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This comprehensive single source gives you the latest findings and techniques for understanding, assessing, and mitigating reservoir formation damage. It is the only book in the world to draw from the key disciplines of chemistry, engineering, petrophysics, geology, and mathematical modeling to provide state-of-the-art knowledge and valuable insights into formation damage. The author's expertise in petroleum, chemical, and geological engineering make this book unique because of its broad, thorough coverage. It provides an understanding of the testing, modeling, and simulation techniques available for formation damage assessment. You will discover new strategies designed to minimize and avoid formation damage in petroleum reservoirs. Reservoir Formation Damage is a concise and practical reference for engineers, scientists, and operators engaged in various aspects of formation damage, including testing, evaluation, diagnosis, prediction, and mitigation.

Includes Part 1, Number 2: Books and Pamphlets, Including Serials and Contributions to Periodicals July - December)

Vols. 7- include "Abstracts" which, beginning with v. 9 form a separately paged section, and from v. 17 on, have separate title pages.

This 2000 book provides an introduction to the nature, occurrence, physical properties, propagation, and uses of surfactants in the petroleum industry.

This book treats corrosion as it occurs and affects processes in real-world situations, and thus points the way to practical solutions. Topics described include the conditions in which petroleum products are corrosive to metals; corrosion mechanisms of petroleum products; which parts of storage tanks containing crude oils and petroleum products undergo corrosion; dependence of corrosion in tanks on type of petroleum products; aggressiveness of petroleum products to polymeric material; how microorganisms take part in corrosion of tanks and pipes containing petroleum products; which corrosion monitoring methods are used in systems for storage and transportation of petroleum products; what corrosion control measures should be chosen; how to choose coatings for inner and outer surfaces of tanks containing petroleum products; and how different additives (oxygenates, aromatic solvents) to petroleum products and biofuels influence metallic and polymeric materials. The book is of interest to corrosion engineers, materials engineers, oil and gas engineers, petroleum engineers, chemists, chemical engineers, mechanical engineers, failure analysts, scientists, and students, designers of tanks, pipelines and other systems for storage and transportation fuels, technicians. The book is of interest to corrosion engineers, materials engineers, oil and gas engineers, petroleum engineers, chemists, chemical engineers, mechanical engineers, failure analysts, scientists, and students, designers of tanks, pipelines and other systems for storage and transportation fuels, technicians. The book is of interest to corrosion engineers, materials engineers, oil and gas engineers, petroleum engineers, chemists, chemical engineers, mechanical engineers, failure analysts, scientists, and students, designers of tanks, pipelines and other systems for storage and transportation fuels, technicians.

The last three chapters of this book deal with application of methods presented in previous chapters to estimate various thermodynamic, physical, and transport properties of petroleum fractions. In this chapter, various methods for prediction of physical and thermodynamic properties of pure hydrocarbons and their mixtures, petroleum fractions, crude oils, natural gases, and reservoir fluids are presented. As it was discussed in Chapters 5 and 6, properties of gases may be estimated more accurately than properties of liquids. Theoretical methods of Chapters 5 and 6 for estimation of thermophysical properties generally can be applied to both liquids and gases; however, more accurate properties can be predicted through empirical correlations particularly developed for liquids. When these correlations are developed with some theoretical basis, they are more accurate and have wider range of applications. In this chapter some of these semitheoretical correlations are presented. Methods presented in Chapters 5 and 6 can be used to estimate properties such as density, enthalpy, heat capacity, heat of vaporization, and vapor pressure. Characterization methods of Chapters 2-4 are used to determine the input parameters needed for various predictive methods. One important part of this chapter is prediction of vapor pressure that is needed for vapor-liquid equilibrium calculations of Chapter 9.

Essentials of Offshore Structures: Framed and Gravity Platforms examines the engineering ideas and offshore drilling platforms for exploration and production. This book offers a clear and acceptable demonstration of both the theory and application of the relevant procedures of structural, fluid, and geotechnical mechanics to offshore structures. It

Surfactants Fundamentals and Applications in the Petroleum Industry Cambridge University Press

Annotation This new Handbook is designed to give a complete, comprehensive overview of field development and well production, providing a wealth of practical information. It is intended as a reference guide for petroleum engineers and oilfield operators, yet also provides readily-available solutions to practical problems. The user will find the guidelines, recommendations, formulas and charts currently in use, as it covers most of the cases encountered in the field. Even when a problem has been contracted out to a service company, reference to this handbook will help the oilfield manager to better monitor outsourced work and current operations. The handbook also introduces the new techniques of well production (horizontal and multilateral wells, heavy oil production, etc.). Many examples are given throughout to facilitate the use of the formulas. Also, measurements are frequently expressed in both metric and U.S. units. The symbols used for these units conform to the recommendations of the SPE Board of Directors. This publication will therefore serve both as a guide and as a handbook, in which the operator will find answers to his questions, along with quick and easy solutions to most of the problems that occur in field development. Contents: General data. Casing and tubing. Coiled tubing. Packers. Pressure losses. Fundamentals of petroleum reservoirs. Well productivity. Formation damage control. Sand control. Stimulation. Horizontal and multilateral wells. Water management. Heavy oil production, Enhanced oil recovery. Artificial lift. Beam pumping and other reciprocating rod pumps. Gas lift. Electric submersible pumps. Progressing cavity pumps. Hydraulic pumping. multiphase pumping and metering. Deposit treatment. Well servicing. Cased hole logging and imaging. Financial formulas for investment decisions. List of standards for petroleum production. Glossary. Index.

Determining the composition and properties of complex hydrocarbon mixtures in petroleum, synthetic fuels, and petrochemical products usually requires a battery of analytical techniques that detect and measure specific features of the molecules, such as boiling point, mass, nuclear magnetic resonance frequencies, etc. there have always been a need for new and improved analytical technology to better understand hydrocarbon chemistry and processes. This book provides an overview of recent advances and future challenges in modern analytical techniques that are commonly used in hydrocarbon applications. Experts in each of the areas covered have reviewed the state of the art, thus creating a book that will be useful to readers at all levels in academic, industry, and research institutions.

Presents opportunities for making significant improvements in preventing harmful effects that can be caused by corrosion Describes concepts of molecular modeling in the context of materials corrosion Includes recent examples of applications

of molecular modeling to corrosion phenomena throughout the text Details how molