-9

A comprehensive look at gas contracts and the significant changes they have gone through partially due to FERC Order 636 and activism of Gas Industry Standards Board.

### Contents:

Gas industry players (and why they play that way) • Natural gas transportation laws & regulations • U.S. gas sales laws • North American sale of goods • Essentials of contracting • The gas contract—Part 1 & 2 • New issues: Over-the-counter (OTC) derivatives documentation & electronic contracting • Practical tips for gas contractors • Glossary

■ 467 Pages/Hardcover/1999



### THE NEW RULES: A GUIDE TO ELECTRIC MARKET REGULATION

by Steven Ferrey

\$59.00 US ISBN 0-87814-790-X ISBN13 978-0-87814-790-8

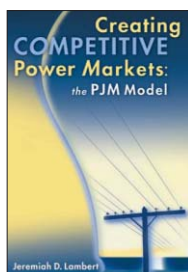


Ferrey highlights the importance of the new electric energy rules and legal restrictions replacing the traditional utility environment. This book covers transcendent issues and long-term rules and structure of the electric industry.

#### Contents:

Introduction: Past is no longer prologue • Bold changes in electric energy technologies alter the market • The evolution of wholesale power sale rules • Hands on the switch: the new transmission rules • In the shadow of the PUHCA: Exempt Wholesale Generation (EWGs) • The PURPA of rules: Old is new • QFs and the PURPA contracts: The Holy Grail • Power shift: The "current" current • Deregulation of retail markets: New opportunities breed new problems • Restructuring utility power in a competitive environment: Mergers and asset acquisitions • The competition rules of the new market • The local angle: Franchise, municipal competition, and tax rules • Electricity: Good or service? The contract rules that govern the power sale market • The deregulation vanguard • The new risk paradigm • Appendices • Glossary • Index

■ 370 Pages/Hardcover/2000



### CREATING COMPETITIVE POWER MARKETS: THE PJM MODEL

by Jeremiah D. Lambert

\$69.00 US ISBN 0-87814-791-8 ISBN13 978-0-87814-791-5

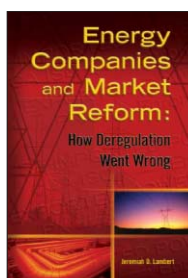
This comprehensive model of the nation's largest, most technically advanced and forward-thinking power pool—Pennsylvania, Jersey, Maryland (PJM)—provides a window on state-of-the-art solutions to complex organizational, managerial, technical, and regulatory issues that cut across an entire industry in transition.

With full cooperation from PJM, nationally recognized energy lawyer, Jeremiah D. Lambert, compares and contrasts PJM with other ISOs on key issues such as governance, structure, and transmission pricing.

#### Contents:

The road to competitive electric markets • PJM's evolution and development • PJM's transition to ISO status • FERC authorization • PJM market pricing rules • Reliability • Generator interconnections and operations • Governance and management • Epilogue

■ 236 Pages/Hardcover/2001



### ENERGY COMPANIES AND MARKET REFORM: HOW DEREGULATION WENT WRONG

by Jeremiah D. Lambert

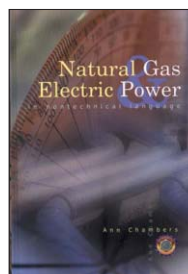
\$69.00 US ISBN 1-59370-060-1 ISBN13 978-1-59370-060-7

During the last two decades, deregulation and restructuring were widely expected to transform the nation's energy industries, bringing more competitive pricing and abundant, reliable energy to the public. Instead, consumers and investors in the post-Enron era have suffered losses measured in the billions, attributable to market-rigging, accounting fraud, and business plans that were doomed to failure. In this in-depth look at the latest era of greed, Jeremiah Lambert explains how the leaders of these companies schemed, collaborated or ignored the obvious signs that signaled the oncoming failures of well-established energy companies.

#### Contents:

A short history of deregulation • Corporate self-regulation: Form vs substance • Corporate self-regulation: The accountant as gatekeeper • FERC's shortfall as market regulator • The deregulated gas supply market • Implosion of the California electricity market--Part I • Implosion of the California electricity market--Part II • Market design • Changing the ground rules • Conclusion

■ 267 Pages/Hardcover/2006



### NATURAL GAS & ELECTRIC POWER IN NONTECHNICAL LANGUAGE

by Ann Chambers

\$69.00 US ISBN 0-87814-761-6 ISBN13 978-0-87814-761-8

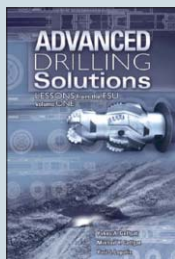
Ann Chambers gives you a history of these two converging industries and an overview of the factors forcing them together—political, regulatory, technical, and economic. She covers other fuels competing for market share in the electric industry, the merchant power uprising, distributed generation and strategies for creating value in the Btu stream.

#### Contents:

Natural gas history • Transportation and storage • Exploration, drilling, and production • Trading • Natural gas basics • Electric power history • Deregulation • Convergence • Power plant basics • Power generation technologies • Competing fuels and environmental factors • Merchant plants • Distributed generation • Conclusion

■ 258 Pages/Hardcover/1999

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**ADVANCED DRILLING SOLUTIONS:  
LESSONS FROM THE FSU, VOLUME I**

by Yakov A. Gelfgat, Mikhail Y. Gelfgat,  
and Yuri S. Lopatin

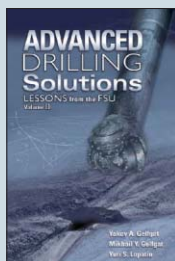
\$129.00 US ISBN 0-87814-786-1 ISBN13 978-0-87814-786-1

Covers historical trends and two major aspects of drilling technologies—downhole motors and oil well drilling optimization (KTW-Key Technological Wells drilling method). Using a downhole motor is more efficient, especially in hard formations. Advanced drilling studies have long been conducted in the FSU and are important in reducing drilling costs in marginal reservoirs.

**Contents:**

Introduction to drilling technologies for oil and gas in Russia and the FSU • Downhole motor drilling technology and applications • Well drilling optimization methods in the FSU • Conclusions • Acronyms

■ 412 Pages/Hardcover/2003



**ADVANCED DRILLING SOLUTIONS:  
LESSONS FROM THE FSU, VOLUME II**

by Yakov A. Gelfgat, Mikhail Y. Gelfgat,  
and Yuri S. Lopatin

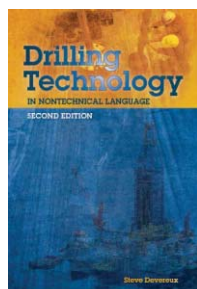
\$129.00 US ISBN 0-87814-891-4 ISBN13 978-0-87814-891-2

Provides detailed descriptions and case studies of the technologies developed and used in Russia. These include directional drilling, deep and ultra-deep well construction, underbalanced drilling, rotary-turbine drills, underreamers, and retractable drill bits.

**Contents:**

Development of directional, cluster, and horizontal drilling technology using downhole motors • Deep and ultra-deep well drilling technology in the FSU • Development of well drilling and completion technology using air, aerated mud, and foam drilling methods • Retractable drillbit technology—drilling without pulling out drillpipe • Acronyms

■ 400 Pages/Hardcover/2003



**DRILLING TECHNOLOGY IN  
Nontechnical Language,  
2ND EDITION**

by Steve Devereux

\$79.00 US ISBN 1-59370-264-7 ISBN13 978-1-59370-264-9

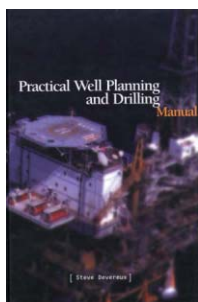


Author Steve Devereux has revised and rewritten his overview of onshore and offshore drilling operations and technology. The new second edition includes additional chapters that cover working in the drilling industry, working in remote locations, and advanced drilling techniques, and includes an additional section about managing costs.

**Contents:**

Drilling geology • Oil and gas reservoir formation • Drilling a land exploration well • Planning and drilling a development well offshore • Rig selection and equipment • Drill bits • Drilling fluids • Directional and horizontal drilling • Casing and cementing • Evaluation • Well control • Managing drilling operations • Drilling problems and solutions • Safety and environmental issues • Getting work in the drilling industry • Index

■ 382 Pages/Hardcover/6x9/February 2012



**PRACTICAL WELL PLANNING  
AND DRILLING MANUAL**

by Steve Devereux

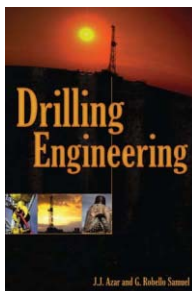
\$109.00 US ISBN 0-87814-696-2 ISBN13 978-0-87814-696-3

A must-read for anyone planning new wells or simply wanting to manage existing sites more effectively, this text provides the essentials of drilling and associated engineering functions for today's team drilling approach.

**Contents:**

Well design • Preliminary work for the well design • Precompletion, completion, casing and directional design • Well programming • Preliminary work for the drilling program • Well control • Directional planning • Drillbit selection, parameters, and hydraulics • Drilling fluids program • Casing running program • Cementing program • Formation evaluation • Drilling problems—avoidance planning • Practical wellsite operations and reporting • Drilling fluid • Drilling problems • Casing • Cementing • Drillbits • Directional drilling • Writing the final well report • Appendices: Calculating kick tolerances; Formation integrity test recommended procedure; Information sources; Drilling equipment lists by operation; Conductor setting depth for taking returns to the flowline • Glossary

■ 522 Pages/Hardcover/1998

**DRILLING ENGINEERING**

by Dr. J. J. Azar and Dr. G. Robello Samuel

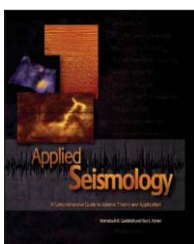
\$139.00 us ISBN 1-59370-072-5 ISBN13 978-1-59370-072-0

Coauthored by a preeminent drilling engineering professor/researcher and a well-experienced drilling research advisor, *Drilling Engineering* explains the fundamentals and field practices in drilling operations. This textbook is an excellent resource for drilling engineers, drilling supervisors and managers, and petroleum engineering students.

**Contents:**

Rotary drilling for oil & gas • Drilling fluids • Fluid flow and associated pressures in the rotary rig circulating system • Drill bit hydraulics • Drilled cuttings transport • Prevention and control mechanics of well blowouts • Directional well drilling • Drill bit mechanics • Drillstring fundamentals • Drilling problems • Casing and dementing design • Well planning in drilling engineering

■ 500 Pages/Hardcover/2007

**APPLIED SEISMOLOGY: A COMPREHENSIVE GUIDE TO SEISMIC THEORY AND APPLICATION**

by Mamdouh R. Gadallah and Ray L. Fisher

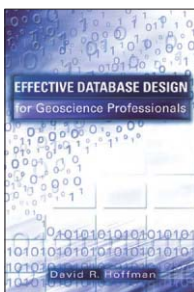
\$139.00 us ISBN 1-59370-022-9 ISBN13 978-1-59370-022-5

This text provides comprehensive coverage of exploration seismology and elements of geology pertinent to exploration geology. It is heavily illustrated and has workshops included to aid understanding. The text includes several appendices to explain the math, equations and answers to selected exercise questions.

**Contents:**

Geological background • Geophysical and mathematical background • Seismic refraction exploration • Seismic reflection data acquisition • Seismic reflection data processing • Seismic reflection data interpretation • Appendix A: Refraction calculations • Appendix B: SEG tape formats • Appendix C: Workshop answers

■ 473 Pages/Hardcover/2005

**EFFECTIVE DATABASE DESIGN FOR GEOSCIENCE PROFESSIONALS**

by David R. Hoffman

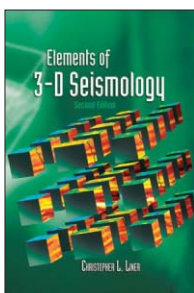
\$89.00 us ISBN 0-87814-828-0 ISBN13 978-0-87814-828-8

Geotechnical data management plays a key role in problem solving for oil company exploration and development operations. This text is a complete manual that geoscientists can use to provide a basic introduction to data management concepts. A highly organized work, each chapter is complete with an introductory synopsis and key terms where necessary. Overall, Hoffman provides practical information sprinkled with cautionary advice on avoiding potential database design pitfalls.

**Contents:**

Key terms and concepts • Pre-planning database projects • Data types and formats • Designing the database • Geotechnical data • Data reformatting • Data loading and input • Data normalization • Data validation, editing, and quality control • Designing the user interface • Summary • Additional resources • Appendix A: checklist for geological data types • Glossary

■ 263 Pages/Hardcover/2003

**ELEMENTS OF 3-D SEISMOLOGY, 2ND EDITION**

by Christopher L. Liner

\$129.00 us ISBN 1-59370-015-6 ISBN13 978-1-59370-015-7

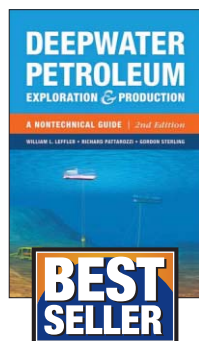


Updated and expanded, this new edition is a thorough introduction to the acquisition, processing, and interpretation of 3D seismic data. Developed from university courses, the text teaches the fundamentals of 3D seismic theory, techniques, and application. Includes free companion CD with related QuickTime® movies and SeisCom 7 for rapid calculation of 2D and 3D seismic quantities.

**Contents:**

General properties of waves • Waves in fluids • Understanding seismic events • Reservoir fluid properties • Waves in solids • Waves in porous solids • 2D land acquisition • Financial aspects of 3D seismic • Survey predesign • Land shooting geometry • Land 3D design optimization • Marine acquisition methods • Data dimensionality and components • Processing and binning overview • Computing • Creating the CMP stack • Migration I: concepts • Migration II: classification and velocity analysis • Historical perspective • Synthetic seismogram, tuning, and resolution • Introduction to interpretation • Data volume • Structure • Stratigraphy • Seismic attributes • Amplitude in space, time, and offset

■ 450 Pages/Hardcover/2004



### DEEPWATER PETROLEUM EXPLORATION & PRODUCTION: A NONTECHNICAL GUIDE, 2ND EDITION

by William L. Leffler, Richard Pattarozzi,  
and Gordon Sterling

\$79.00 US ISBN 1-59370-253-1 ISBN13 978-1-59370-253-3

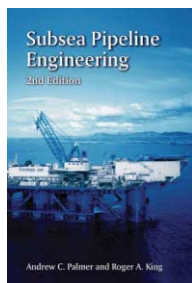


The new second edition of this authoritative book has retained all the virtues of the best-selling original, explaining the unique challenges of oil and gas exploration and production in the world's deepwater provinces. New chapters on geology and geophysics, rigs, and service vehicles are included, and engineering and scientific schemes used in deepwater are covered in greater detail. Case studies in several chapters give practical examples, while the final chapter presents the latest technology employed in a "third wave" of industry evolution.

#### Contents:

A century getting ready • Letting go of the past • Geology and geophysics • Exploring the deepwater • Drilling and completing wells • Development systems • Fixed structures • Floating production systems • Subsea systems • Topsides • Pipelines, flowlines, and risers • Technology and the third wave

■ 372 Pages/Hardcover/6x9/October 2011



### SUBSEA PIPELINE ENGINEERING, 2ND EDITION

by Andrew C. Palmer and Roger A. King

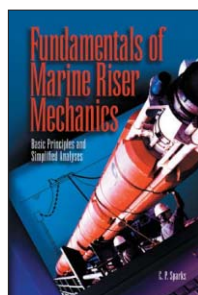
\$179.00 US ISBN 1-59370-133-0 ISBN13 978-1-59370-133-8

*Subsea Pipeline Engineering* was the first of its kind, written by two of the world's most respected authorities in subsea pipeline engineering. In the second edition, these industry veterans have updated their definitive reference book, covering the entire spectrum of subjects in the discipline, from route selection and planning to design, construction, installation, materials and corrosion, inspection, welding, repair, risk assessment, and applicable design codes and standards. Particular attention is also devoted to the important specialized subjects of hydraulics, strength, stability, fracture, upheaval, lateral buckling and decommissioning. The book is distilled from the authors' vast experience in the industry and their popular course on Subsea Pipeline Engineering.

#### Contents:

Route selection • Carbon-manganese steels • Increasing corrosion resistance • Welding • Flexible and composite pipelines • Internal corrosion and its prevention • External corrosion, coatings, cathodic protection, and concrete • Pipeline hydraulics • Strength • Stability • Construction • Shore approaches • Upheaval and spans • Inspection • Risk, accidents, and repair • Decommissioning • Future development

■ 650 Pages/Hardcover/2008



### FUNDAMENTALS OF MARINE RISER MECHANICS: BASIC PRINCIPLES AND SIMPLIFIED ANALYSIS

by Charles Sparks

\$129.00 US ISBN 1-59370-070-9 ISBN13 978-1-59370-070-6

Charles Sparks has written the definitive work on the fundamentals of riser mechanics, based on his 28 years of experience with riser analysis and, in particular, on his previous publications, some of which have become classics of riser literature. Basic principles are clearly established using several different complementary approaches. The primary parameters that influence riser behavior are identified, and their influence is illustrated using 17 Excel files, provided on an accompanying CD-ROM, which readers are able to use with their own data. The files are intended primarily to allow readers to confirm the validity of statements made in the text, but they can also be used to for the simplified analysis of particular riser problems. This book is a must-own, for anyone who deals with riser design and analysis or with riser technology, from the classroom student to the offshore drilling platform engineer.

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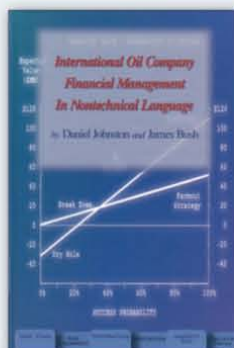
Influence of tension and pressure on riser global stability stability, stresses and strains • Profiles and curvature of uniform risers and segmented risers - Influence of bending stiffness • Stress joint design • Riser bundles • Local bending between guides • Behavior of TTRs associated with floating platforms • Behavior of SCRs • Axial vibration of fixed risers • Axial vibration of hung-off risers • Riser transverse vibrations • 10 Appendices • 17 CD-ROM Excel programs

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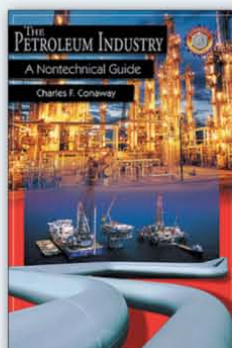
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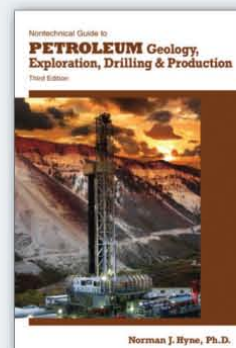
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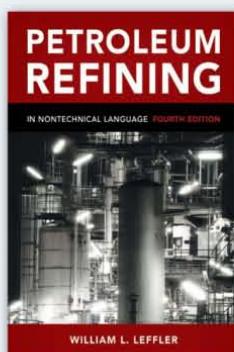
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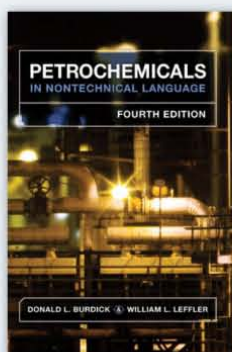
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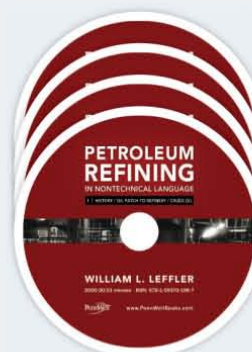
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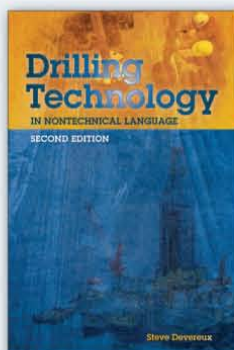
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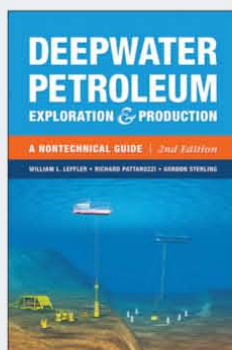
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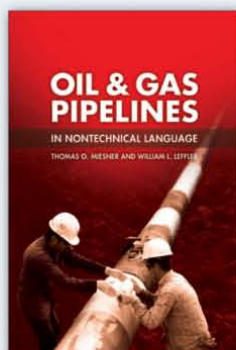
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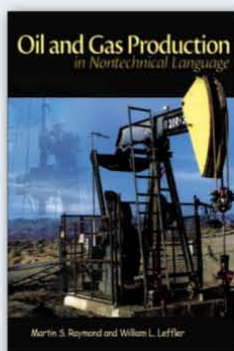
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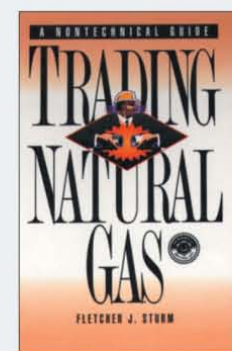
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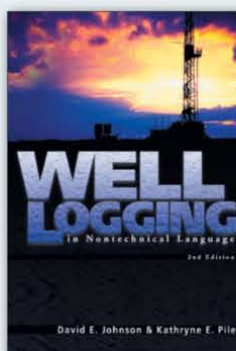
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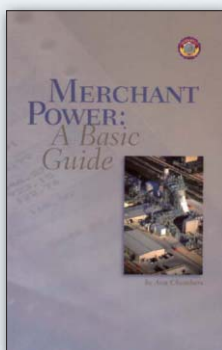


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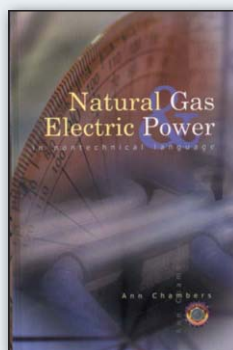


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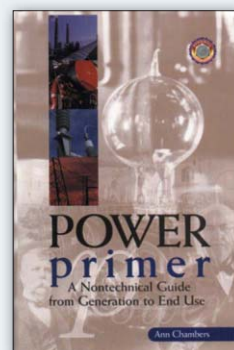
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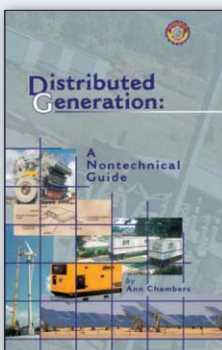
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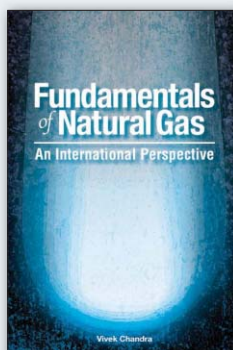
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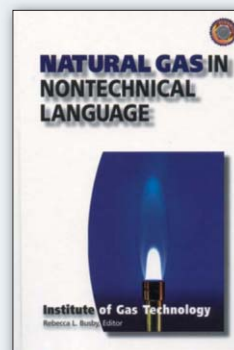
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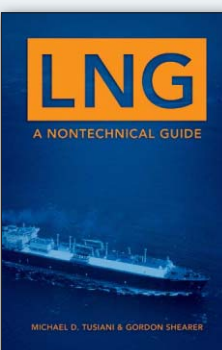
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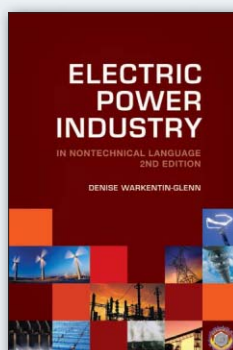
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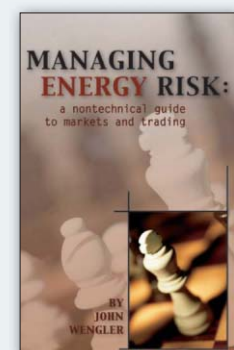
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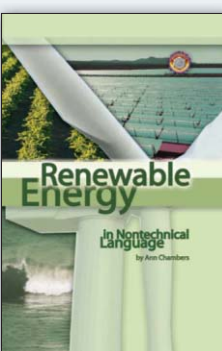
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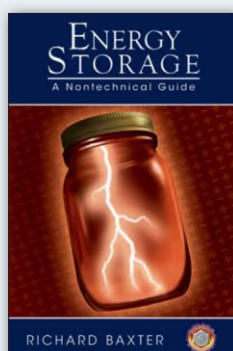
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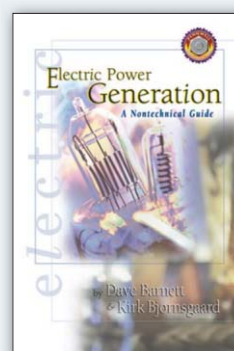
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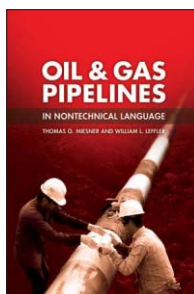
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## OIL & GAS PIPELINES IN NONTECHNICAL LANGUAGE

by Thomas O. Miesner and William L. Leffler

\$79.00 us ISBN 1-59370-058-X ISBN13 978-1-59370-058-4



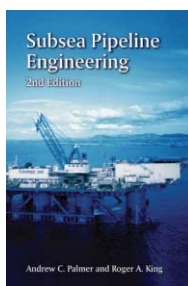
*Oil & Gas Pipelines in Nontechnical Language* examines the processes, techniques, equipment, and facilities used to transport liquids such as refined products, crude oil, natural gas, and natural gas liquids through cross-country pipelines. Topics include the importance of the pipeline infrastructure; planning, designing, constructing, operating, and maintaining pipelines; regulatory requirements; and the challenges for the future. Special emphasis is included on control and leak detection systems as well as emerging technologies and systems to ensure

safe and environmentally sound operation. Thorough but easy to read, this text is useful for anyone who wants to learn about pipelines, from petroleum industry newcomers and students to personnel in related arenas such as legal, accounting, financial, government, and others.

### Contents:

How pipelines differ • The first leg • How pipelines work • Oil pipeline operations • Natural gas pipeline operations • Petrochemical and LPG pipeline operations • Offshore pipelines • SCADA, controls, and leak detection • Maintenance • Investment decisions • Major components and how they work • Engineering and design • Construction • Satisfying stakeholders

■ 377 Pages/Hardcover/2006



## SUBSEA PIPELINE ENGINEERING, 2ND EDITION

by Andrew C. Palmer and Roger A. King

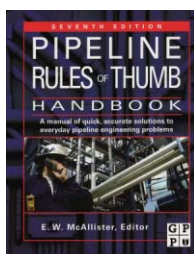
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*Subsea Pipeline Engineering* was the first of its kind, written by two of the world's most respected authorities in subsea pipeline engineering. In the second edition, these industry veterans have updated their definitive reference book, covering the entire spectrum of subjects in the discipline, from route selection and planning to design, construction, installation, materials and corrosion, inspection, welding, repair, risk assessment, and applicable design codes and standards. Particular attention is also devoted to the important specialized subjects of hydraulics, strength, stability, fracture, upheaval, lateral buckling and decommissioning. The book is distilled from the authors' vast experience in the industry and their popular course on Subsea Pipeline Engineering.

### Contents:

Route selection • Carbon-manganese steels • Increasing corrosion resistance • Welding • Flexible and composite pipelines • Internal corrosion and its prevention • External corrosion, coatings, cathodic protection, and concrete • Pipeline hydraulics • Strength • Stability • Construction • Shore approaches • Upheaval and spans • Inspection • Risk, accidents, and repair • Decommissioning • Future development • Glossary • Codes and standards • Units • Route selection • Carbon-Manganese steels • Increasing corrosion resistance • Welding • Flexible and composite pipelines • Internal corrosion and its prevention • External corrosion, coatings, cathodic protection, and concrete • Pipeline hydraulics • Strength • Stability • Construction • Shore approaches • Upheaval and spans • Inspection • Risk, accidents, and repair • Decommissioning • Future development

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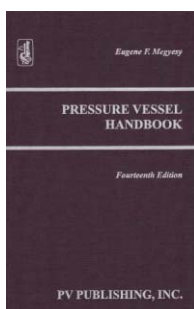
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Provides readers with clear graphic illustrations, straight-forward calculations and answers to the most common questions in the pipeline business. The 7th edition includes essential information, such as recommended drill sizes, calculation for calculating grounding resistance, updated National Electrical Code and ASTM standard reinforcing bars.

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■ 745 Pages/Softcover/2009 - Published by Gulf Professional Publishing



## PRESSURE VESSEL HANDBOOK, 14TH EDITION

by Eugene F. Megyesy

\$149.00 us ISBN 0-914458-24-8 ISBN13 978-0-914458-24-1

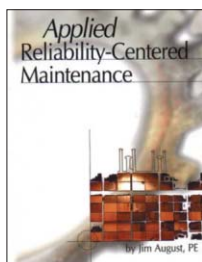
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The *Pressure Vessel Handbook* covers design and construction methods of pressure vessels made of carbon steel. This 14th edition provides an update to the definitive manual for the maker and user of pressure vessels as well as designers, drafters, inspectors and estimators. Reflecting the continuous revisions of the ASME Boiler and Pressure Vessel Code, Section VIII, Division, as well as ANSI standards, API specifications, piping codes, and pressure vessel laws, this book is an entire library of material presented in a clean, concise manner. Organized for quick reference and complete with step-by-step examples, 460 illustrations, multiple tables, charts, formulas and graphs, the text is fully explicit and easy to understand.

### Contents:

Design and construction of pressure vessels • Geometry and layout of pressure vessels • Measures and weights • Design of steel structures • Miscellaneous

■ 511 Pages/Hardcover/2008 – Published by PV Publishing, Inc.



### **APPLIED RELIABILITY-CENTERED MAINTENANCE**

by Jim August, PE

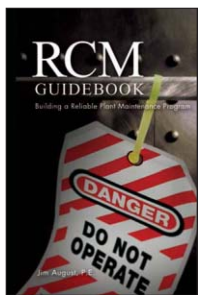
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Based on advanced maintenance models developed during FAA certification of 747 aircraft, reliability-centered maintenance (RCM) is used to control maintenance costs while improving reliability. Author Jim August tells how RCM makes sense for electric utilities that have been forced to control maintenance costs and improve reliability in the throes of conversion to retail competition.

#### **Contents:**

Applied RCM: an overview • Maintenance • RCM performance • Plant needs • Applications • Lessons • Fast track • Maintenance software • Measures • Conclusions • Appendices • Index

■ 500 Pages/Hardcover/2000



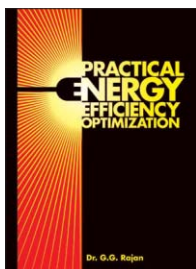
### **RCM GUIDEBOOK: BUILDING A RELIABLE PLANT MAINTENANCE PROGRAM**

by Jim August

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Reliability-centered maintenance (RCM) is a risk management process that is objective, measurable, and systematic as it selects and performs effective preventive maintenance (PM) tasks. This text provides what readers really need -- guidance on how to keep PM development with RCM simple and understandable. This text will appeal to a range of readers, providing a nuts and bolts reference material on practical RCM use. August gives readers a step-by-step explanation of maintenance plan development. He begins with three primary utility requirements for maintenance optimization, and explains the roles of equipment templates, component failures, worksopes, practical implementation barriers, process considerations, data control, RCM standards, and software applications.

■ 267 Pages/Hardcover/2004



### **PRACTICAL ENERGY EFFICIENCY OPTIMIZATION**

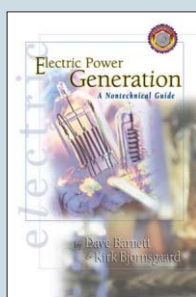
by Dr. G.G. Rajan

\$90.00 us ISBN 1-59370-051-2 ISBN13 978-1-59370-051-5

This comprehensive book presents basic information for optimizing power plants. Whether at a major utility, or at an industrial facility, these formulas are proven to increase power plant efficiency. Review exercises and practical case studies provide real-world applications on maintaining optimal efficiency. Readers will learn the basics of optimization for an energy system, a sub system and equipment through usable case studies. Dr. Rajan offers guidance on how to increase productivity, profitability and performance through a wide range of industries -- electric utilities, petroleum processing and petrochemical.

■ 402 Pages/Hardcover/2006

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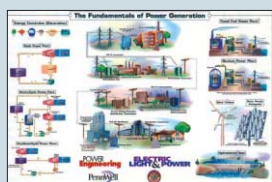
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by Dave Barnett and Kirk Bjornsgaard

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Unlike more technical texts, this book explains in nontechnical language how power is created, using everyday examples and easy-to-understand illustrations. It opens with an explanation of how electricity is generated, then covers the planning and development of electric power stations, emphasizing modern considerations of merchant power plants, repowering, and the growth of gas turbine generation. The "facts" of generation are covered in part two—boilers, turbines, generators, hydro and pumped storage, and alternative generations sources, such as geothermal, tidal, solar, and wind. Maintenance and operations are covered in basic overview format. In addition, the authors cover specific features and fuel-types in nontechnical terms.

■ 337 Pages/Hardcover/2000

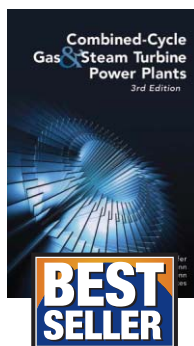


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This full-color laminated chart illustrates the basic elements involved in the generation of electricity, including furnace and boilers; steam and gas turbines; generators; and the various incarnations of designs based on fuel type (conventional fossil fuel, combined-cycle gas turbine) and alternative generating devices (solar, wind, hydro). A perfect wall hanging for office or shop floor -- for both electric and natural gas industries -- and the perfect companion to *Electric Power Generation: A Nontechnical Guide*.

■ Size: 24" x 36"/1999



### COMBINED-CYCLE GAS & STEAM TURBINE POWER PLANTS, 3RD EDITION

by Rolf Kehlhofer, Frank Hannemann,  
Franz Stirnimann and Bert Rukes

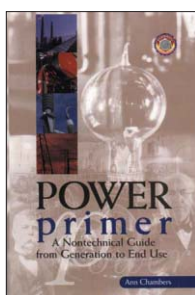
\$99.00 us ISBN 1-59370-168-3 ISBN13 978-1-59370-168-0

With this third edition, international expert Rolf Kehlhofer leads a team of eminent engineers for the long-awaited update of the "bible" for combined-cycle plants. Recognized as the foremost technical and economic reference for these complex facilities, *Combined-Cycle Gas & Steam Turbine Power Plants, 3rd Edition*, still offers the backbone of basics in system layout, details on controls and automation, and operating instructions. New information includes a chapter devoted to the integrated gasification combined cycle (IGCC), in-depth technical information on heat recovery steam generator, and a diverse group of real-world combined-cycle plant case studies.

#### Contents:

The electricity market • Economics • Thermodynamic principles of the combined-cycle plant • Combined-cycle concepts • Applications of combined-cycles • Components • Control and automation • Operating and part load behavior • Environmental consideration • Developmental trends • The Integrated Gasification Combined-Cycle (IGCC) • Carbon dioxide capture and storage • Some typical combined-cycle plants • Conclusion • Appendix A Conversions table • Appendix B Calculation of the operating performance of combined-cycle installations • Appendix C Symbols used

■ 430 Pages/Hardcover/2009



### POWER PRIMER: A NONTECHNICAL GUIDE FROM GENERATION TO END-USE

by Ann Chambers

\$69.00 us ISBN 0-87814-756-X ISBN13 978-0-87814-756-4

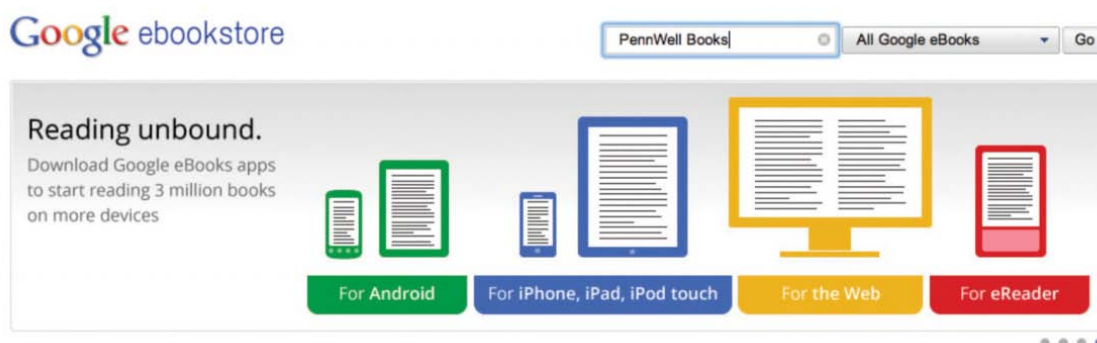
This detailed overview explains to readers how electricity is generated, transmitted and distributed. The book opens with an overview of electricity—what it is and how it works "from plant to plug"—and then moves to a historic overview of the electric power industry. Section two explains generation—plants, components, and systems—and section three covers transmission and distribution—equipment, facilities, and their functions. The conclusion consists of an appendix that profiles the business, cultural, and political ramifications of deregulation. Another appendix provides a grounding terminology as well as a bibliography for further reading.

#### Contents:

The big picture: from plant to plug • History • Boilers • Turbines • Controls and control rooms • Emissions and pollutants • Generators • Engines • Traditional fuels • Alternative fuels • Transformers • Substations • Poles and towers • Lines and voltages • Site selection and permits • North American Electric Reliability Council • Residential electricity • Appendices

■ 262 Pages/Hardcover/1999

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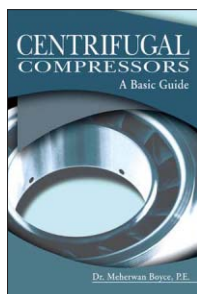


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### **CENTRIFUGAL COMPRESSORS: A BASIC GUIDE**

by Dr. Meherwan Boyce, P.E.

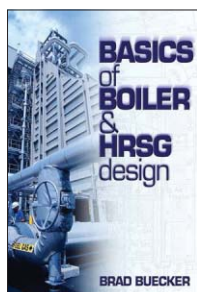
\$109.00 us ISBN 0-87814-801-9 ISBN13 978-0-87814-801-1

Dr. Boyce provides an up-to-date reference covering all major aspects of design, operation, and maintenance. He includes technical details on sizing, plant layout, fuel selection, types of drives, and performance characteristics of all major components in a co-generation or combined-cycle power plant. Section 1 covers design, theory, and practice and Section 2 covers operation and maintenance.

#### **Contents:**

Section 1: Design, theory, and practice • An history and overview of centrifugal compressors • Aerothermodynamics of compressors • Two dimensional design of compressor stages • Three dimensional flow in a centrifugal compressor • Diffuser design • Surge and surge control • Off design performance characteristics • Mechanical equipment standards • Section 2: Operation & maintenance: • Mechanical equipment standards • An overview of gas turbines • An overview of steam turbines • An overview of motor drives • Appendices • Index • Summary

■ 662 Pages/Hardcover/2002



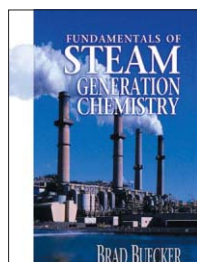
### **BASICS OF BOILER AND HRSG DESIGN**

by Brad Buecker

\$79.00 us ISBN 1-59370-186-1 ISBN13 978-1-59370-186-4

An excellent primer for power plant professionals who have to wear many hats and need a practical explanation of the design and basic operation of conventional steam generating boilers and HRSGs without having to wade through technical material. Buecker uses anecdotes and humor to liven up what would otherwise be considered a dry subject. No other book explains the fundamentals of boilers and HRSGs without going into technical depths.

■ 184 Pages/Softcover/2002



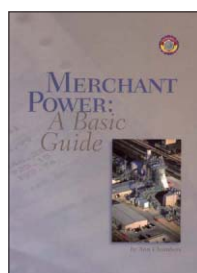
### **FUNDAMENTALS OF STEAM GENERATION CHEMISTRY**

by Brad Buecker

\$99.00 us ISBN 0-87814-750-0 ISBN13 978-0-87814-750-2

Provides the non-chemist with practical information on steam generation chemistry which can be used on a daily basis to monitor water/steam chemistry parameters. Plant engineers, operators, or mechanical and chemical engineering students, will be able to immediately apply the information found in this book.

■ 334 Pages/Softcover/2000



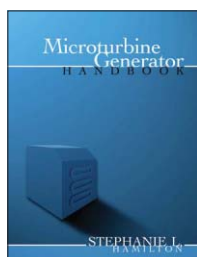
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■ 220 Pages/Hardcover/1999



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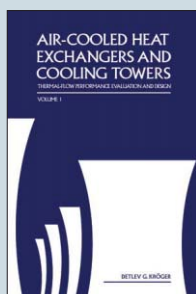
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This introductory handbook to cutting-edge microturbine applications covers the technology, how it operates, and a history of its development. Hamilton addresses critics, skeptics, and beginners in her educational approach to distributed generation technologies and the significant role microturbines could play in the changing electricity market.

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by Detlev Kroger

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**Contents:**

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AND DESIGN, VOLUME 2**

by Detlev Kroger

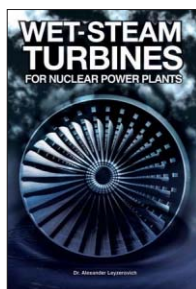
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**Contents:**

Fans • Natural draft cooling towers • Mechanical draft coolers • Meteorological effects • Cooling system selection and optimization • Appendices

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by Dr. Alexander Leyzerovich

\$164.00 us ISBN 1-59370-032-6 ISBN13 978-1-59370-032-4

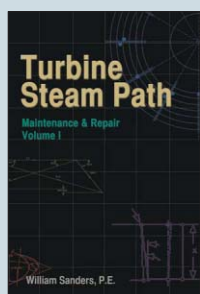
With the widespread deployment of wet-steam turbines at nuclear power plants worldwide, readily available information on operations and maintenance is a critical factor. Within these pages world-renowned scientist Dr. Alexander Leyzerovich presents in-depth technical information essential for plant operators and managers.

This book explains in clear, but detailed language the design process by the world's leading wet-steam turbine manufacturers. It also gives readers comprehensive instruction on the subtleties of operation and maintenance of these complex components. This volume by a world-renowned scientist should be a must-read for all nuclear power plant personnel.

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Sanders examines the damage, deterioration, and failure mechanisms that occur with unfortunate consequences – and on some units, with monotonous regularity – within the turbine steam path and gives practical solutions for maintenance and repair.

**Contents:**

Considerations of a turbine steam path maintenance strategy • Steam path component alignment & stage spatial requirements • Steam path damage & water induced damage, deterioration from material property degradation, & from the deposition of contaminants • Operational events giving rise to steam path damage

■ 753 Pages/Hardcover/2001



**TURBINE STEAM PATH MAINTENANCE & REPAIR, VOLUME II**

by William P. Sanders, P. Eng.

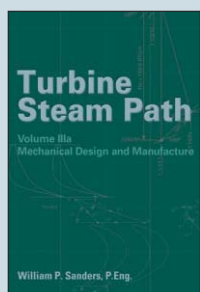
\$89.00 US ISBN 0-87814-788-8 ISBN13 978-0-87814-788-5

In the second volume of his four-book set, William P. Sanders turns his expert analysis to repair and refurbishment options currently accessible that will keep turbines operating with high levels of availability and improved efficiency. Also provided are details on estimating financial penalties associated with leakage from damaged turbines, which can reduce the cost of power. A full analysis of quality and inspection of manufactured elements to replace damaged components is included, as well. Readers will be able to identify the type and severity of any damage, suggest possible causes of damage, and indicate the most appropriate actions available.

**Contents:**

Operating damage mechanisms and refurbishment techniques for stationary components • Refurbishment techniques for rotating blades • Damage mechanisms arising from operation and refurbishing techniques for rotating components • The steam seal system and glands • Quality assurance for replacement and refurbished steam turbine components • The manufacture and inspection requirements of steam turbine blades • Appendix: Thermodynamics and the mollier enthalpy-entropy diagram for water/steam

■ 750 Pages/Hardcover/2002



**TURBINE STEAM PATH MECHANICAL DESIGN AND MANUFACTURE, VOLUME IIIA**

by William P. Sanders, P. Eng.

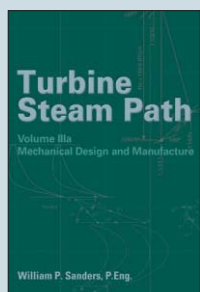
\$89.00 US ISBN 1-59370-009-1 ISBN13 978-1-59370-009-6

This ready-reference contains valuable insight for the engineer faced with design and manufacture decisions. A continuation of Sanders' two volumes on maintenance and repair, this volume represents the first in a subsequent two volume set on mechanical design and manufacture, completing the remaining portion of his popular seminar. In this volume, Sanders turns his focus to design options and the challenges faced in selecting and arranging the components to optimize unit performance efficiency, reliability, and safety, providing the reader with the necessary information to evaluate the performance, refurbishment, and upgrading of a unit.

**Contents:**

The basic considerations of thermodynamic design • The turbine steam path mechanical design process • Turbine steam path performance and the factors affecting it • Performance testing • Appendix

■ 364 Pages/Hardcover/2004



**TURBINE STEAM PATH MECHANICAL DESIGN AND MANUFACTURE, VOLUME IIIB**

by William P. Sanders, P. Eng.

\$89.00 US ISBN 1-59370-010-5 ISBN13 978-1-59370-010-2

The final book of Sanders' four-volume set on turbine steam paths, Sanders turns his focus to the details of design consideration for steam turbines. He relays all the information on mechanical design and function needed in evaluating turbine manufacturer, maintenance, and operation. This extensive work covers much of the technical material included in Sanders' seminar, Turbine Steam Path Engineering. This popular seminar has been developed over several years and presented to turbine engineers worldwide.

**Contents:**

Mechanical design considerations for high- and low-pressure casings • Mechanical design considerations of the stationary blade rows • Mechanical design considerations of the turbine rotors • The rotating blade rows mechanical design considerations • The rotating blade row root attachments • Mechanical design considerations of stage hardware, coverbands and tie wires • Rotating blade manufacturing methods, materials, and spatial and quality program requirements • Appendix

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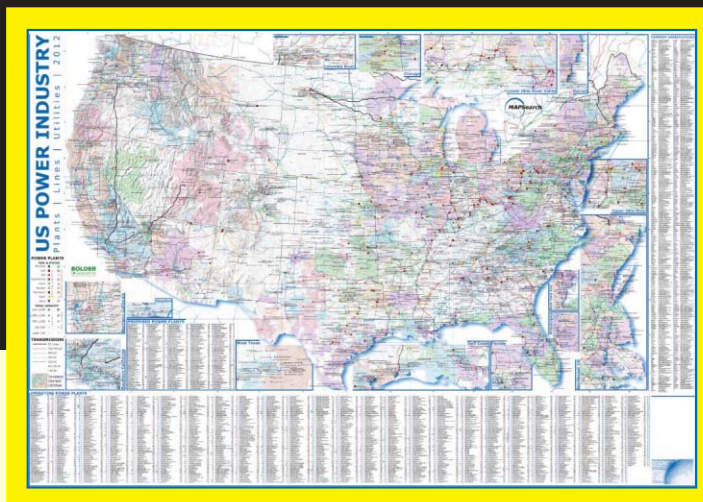
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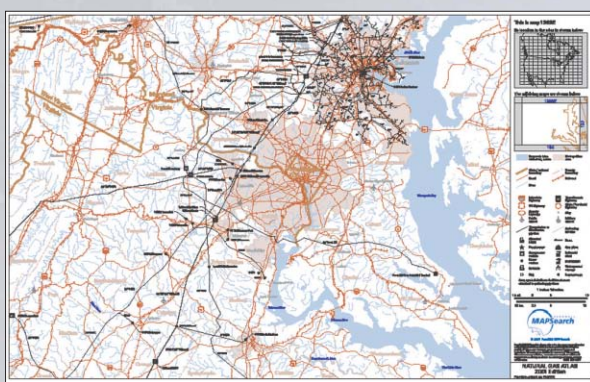
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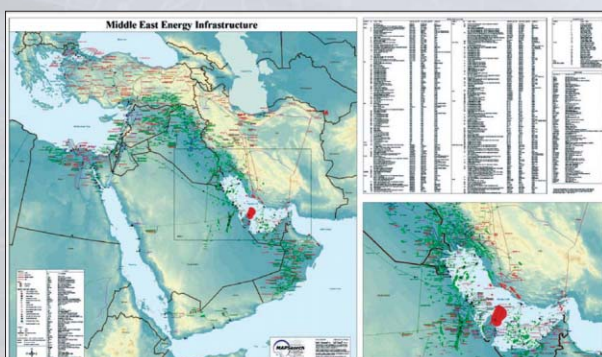


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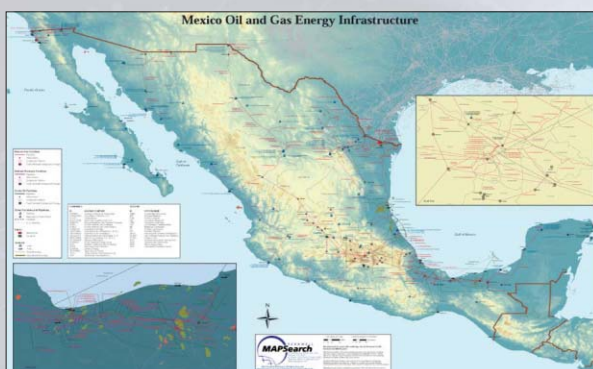
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This full-color, topographic map features the Middle East's existing energy infrastructure, including crude oil and natural gas fields for 15 Middle East countries! More than 74,000 kilometers of pipelines include crude, natural gas, refined products, and LPG—all clearly color-coded by commodity and labeled with owner and status. Also Included are over 250 facilities: refineries, compressor/pump stations, gas plants, storage/terminal facilities and power plants—symbolized by type and labeled with owner and facility name.

This detailed reference map incorporates data, additions, and edits taken from current interim (petroleum and power officials in the area, as of February 2004).

■ Size: 40" x 66", scale: 1" = 69.75 miles/ 1 centimeter = 44.19 kilometers, February 2004.

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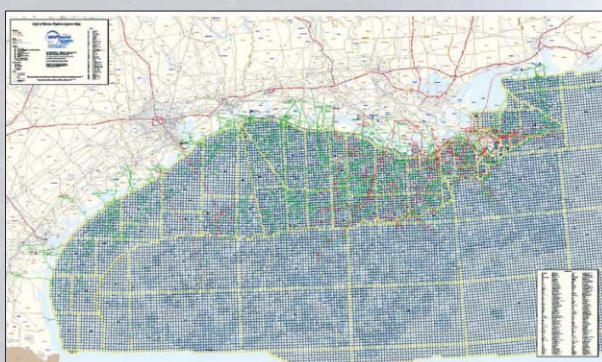


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■ Size: 42" x 30" / Scale 1:3,500,000 / 1" = 55.2 miles June 2003.

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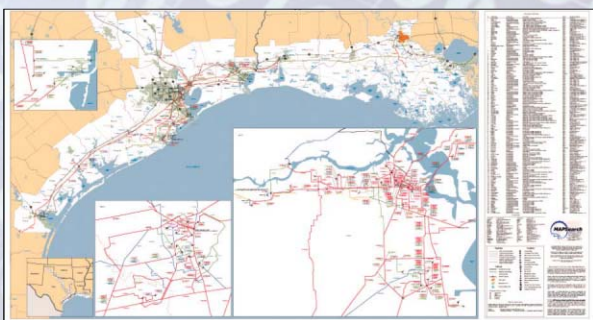
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■ Size: 40" X 57"/1" = 56.7 miles/1985

MS115 \$199.00

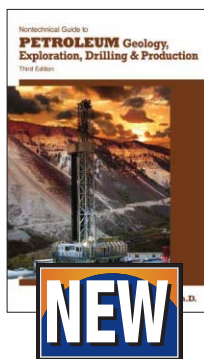
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by Norman J. Hyne, Ph.D.

\$89.00 US ISBN 1-59370-269-8 ISBN13 978-1-59370-269-4

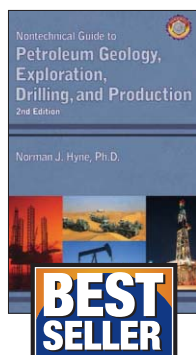


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by Norman J. Hyne, Ph.D.

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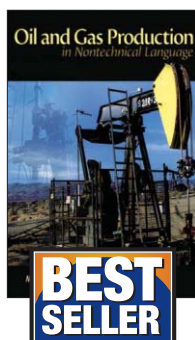
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by Martin S. Raymond and William Leffler

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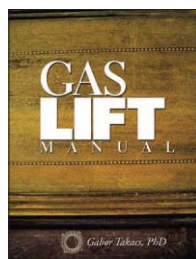


This nontechnical treatment is a great introduction to oil and gas production for anyone from beginning petroleum engineering and geology students to accountants, salespersons, and other professionals interested in the industry. Co-authored by Martin Raymond, a veteran production manager, and William Leffler, one of the top petroleum nontechnical writers, it is an easy-to-read reference for those who deal with petroleum industry personnel and production issues in their jobs, but need a quick overview of the technical and business issues. Complete with helpful charts and diagrams, this book covers everything from production equipment and processes to theory, business operations, and strategies.

#### **Contents:**

How did we get here? The history of production • The container: the reservoir • What's in the container? The prize • Yours, mine, or theirs? Ownership • Getting there: drilling • What have we found? Logging, testing and completing • Behavior: hydrocarbon activity in the reservoir • Here it comes: production • Making it marketable: field processing • Fixing things: remedial operations and workovers • Who's involved? The players • What should we do? Strategy

■ 254 Pages/Hardcover/2005



### **GAS LIFT MANUAL**

by Gabor Takacs, PhD

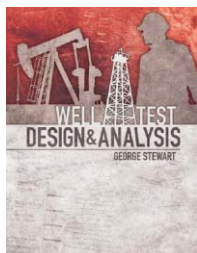
\$139.00 US ISBN 0-87814-805-1 ISBN13 978-0-87814-805-9

Gas lifting can be used throughout the whole lifespan of an oil well: from the time it dies until its abandonment. The *Gas Lift Manual* is a thorough, handy reference that is essential to the practicing engineer needing to successfully perform this type of artificial lift project. In his manual, Takacs imparts more than 30 years experience and research in the artificial lift methods arena. He starts the manual with an introduction to gas lift, and then moves on to the various parts of the gas lift model, including analysis and troubleshooting, as well as, common gas lift malfunctions. This book will be particularly useful to those needing to research this technology, as the author has supplied extensive resource references to other literature sources.

#### **Contents:**

Production engineering fundamentals • Gas lift valves • Gas lift installation types • Continuous flow gas lift • Intermittent gas lift • Plunger-assisted intermittent lift • Dual gas lift • The gas lift system • Analysis and troubleshooting

■ 488 Pages/Hardcover/2005



## WELL TEST DESIGN & ANALYSIS

by George Stewart

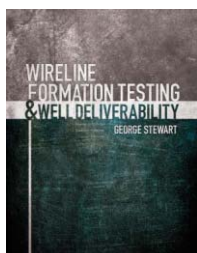
\$179.00 us ISBN 1-59370-231-0 ISBN13 978-1-59370-231-1

Petroleum engineers face the daily challenges of designing and testing wells. Finding the right technical data guide for conducting these tasks can be daunting, and so renowned petroleum engineer George Stewart has written the comprehensive volume *Well Test Design and Analysis*, filled with advanced information unparalleled on a variety of wellbore topics. From ascertaining accurate reservoir descriptions, to the intricacies of designing a horizontal well program, the author covers every topic in detail. The volume includes a CD containing chapters 16 - 20.

### Contents:

Pressure transient analysis in drawdown and buildup • Wellbore storage and type curve matching • Semi-infinite system late transient analysis • Well in a bounded drainage area • Variable rate well test analysis • Channel sands and parallel faults • Constant pressure boundaries • Vertically fractured wells • Dual porosity systems • Limited entry and double permeability systems • Radial composite systems • Horizontal wells • Gas well testing • Automatic model matching • Two cell compartmentalized systems • On CD: Well test design; Multiphase flow; Numerical well testing; Layered well testing; Deconvolution in PTA

■ 1,544 Pages/Hardcover+CD/8.5x11/2011 (Special shipping rates apply. See page 53 for details.)



## WIRELINE FORMATION TESTING & WELL DELIVERABILITY

by George Stewart

\$179.00 us ISBN 1-59370-230-2 ISBN13 978-1-59370-230-4



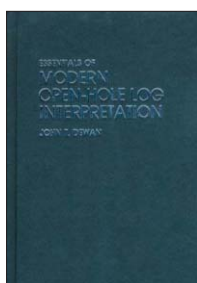
Modern reservoir engineering must accommodate for a complex set of heterogeneous phases contained in the well and petroleum reservoir. Achieving the optimal solution to reservoir problems involves employing sophisticated simulation techniques, executing complex well-completion actions, and following up with constant attention to the changes within a reservoir.

Renowned petroleum engineer George Stewart offers in-depth information in his new book, *Wireline Formation Testing and Well Deliverability*. A companion to *Well Test Design and Analysis*, this newest technical volume covers the widest range of possible issues for reservoir engineering. Stewart's exhaustive explanations include the nuances of radial flow theory, and examples of when to run production logs and when to well test for drawdown in a commingled reservoir. The volume includes a CD containing chapters 13 - 17.

### Contents:

Radial flow theory in porous media • Skin factor in fractured and perforated wells • Well inflow performance relations • Gas reservoir material balance • General mechanistic material balance • Coning and displacement models in the material balance context • Decline curve analysis • Distributed pressure measurement • Exploration of distributed pressure measurement • Field development applications of distributed pressure measurement • Production logging and layered reservoirs • On CD: Integration of data from wireline formation testers and other sources; Compartmentalized material balance; Multiphase well flow; Gas well deliverability; Effect of mud filtrate invasion on WFT profiles

■ 1,548 Pages/Hardcover+CD/8.5x11/March 2012 (Special shipping rates apply. See page 53 for details.)



## ESSENTIALS OF MODERN OPEN-HOLE LOG INTERPRETATION

by John T. Dewan

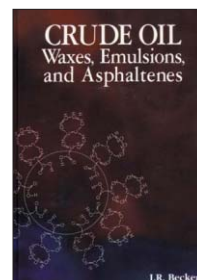
\$99.00 us ISBN 0-87814-233-9 ISBN13 978-0-87814-233-0

This book presents modern log interpretation simply and concisely for the geologist, petrophysicist, reservoir engineer, and production engineer familiar with rock properties but inexperienced with logs. It helps specify good logging programs with up-to-date tools and interpret zones of interest with the latest techniques. It also familiarizes readers with computer-processed logs generated by the service companies at the wellsite and office.

### Contents:

The logging environment • Evaluation of hydrocarbons • Permeable zone logs • Resistivity logs • Porosity logs • Clean formation interpretation • Shaly formation interpretation • Prediction of producibility • Wellsite computed logs • Recommended logging suites

■ 361 Pages/Softcover/1983



## CRUDE OIL WAXES, EMULSIONS, AND ASPHALTENES

by J.R. Becker

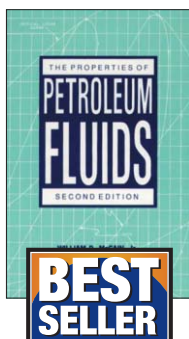
\$89.00 us ISBN 0-87814-737-3 ISBN13 978-0-87814-737-3

Becker explains the physical chemical problems associated with waxes and emulsions and the new technologies for treatment of these problems.

### Contents:

Petroleum companies and emulsions • Forces involved in and macroscopic physical behavior of emulsions • Oil and water emulsion breakers • Petroleum companies and waxes • Chemical surfaces • Wax crystal order and temperature • Wax: physical properties and quantum effects • Asphaltenes and crude oil • Asphaltenes: bulk behavior and testing methods • Physical properties of treating chemicals

■ 276 Pages/Hardcover/1997



## THE PROPERTIES OF PETROLEUM FLUIDS, 2ND EDITION

by William D. McCain, Jr.

\$139.00 us ISBN 0-87814-335-1 ISBN13 978-0-87814-335-1

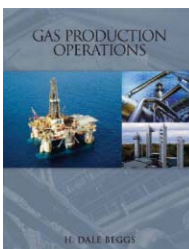


A conveniently arranged petroleum fluids reference book covering components, properties, and equations for the various fluids and gases.

### Contents:

Water-in-crude-oil emulsions • Characterization, phase behavior, and field processing of crude oil • Separation of gas, oil, and water • Dehydration and desalting of crude oil • Crude sweetening and stabilization • Pumps • Measurement of crude oil • Fire heaters • Pipeline transportation • Energy conservation • Instrumentation and process control • Pressure relief and flaring • Case histories

■ 548 Pages/Hardcover/1990



## GAS PRODUCTION OPERATIONS

by H. Dale Beggs

\$92.50 us ISBN 0-930972-06-6 ISBN13 978-0-930972-06-6

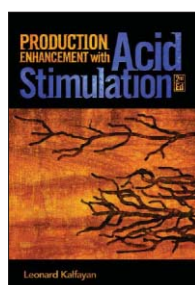
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*Gas Production Operations*, an upper-level engineering text, covers essentially all of the operations involved in moving natural gas from its initial location in the reservoir to its final destination, including movement through the reservoir, piping system, separation facilities, and compressor. The book covers information that is essential in the day-to-day operation of a gas field. Detection of abnormal well performance, separator selection, and prediction of hydrate formation are illustrated.

### Contents:

Gas properties • Gas reservoir performance • Piping system performance • Gas compression • Total system analysis • Flow measuring • Gas-Condensate reservoirs • Field operations problems • Gas processing

■ 311 Pages/Hardcover/2002 - Published by OGCI



## PRODUCTION ENHANCEMENT WITH ACID STIMULATION, 2ND ED.

by Leonard Kalfayan

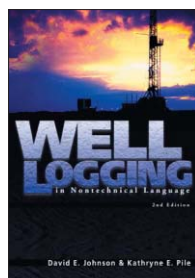
\$89.00 us ISBN 1-59370-139-X ISBN13 978-1-59370-139-0

In this second edition, Kalfayan offers practical guidelines for acid treatment design by stressing a systematic approach to candidate selection and treatment design, as well as execution and evaluation for improvement in profits and productivity. The new edition includes discussions of modern acid systems and treatment methods with worldwide applications for both carbonate and sandstone formations; new concepts for simplifying and proliferating sandstone acid application; the latest in carbonate matrix and fracture acidizing; more on non-conventional acidizing concepts and acid systems; and more on geothermal well stimulation. As with his original book, readers can find practical, useful acidizing information and gain greater understanding and appreciation of its benefits.

### Contents:

Part I. Preliminaries • A brief history of acidizing • Acid treatment categories • Formation damage • Part II. Sandstone acidizing • Purposes of sandstone acidizing • Why sandstone acid jobs fail • Six steps to successful sandstone acidizing • Unconventional sandstone and geothermal well acidizing procedures • Sandstone acidizing in horizontal wells • Part III. Carbonate acidizing • Purposes of carbonate acidizing • Comments on the chemistry and the physics of carbonate acidizing • Carbonate matrix acidizing: systems and procedures • Carbonate fracture acidizing: systems and procedures • Carbonate acidizing in horizontal wells • Part IV. Specialized remedial treatments • Inorganic scale removal • Organic deposit removal • Part V. Quality control practices • Acid treatment quality control • Safety • Appendix A: Conventional sandstone acidizing procedures • Appendix B: Conventional carbonate matrix acidizing procedures • Appendix C: Conventional carbonate fracture acidizing procedures • Appendix D: Surfactants

■ 270 Pages/Hardcover/2008



## WELL LOGGING IN NONTECHNICAL LANGUAGE, 2ND EDITION

by David E. Johnson and Kathryn E. Pile

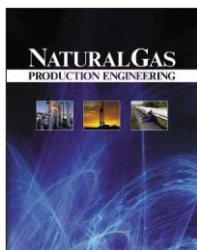
\$79.00 us ISBN 0-87814-825-6 ISBN13 978-0-87814-825-7

An update of the PennWell classic *Nontechnical Guide to Logging Techniques*, this text provides an easy-to-understand overview of the technically complex subject of well logging. Divided into three main parts – Earth's formations, details how to determine if there is oil or gas present; Real-life examples, shows how to read open-hole logs, make the calculations and interpret the results; and Recent developments, logging tools and presentations, as well as older logs not discussed in the first edition. By the end of the book, you will be conversant with nearly every phase of well logging.

### Contents:

Introduction to logging • Reading logs • Mud logging • Formation parameters • Porosity & resistivity measurements • Putting it all together • Detailed interpretation • Computer-generated & specialty logs

■ 289 Pages/Hardcover/2002



## **NATURAL GAS PRODUCTION ENGINEERING**

by Mohan Kelkar

\$139.00 US ISBN 1-59370-017-2 ISBN13 978-1-59370-017-1

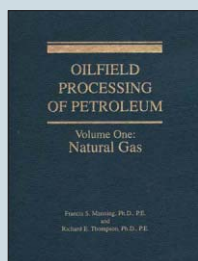


In this important book, Mohan Kelkar, a respected author and professor, presents the quintessential guide for gas engineers, emphasizing the practical aspects of natural gas production. Readers will learn to incorporate cutting-edge research in estimating reserves, evaluating the performance of fractured wells, processing gas, and material balance analysis; learn to evaluate future performance of gas reservoirs; learn to improve the performance of gas wells; and more.

### **Contents:**

Properties of natural gas • Material balance analysis • Inflow performance • Well testing • System performance • Gas compression • Gas metering

■ 584 Pages/Hardcover/2008



## **OILFIELD PROCESSING OF PETROLEUM, VOLUME ONE: NATURAL GAS**

by Francis S. Manning, Ph.D. and  
Richard Thompson, Ph.D.

\$89.00 US ISBN 0-87814-343-2 ISBN13 978-0-87814-343-6

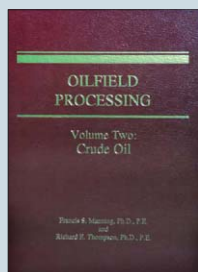


Process descriptions, design methods, operating procedures and troubleshooting are covered in detail in this hands-on reference. You will gain a better understanding of surface operations between the wellhead and the point of custody transfer or transport from the production facilities.

### **Contents:**

Characterization of natural gas and its products • Phase behavior of natural gas • Water-hydrocarbon phase behavior • Field processing of natural gas • Prevention of hydrate formation • Gas sweetening • Gas dehydration using glycol, solid desiccants, LTX, and CaCl • Compression • Gas measurement • Heat and cooling • Transportation • Natural gas liquids recovery • Glossary • Material and energy balances • OPSIM: conversion of units • Physical properties

■ 408 Pages/Softcover/1991



## **OILFIELD PROCESSING, VOLUME TWO: CRUDE OIL**

by Francis S. Manning Ph.D.  
and Richard E. Thompson Ph.D.

\$89.00 US ISBN 0-87814-354-8 ISBN13 978-0-87814-354-2

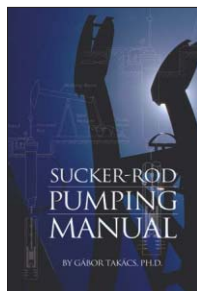


Covers process descriptions, design methods, operating procedures, and troubleshooting in great detail. This text is the definitive source on its topic and contains numerous diagrams and appendices, as well as case histories and review questions with numerical problems.

### **Contents:**

Characterization & phase behavior of crude oil • Water-in-crude-oil emulsions • Field processing of crude oil • Separation of gas, oil, & water • Dehydration & desalting of crude oil • Crude sweetening & stabilization • Pumps • Measurement of crude oil • Fire heaters • Instrumentation & process control • Pipeline transportation • Energy conservation • Pressure relief & flaring • Case histories • Appendices

■ 400 Pages/Softcover/1995



## **SUCKER-ROD PUMPING MANUAL**

by Gabor Takacs, Ph.D.

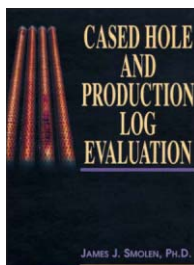
\$89.00 US ISBN 0-87814-892-2 ISBN13 978-0-87814-892-9

Provides detailed technical information on a popular century old and still very popular worldwide artificial lift method—sucker-rod pumping. Full of illustrations, tables, and formulas, this book will provide the reader with everything they need to ensure successful sucker-rod pumping operations.

### **Contents:**

Introduction to sucker-rod pumping • The components of the sucker-rod pumping system • Calculation of operational parameters • The design of the pumping system • The analysis of sucker-rod pumping installations • Appendices • Exercise problems

■ 395 Pages/Softcover/2003



### **CASED HOLE AND PRODUCTION LOG EVALUATION**

by James J. Smolen, Ph.D.

\$129.00 US ISBN 0-87814-465-X ISBN13 978-0-87814-465-5

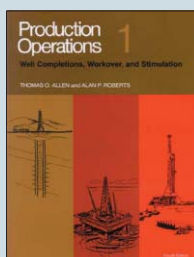


Dr. Smolen provides information on the uses of cased hole logging tools in the following recovery/workover applications: formation evaluation through casing; mechanical integrity, cement bond evaluation and casing inspection surveys; and flow evaluation in production and injection wells.

#### **Contents:**

Cased hole environment and operations • Classification of cased hole logs based on primary region of investigation • Production potential through casing • Cement annular fill and/or compressive strength • Casing inspection techniques • Fluid movement in and behind pipe • Special problems

■ 365 Pages/Hardcover/1996



### **PRODUCTION OPERATIONS, 4TH EDITION: VOLUME 1**

by T.O. Allen and Alan P. Roberts

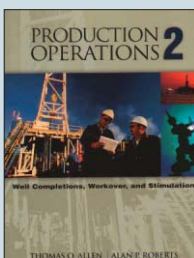
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■ 310 Pages/Hardcover/1994 - Published by Petroskills



### **PRODUCTION OPERATIONS, 4TH EDITION: VOLUME 2**

by T.O. Allen and Alan P. Roberts

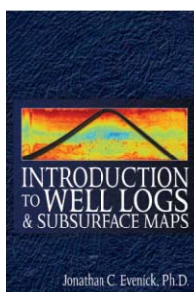
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#### **Contents:**

Problem well analysis - oilfield management • Paraffins and asphaltenes • Squeeze cementing - remedial cementing • Sand control • Formation damage • Surfactants for well treatments • Acidizing; hydraulic fracturing • Scale deposition, removal, and prevention • Corrosion control • References • Symbols and abbreviations • English/ Metric conversion factors

■ 350 Pages/Hardcover/1994 - Published by Petroskills



### **INTRODUCTION TO WELL LOGS AND SUBSURFACE MAPS**

by Jonathan C. Evenick, Ph.D.

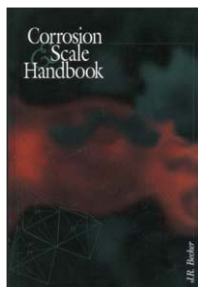
\$59.00 US ISBN 1-59370-138-1 ISBN13 978-1-59370-138-3

Subsurface mapping is a way to visualize various geologic and hydrologic features in any dimension from a 1-D cross section to a 4-D production map. All subsurface map types can be useful, but the key is to know what you are investigating and what map types are most appropriate. This book introduces different types of geophysical logs and subsurface maps that can be generated from basic well data, and subsurface problems that can be solved using geophysical logs and subsurface maps. "Hands-on" exercises reveal how each map type is generated and what applications they may have. Exercises at the end of each chapter introduce different types of wells and lithologies.

#### **Contents:**

Introduction to well logs and terminology • Basic well logs and log signatures • Introduction to subsurface maps and contouring • Structural and stratigraphic interpretations • Structure contour maps • Thickness maps • Facies maps • Trend surface maps • Trend surface residual anomaly maps • Hydrologic maps and injection wells • Formation fluid interpretation and hydrocarbon reserves • Mining maps • Cross sections • Appendix A: Swan Creek Term Project

■ 254 Pages/Softcover/2008



## **CORROSION & SCALE HANDBOOK**

by J.R. Becker

\$89.00 us ISBN 0-87814-749-7 ISBN13 978-0-87814-749-6

Corrosion and scale in crude oil systems are two of the most costly problems facing oil companies, which go to great expense to effectively control the problems. Protection of equipment is critical to the profitability and successful operation of these companies. This book provides an understanding of corrosion and scale, their impact on petroleum companies, and potential solutions and inhibitors.

### **Contents:**

Petroleum-related corrosion and scale • Petroleum-related fluids and scale • Petroleum fluids and corrosion • Petroleum industry & mild steel • Petroleum fluid scale growth & inhibition • Solid-solid surfaces • Electrochemical effects on scale • Special case of hydrogen • Corrosion and scale forms • Electrochemical behavior of petroleum fluids • Corrosion inhibition • Phase behavior of corrosion chemicals and scale chemicals • Petroleum fluids corrosion and scale testing • Synthetic routes to some scale and corrosion chemicals • Corrosion and scale inhibitors and native petroleum surfactants

■ 329 Pages/Hardcover/1998



## **POWER INDUSTRY DICTIONARY**

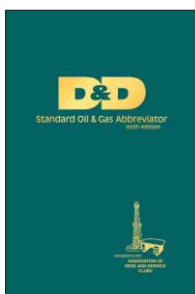
by Ann Chambers & Susan D. Kerr

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### **Contents:**

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## **D & D STANDARD OIL & GAS ABBREVIATOR, 6TH EDITION**

Compiled by the Association of Desk & Derrick Clubs

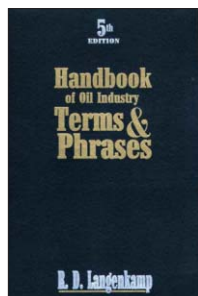
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This is an indispensable tool in the oil, gas, and energy industries. The information included in this book has made writing tasks within energy and its related industries simpler and has through the years added consistency to industry reports. The 6th Edition provides valuable supplementary information about "Minerals Management Services Two Digit Area Prefix Standards" and expands "Miscellaneous Information and Symbols" to include directional survey methods, frequently cited additives, frequently cited fluids, and lithology and formation names.

### **Contents:**

What is D & D? • Abbreviations with definitions • Definitions with abbreviations • Abbreviations for logging tools and services • Federal environmental acronyms • Frequently cited chemical abbreviations • Pipe coating terminology and definitions • Mnemonics • Abbreviations for companies, associations, and organizations • Miscellaneous information and symbols • Minerals management services two digit area prefix standard • Petrophysical curve mnemonics • Universal conversion factors (CD-ROM Only) • Stratigraphic nomenclature for Michigan (CD-ROM Only)

■ 406 Pages/Softcover/2007



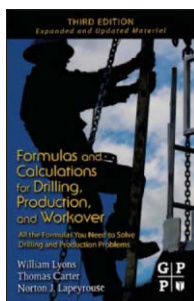
## **HANDBOOK OF OIL INDUSTRY TERMS & PHRASES, 5TH EDITION**

by Robert D. Langenkamp

\$49.00 us ISBN 0-87814-421-8 ISBN13 978-0-87814-421-1

The 5th edition of Langenkamp's *Handbook of Oil Industry Terms & Phrases* is the most comprehensive source of its kind. With more than 1,000 additional entries to its credit — more than 4,200 entries in all — this new reference contains expanded coverage of directional drilling, geophysical, and computer-related terms. Incorporating the latest methodology and technology, *Handbook of Oil Industry Terms & Phrases* is a must for all petroleum professionals, regardless of their level of knowledge and industry segment.

■ 512 Pages/Softcover/1994



### FORMULAS AND CALCULATIONS FOR DRILLING, PRODUCTION AND WORKOVER, 3RD EDITION

by William Lyons, Thomas Carter and Norton J. Lapeyrouse

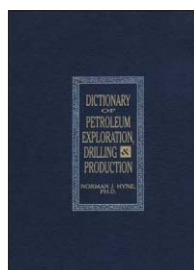
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Presented in easy-to-use, step-by-step order, *Formulas and Calculations* is a quick reference for day-to-day work out on the rig. It also serves as a handy study guide for drilling and well control certification courses. Virtually all the mathematics required out on the drilling rig is here in one convenient source, including formulas for pressure gradient, specific gravity, pump output, annular velocity, buoyancy factor, volume and stroke, slug weight, drill string design, cementing, depth of washout, bulk density of cuttings, and stuck pipe.

#### Contents:

Basic equations • Basic calculations • Drilling fluids • Pressure control • Engineering calculations • Air and gas calculations • Appendices

■ 293 Pages/Softcover/2012 - Published by Gulf Professional Publishing



### DICTIONARY OF PETROLEUM EXPLORATION, DRILLING & PRODUCTION

by Norman J. Hyne, Ph.D.

\$109.00 us ISBN 0-87814-352-1 ISBN13 978-0-87814-352-8



The most comprehensive upstream petroleum dictionary ever with more than 20,000 definitions of words, phrases and abbreviations used in exploration, drilling and production and more than 500 illustrations. Definitions are written for use by both nontechnical and technical readers. Extensive appendices that include charts of drilling rigs and a beam pumper, giant oil and gas fields, United States and Canada geological features, sandstone and limestone classifications, drillstem test symbols, drilling and completion records and many more.

#### Contents:

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■ 625 Pages/Hardcover/1991



### GLOSSARY OF THE PETROLEUM INDUSTRY: ENGLISH/SPANISH & SPANISH/ENGLISH, 4TH EDITION

by Maria-Dolores Proubasta

\$59.00 us ISBN 1-59370-041-5 ISBN13 978-1-59370-041-6

*The Glossary of the Petroleum Industry: English/Spanish & Spanish/English* is the premier reference for the translation of oil and gas industry terminology. With thousands of copies sold since its inception, this glossary is packed with more than 25,000 terms covering oil and gas exploration, drilling, logging, completion, transportation, refining, gas processing, marketing, reservoir engineering, and production, as well as geologic, geophysical, commercial, computer, and legal terminology. This comprehensive glossary also covers ancillary fields such as electricity, navigation, construction, and ecology. The fourth edition draws heavily from the editorial content of *Oil & Gas Journal Latinoamérica* as a source of new technical vocabulary and of actual usage in different Spanish-speaking countries.

#### Contents:

A-Z terms listed from English to Spanish and Spanish to English • Common abbreviations • Acronyms of associations, companies, and entities of the energy industry

■ 418 Pages/Softcover/2005

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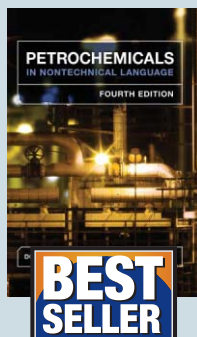
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by Donald L. Burdick and William L. Leffler

\$79.00 us ISBN 1-59370-216-7 ISBN13 978-1-59370-216-8



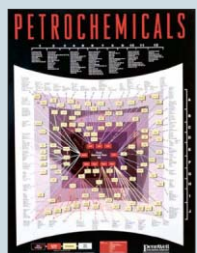
Authors Burdick and Leffler have completely rewritten this time-honored bestseller, now the definitive book for understanding the mysteries of the petrochemical industry. With chapters on all the base chemicals and derivatives, plus seven new ones covering the Fischer-Tropsch process, polyurethane, epoxy resins and more, this is the broadest available look inside the industry. Still offering readers the easy-to-understand diagrams, charts and tables, plus the digestible chapter reviews – this classic delivers the information that every person in the industry needs.

#### **Contents:**

What you need to know about organic chemistry • Processes and equipment • Benzene • Toluene and xylene • Olefin plants, ethylene and propylene • Cyclohexane • The C4 hydrocarbon family • Cumene and phenol • Ethylbenzene and styrene • Ethylene dichloride, vinyl chloride and epichlorohydrin • Ethylene oxide and ethylene glycol • Propylene oxide and propylene glycol • Ethanolamines and polyols • Methanol and synthesis gas • Fischer-Tropsch process • Lots of other alcohols • MTBE • Formaldehyde and acetaldehyde • Ketones • Acids • Maleic • Acrylonitrile, acrylic acid, and acrylates • Aniline and phosgene • Bisphenol A • Alpha olefins • Making polymers • Thermoplastics • MDI and TDI • Polyurethane • Epoxy resins and polycarbonates • Fibers and other resins

■ 460 Pages/Hardcover/6x9/2010

Course in petroleum refining in nontechnical language: Drs. Burdick and Leffler offer a course on this subject at clients' locations. They tailor the 1-2 day session to each company's agenda. See more at <http://venusconsulting.tripod.com> or email to [leffler@hal-pc.org](mailto:leffler@hal-pc.org).

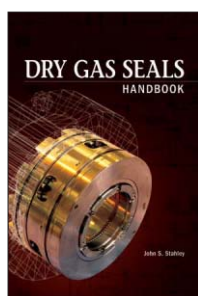


### **PETROCHEMICALS CHART**

by Donald L. Burdick and William L. Leffler

\$49.00 us ISBN 0-87814-584-2 ISBN13 978-0-87814-584-3 (Laminated)

Size: 25" X 31"/1996



### **DRY GAS SEALS HANDBOOK**

by John Stabley

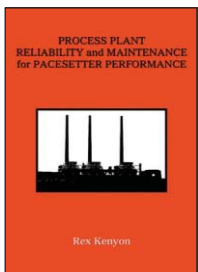
\$59.00 us ISBN 1-59370-062-8 ISBN13 978-1-59370-062-1

Despite the fact that the use of dry gas seals in process gas centrifugal compressors has increased dramatically over the last 20 years, the technology remains misunderstood by many in the industry. Dry gas seals operate with clearances measured in microns, much less than the thickness of a human hair! While dry gas seals can be very problematic if not properly applied at the time of plant, process, and/or compressor design, the many successful installations are a testament to how trouble-free these devices can be when properly applied.

#### **Contents:**

The evolution of dry gas seals • Introduction to dry gas seals • Dry gas seal configurations • Barrier seals • Dry gas seal support systems • Dry gas seal retrofits • Dry gas seal operations and maintenance • Dry gas seal contamination—lessons from the field

■ 135 Pages/Softcover/2005



### **PROCESS PLANT RELIABILITY AND MAINTENANCE FOR PACESETTER PERFORMANCE**

by Rex Kenyon

\$49.00 us ISBN 1-59370-024-5 ISBN13 978-1-59370-024-9

This is one text every plant manager will want to keep on hand. Noted industry consultant, Rex Kenyon, draws from his results-driven consultancy practice for this handy reference packed with the basic work processes necessary to achieve pacesetter performance in maintenance and reliability.

#### **Contents:**

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**PETROLEUM REFINING IN NONTECHNICAL LANGUAGE, 4TH EDITION**

by William L. Leffler

\$79.00 US ISBN 1-59370-158-6 ISBN13 978-1-59370-158-1



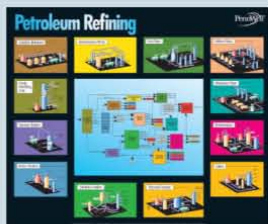
William Leffler's *Petroleum Refining in Nontechnical Language, Fourth Edition* is designed to give the reader an overview of key refining topics by using relevant analogies, easy-to-understand graphs, formulas, and illustrations. New to this edition is important information on the nature of crude oil and raw materials and a comprehensive discussion on what sets crude oil and oil products price differentials. Also new is a chapter on lubricants as well as the latest technologies employed by refiners. Each chapter was carefully written in nontechnical language to give the reader a basic understanding of the refining industry. The book can be used for self-study, as a classroom textbook, or as a quick reference.

**Contents:**

The evolution of petroleum refining • From the oil patch to the refinery • Crude oil characteristics • Distilling • Vacuum flashing • The chemistry of petroleum • Refinery gas plants • Cat cracking • Alkylation • Cat reforming • Hydrocracking • Isomerization • Residue reduction • Gasoline • Distillate and residual fuels • Hydrogen, hydrotreating, and sulfur plants • Asphalt • Lubricants • Ethylene plants • Simple and complex refineries • Solvent recovery of aromatics • Fuel values—Heating values • Answers to the exercises • Glossary • Index

■ 270 Pages/Hardcover/2008

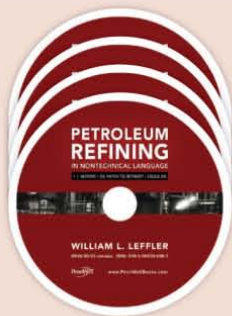
Course in petroleum refining in nontechnical language: Dr. Leffler teaches courses on this subject at clients' locations. He tailors the 1-2 day courses to each company's needs. See his website at <http://bill.leffler.tripod.com> or contact him at [leffler@hal-pc.org](mailto:leffler@hal-pc.org).

**PETROLEUM REFINING CHART**

by William L. Leffler

\$49.00 US ISBN 0-87814-571-0 ISBN13 978-0-87814-571-3

Size: 24" x 29"/1993

**PETROLEUM REFINING IN NONTECHNICAL LANGUAGE VIDEO SERIES (10 DVD SET)**

by William L. Leffler

\$331.50 US ISBN 1-59370-228-0 ISBN13 978-1-59370-228-1

Based on the best-selling book by William Leffler—industry veteran, author, and lecturer—the *Petroleum Refining in Nontechnical Language Video Series* walks you through the refining process one procedure at a time. In this 10-part series, Dr. Leffler covers the information found in the book, breaking down into easily digestible concepts each basic principle of refining. Previously sold only as a set. The DVDs are now available for purchase individually as well as a set!

■ 10-DVD Set/2010

**#1 HISTORY/OIL PATCH TO REFINERY/CRUDE OIL**

\$39.00 US ISBN 1-59370-198-5 ISBN13 978-1-59370-198-7

In DVD 1, *History/Oil Patch to Refinery/Crude Oil*, Dr. Leffler outlines the history of the petroleum industry, its milestones and accomplishments, and then provides an overview of how the oil gets from the oil patch to the refinery. He concludes by explaining the composition of crude oil and discussing the qualities and characteristics of each type of crude.

■ DVD/March 2010/Run Time: 20:33 Minutes

**#2 DISTILLING/VACUUM FLASHING**

\$39.00 US ISBN 1-59370-199-3 ISBN13 978-1-59370-199-4

In DVD 2, *Distilling and Vacuum Flashing*, Dr. Leffler takes you into the refinery, and illustrates the process of separating the various components within crude oil using a process called distillation. He then explains how refiners further separate the components of crude through vacuum flashing.

■ DVD/March 2010/Run Time: 18:43 Minutes

**#3 CHEMISTRY OF PETROLEUM**

\$39.00 US ISBN 1-59370-200-0 ISBN13 978-1-59370-200-7

In DVD 3, *The Chemistry of Petroleum*, Dr. Leffler explains the chemical properties of various components within crude oil. He covers the basic properties of paraffins, olefins, naphthenes, and aromatics, and discusses how they are formed and their destination within the refinery.

■ DVD/March 2010/Run Time: 15:46 Minutes

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#### #4 REFINERY GAS PLANTS /CAT REFORMING

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In DVD 4, *Refinery Gas Plants/Cat Reforming*, Dr. Leffler covers what goes on in a refinery gas plant. He discusses the various paths and processes refiners use to separate and utilize the various gasses in the petroleum stream. Dr. Leffler gives a history of cat reformers, and explains how cat reformers are used to create higher octane products to be used primarily as gasoline blending components.

■ DVD/March 2010/Run Time: 32:52 Minutes

#### #5 CATALYTIC CRACKING/ALKYLATION

\$39.00 US ISBN 1-59370-202-7 ISBN13 978-1-59370-202-1

In DVD 5, *Catalytic Cracking/Alkylation*, Dr. Leffler outlines the cat cracking process and explains how it takes straight run heavy oils and cracks them into smaller, more valuable molecules. Dr. Leffler then outlines alkylation, and how the process takes various low value products and combines them to create a valuable blending stock.

■ DVD/March 2010/Run Time: 30:35 Minutes

#### #6 HYDROCRACKING/ISOMERIZATION

\$39.00 US ISBN 1-59370-203-5 ISBN13 978-1-59370-203-8

In DVD 6, *Hydrocracking/Isomerization*, Dr. Leffler reviews the hydrocracking process and explains how this versatile unit in the refinery can easily produce various products like distillate and gasoline. Dr. Leffler then outlines isomerization, and explains how the isom plant converts normal paraffins to isoparaffins.

■ DVD/March 2010/Run Time: 20:16 Minutes

#### #7 RESIDUAL REDUCTION

\$39.00 US ISBN 1-59370-204-3 ISBN13 978-1-59370-204-5

In DVD 7, *Residual Reduction*, Dr. Leffler discusses the various techniques used to deal with residue in the refinery, including the coker, the delayed coker, and the flexicoker.

■ DVD/March 2010/Run Time: 16:35 Minutes

#### #8 GASOLINE

\$39.00 US ISBN 1-59370-205-1 ISBN13 978-1-59370-205-2

In DVD 8, *Gasoline*, Dr. Leffler covers the demands of the internal combustion engine, and how that, along with the governmental restrictions placed on refineries, has shaped the way refiners produce and blend gasoline.

■ DVD/March 2010/Run Time: 32:59 Minutes

#### #9 DISTILLATE AND RESIDUAL FUELS/ASPALT

\$39.00 US ISBN 1-59370-206-X ISBN13 978-1-59370-206-9

In DVD 9, *Distillate and Residual Fuels/Asphalt*, Dr. Leffler discusses distillate and residual fuels, such as kerosene, jet fuel, heating oil, and diesel fuels. He also discusses asphalt as a refinery product, and the various ways it is created.

■ DVD/March 2010/Run Time: 30:52 Minutes

#### #10 HYDROGEN, HYDROTREATING, AND SULFUR PLANTS/REVIEW

\$39.00 US ISBN 1-59370-207-8 ISBN13 978-1-59370-207-6

In DVD 10, *Hydrogen, Hydrotreating, and Sulfur Plants/Review*, Dr. Leffler outlines ways the refiners utilize hydrogen to remove contaminants and unwanted molecules from the refinery. He then presents a quick overview of all the processes examined in this series, and illustrates how they all work together.

■ DVD/March 2010/Run Time: 24:31 Minutes



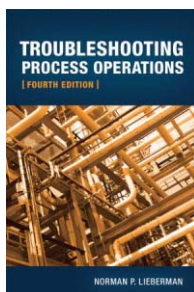
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Snap this QR code with your mobile phone, and watch a sample of the 10-part *Petroleum Refining in Nontechnical Language Video Series*.

If your phone doesn't have a QR reader, go to the app store and search *QR Reader*.

To watch the sample on your computer, go to [www.youtube.com/PennWellPetroBooks](http://www.youtube.com/PennWellPetroBooks).





### **TROUBLESHOOTING PROCESS OPERATIONS, 4TH EDITION**

by Norman P. Lieberman

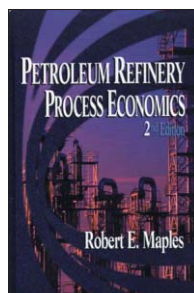
\$129.00 us ISBN 1-59370-176-4 ISBN13 978-1-59370-176-5

The definitive bestselling guide for refinery operations and maintenance, *Troubleshooting Process Operations, 4th Edition*, delivers unparalleled information to engineers and technicians. This new edition updates maintenance and design techniques, and adds seven new chapters covering the latest information on turbines, motors, heat exchangers and environmentally friendly operations. A chemical engineer by training, author Norm Lieberman sprinkles his troubleshooting guide with insightful and humorous examples gained through 45 years in the refining industry.

#### **Contents:**

Section 1 Specific processes • Crude distillation • Delayed coking cycles • Delayed coking process • Amine regeneration and scrubbing • Sulfur recovery • Alkylation • Fluid catalytic cracking units • FCCU product fractionation • Saving energy at reduced feed rates • Section 2 Process equipment • Refrigeration systems • Centrifugal pumps • Distillation towers • Vacuum towers • Treating liquid hydrocarbons • Process heaters • Water coolers • Alarms and trips • Section 3 Practical problems • Additional distillation problems • Fouled trays • Dehydrating light-ends towers • Vapor-liquid separation • Refinery metallurgy for novices • Unusual noises and vibrations • Section 4 Gas drying & compression • Gas drying • Gas compression • Section 5 The process engineer's job • Suggestions for new process operating engineers • Planning a performance test • Understanding control board instruments • How to make field measurements • Turbines, expanders and variable speed motors • Forced draft air coolers • Advances in heat exchanger design • Positive feedback loops • Troubleshooting control loops • Texas City – BP refinery fire • Environmentally friendly process concepts • The people problem • Appendix

■ 706 Pages/Hardcover/2009



### **PETROLEUM REFINERY PROCESS ECONOMICS, 2ND EDITION**

by Robert E. Maples

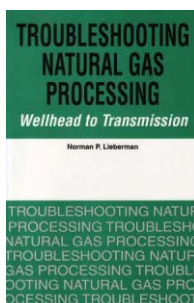
\$99.00 us ISBN 0-87814-779-9 ISBN13 978-0-87814-779-3

Maples presents an organized look at the yield data and properties of products from refinery processes, explains how to use this information in performing various process economics studies, and discusses operating and capital costs for economic evaluation of both single processes and complete refineries. Yield correlations are presented for all of the important, commercially-established petroleum refinery processes, each accompanied by operating requirements and capital cost of a typical unit. Here the user has all the information required to perform a preliminary economic evaluation. For each process yield correlation a simplified process flow diagram and brief process description is given.

#### **Contents:**

Correlation methodology • Crude oils, hydrocarbons, and refinery products • Refinery processing overview • Energy resources and transportation fuels • The environment and the refinery • Crude oil and residual oil processing • Solvent deasphalting • Visbreaking and aquaconversion • Delayed coking • Fluid coking/flexicoking • Heavy distillate processing • Fluid catalytic and heavy oil cracking • Hydrocracking • Hydrotreating • Light distillate processing • Naphtha desulfurization • Catalytic reforming • Light hydrocarbon processing • Isomerization • Alkylation • Catalytic polymerization and dehydrogenation • Oxygenates • Treating and other auxiliary processes • Aromatics extraction • Hydrogen manufacture • Sour water stripping • Sweetening • Acid gas removal • Sulfur recovery • Tail gas cleanup • Water treatment and waste disposal • Blending • Process economics • Economics

■ 424 Pages/Softcover/2000



### **TRUBLESHOOTING NATURAL GAS PROCESSING: WELLHEAD TO TRANSMISSION**

by Norman P. Lieberman

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\$59.00 us ISBN 0-9816652-2-5 ISBN13 978-0-9816652-2-1

*Troubleshooting Natural Gas Processing* is based on Norman Lieberman's experiences in gas fields in South Texas. Encompassing wellhead production problems, as well as gas treating, dehydration, compression and transmission, the book recounts the trials and tribulations of moving gas from the wellhead to the common carrier pipeline from both a technical and personal viewpoint. Each chapter describes the operating principles and troubleshooting techniques of a particular process step in the context of the time and place the problem was first encountered.

#### **Contents:**

Section I - Troubleshooting at the well site • Increasing gas flow at the wellhead • Additional ideas to enhance gas flow • Wellhead surface equipment • Wellhead compression • Process cooling in remote locations • Section II - Troubleshooting at the dehydration and compression station • Glycol dehydration • Reciprocating compressors • Reciprocating engines • Loss in centrifugal compressor capacity • Gas turbine driven centrifugal compressors • Light hydrocarbon distillation • Amine regeneration and scrubbing • Sulfur plant operation • Section III - Pipeline problems • Hydrates • Production metering • Piping pulsations • Corrosion and fouling • Glossary • Index

■ 209 Pages/Softcover/2008 - Published by Lieberman Books



### **PRACTICAL ENHANCED RESERVOIR ENGINEERING: ASSISTED WITH SIMULATION SOFTWARE**

by Drs. Abdus Satter, Ghulam M. Iqbal and James L. Buchwalter

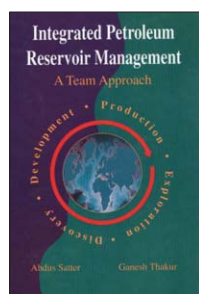
\$139.00 US ISBN 1-59370-056-3 ISBN13 978-1-59370-056-0

This book is a modern and very practical guide offering reservoir engineering fundamentals, advanced reservoir related topics, reservoir simulation fundamentals, and problems and case studies from around the world. It offers all this information with guidelines on how to assist these processes with the use of simulation software (software not included). It is designed to aid students and professionals alike in their active and important roles throughout the reservoir life cycle (discovery, delineation, development, production, and abandonment), and in the various phases of the reservoir management process (setting strategy, developing plan, implementing, monitoring, evaluating, and completing).

#### **Contents:**

Reservoir rock properties • Reservoir fluid properties • Fluid flow in reservoirs • Transient well pressure • Data acquisition, analysis, and management • Integrated reservoir model • Primary reservoir performance analysis and forecasts • Volumetric method • Empirical methods • Decline curve method • Material balance techniques • Reservoir simulation model fundamentals • Reservoir simulation model applications • Oil and gas reserves • Improved recovery processes • Improved recovery processes • Economics, risk and uncertainties • Operational issues • Class projects

■ 706 Pages/Hardcover/2008



### **INTEGRATED PETROLEUM RESERVOIR MANAGEMENT: A TEAM APPROACH**

by Dr. Abdus Satter and Dr. Ganesh C. Thakur

\$99.00 US ISBN 1-59370-261-2 ISBN13 978-1-59370-261-8



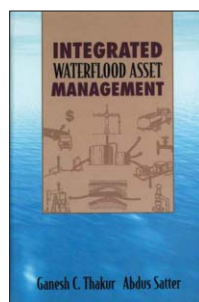
Modern reservoir management practice needs integration of geoscience and engineering. Satter and Thakur present the fundamental, technical, and management perspectives of this practice including examples and case studies.

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Reservoir management concepts and process • Data acquisition, analysis and management • Reservoir model • Production rate and reserves forecasts • Reservoir management economics • Improved recovery processes •

Reservoir management case studies and management plans • Conclusions

■ 335 Pages/Softcover/1994



### **INTEGRATED WATERFLOOD ASSET MANAGEMENT**

by Dr. Ganesh C. Thakur and Dr. Abdus Satter

\$129.00 US ISBN 0-87814-606-7 ISBN13 978-0-87814-606-2

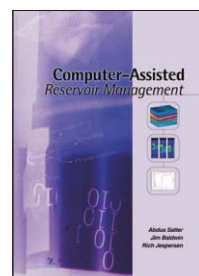


A practical approach using integrated teams and better resource management practices enhancing hydrocarbon recovery and maximizing profitability.

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Reservoir management concepts & process • Integrated technology – geoscience & engineering • Waterflood data • Factors influencing waterflood recovery • Infill drilling • Design of waterfloods: geological, engineering, & operational aspects • Waterflood production performance & reserves forecast • Waterflooding surveillance techniques • Field operations • Waterflood project economics • Case studies • Conclusions & future challenges

■ 402 Pages/Hardcover/1998



### **COMPUTER-ASSISTED RESERVOIR MANAGEMENT**

by Dr. Abdus Satter, Jim Baldwin and Rich Jespersen

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This book teaches key concepts in computerized reservoir management techniques integral in developing economically viable projects.

#### **Contents:**

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■ 278 Pages/Hardcover/2000



### FUNDAMENTALS OF COALBED METHANE RESERVOIR ENGINEERING

by John Seidle

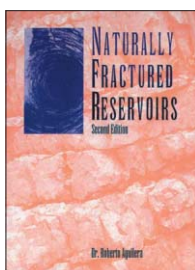
\$149.00 US ISBN 1-59370-001-6 ISBN13 978-1-59370-001-0

Author John Seidle has written this much-needed introduction to a unique unconventional gas resource for students and practicing engineers as well as a basic handbook for those who are involved in coalbed methane on a daily basis and require straightforward, practical answers in the fast-paced business world.

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■ 416 Pages/Hardcover/8.5x11/October 2011



### NATURALLY FRACTURED RESERVOIRS, 2ND EDITION

by Dr. Roberto Aguilera

\$109.00 US ISBN 0-87814-122-7 ISBN13 978-0-87814-122-7

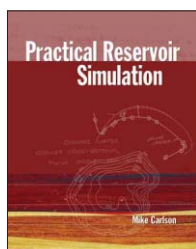


This book deals exclusively with naturally fractured reservoirs and includes many subjects usually treated in separate volumes. A highly practical edition, *Naturally Fractured Reservoirs* is written for students, reservoir geologists, log analysts and petroleum engineers.

#### Contents:

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■ 521 Pages/Softcover/1995



### PRACTICAL RESERVOIR SIMULATION

by Mike Carlson

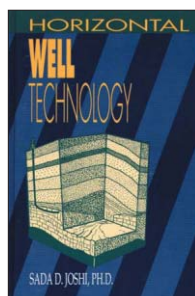
\$139.00 US ISBN 0-87814-803-5 ISBN13 978-0-87814-803-5

This book uses a descriptive style for carrying out reservoir simulations, written by a seasoned practicing simulation engineer. The author shows how to link geology and simulation input—the most critical aspect of successful reservoir simulation. The book also covers techniques that are unique to reservoir simulation, such as pseudo relative permeability.

#### Contents:

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■ 516 Pages/Hardcover/2003



### HORIZONTAL WELL TECHNOLOGY

by Sada D. Joshi, Ph.D.

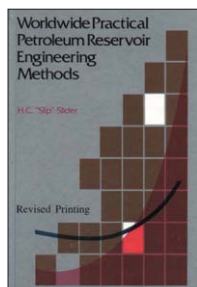
\$99.00 US ISBN 0-87814-350-5 ISBN13 978-0-87814-350-4

Dr. Joshi provides you with an understanding of horizontal well technology basics, presents a history of the technology, which includes recent developments, and basic drilling concepts, and discusses performance factors, such as naturally fractured reservoirs, inaccessible locations, drilling attic oil, drilling through faults, and relief wells.

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■ 535 Pages/Hardcover/1991



## WORLDWIDE PRACTICAL PETROLEUM RESERVOIR ENGINEERING METHODS, 2ND EDITION

by H.C. "Slip" Slider

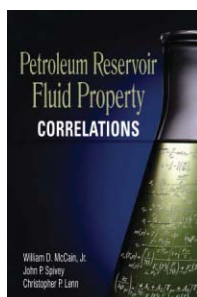
\$99.00 US ISBN 0-87814-234-7 ISBN13 978-0-87814-234-7

This text is written to include reservoirs that produce under steady-state conditions at much higher rates. You can be better prepared to solve reservoir engineering problems, in the U.S. and around the world. Problems are presented throughout the book to give you hands-on experience with various field calculations.

### Contents:

Acquiring reservoir engineering data • Reservoir fluid flow fundamentals • Unsteady and pseudosteady-state flow • Well-pressure behavior analysis • Material balance • Gas reservoir engineering • Fluid distribution and frontal displacement • Decline-curve analysis • Water-flooding and variations • Enhanced oil recovery • Reservoir computer modeling • Reservoir engineering symbols • Empirical reservoir engineering data • Solutions

■ 426 Pages/Hardcover/1983



## PETROLEUM RESERVOIR FLUID PROPERTY CORRELATIONS

by William D. McCain, Jr., John P. Spivey, and Christopher P. Lenn

\$79.00 US ISBN 1-59370-187-X ISBN13 978-1-59370-187-1

Large sets of petroleum fluid data exist for the various reservoir conditions and properties that occur in practice. This new book is the result of years of exhaustive research that gathered data sets from databases all over the world. The data was then compared against the results of many published correlations of fluid properties in order to find the "best in class" required in the petroleum industry. Those findings are offered here as recommended use in reservoir engineering calculations. The data sets cover natural gases, reservoir oils and reservoir waters (brines).

### Contents:

Introduction • Properties of reservoir gases • Properties of black oils • Properties of oilfield waters (brines) • Identification of type of reservoir fluid • References

■ 232 Pages/Hardcover/2010



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## POWER-GEN EUROPE

Cologne, Germany  
June 12-14, 2012



## DEEP OFFSHORE TECHNOLOGY INTERNATIONAL

Perth, Australia  
November 27-29, 2012



## POWER-GEN INTERNATIONAL

Orlando, FL  
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## NUCLEAR POWER INTERNATIONAL

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## OIL SANDS HEAVY OIL TECHNOLOGIES

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## RENEWABLE ENERGY WORLD NORTH AMERICA

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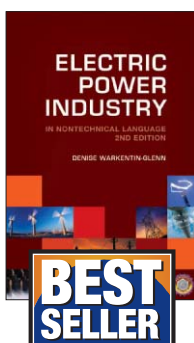
## COAL-GEN

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### **ELECTRIC POWER INDUSTRY IN Nontechnical Language, SECOND EDITION**

by Denise Warkentin-Glenn

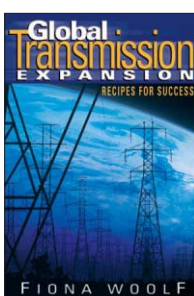
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In the second edition of this bestseller, Denise Warkentin-Glenn presents in everyday language the nuances, history, and recent developments of the electric power industry. This new version includes updated information on utilities, merchant plants, rural cooperatives, government entities and more. It also has new chapters covering the 2005 Energy Policy Act, environmental standards, and updates to industry mergers and acquisitions. This important edition gives a comprehensive look at our country's most critical economic driver.

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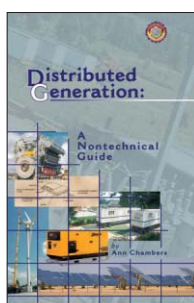
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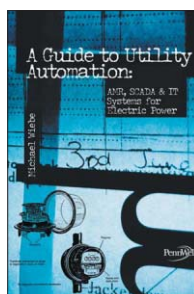
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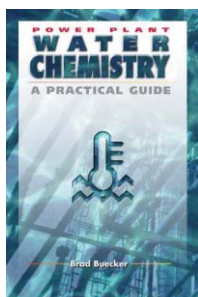
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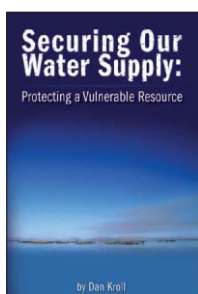
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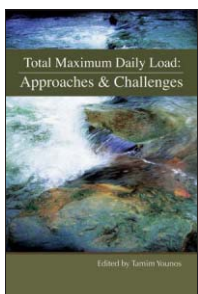
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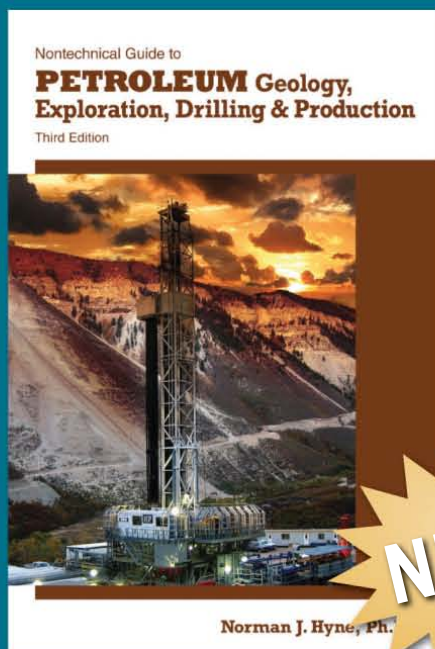
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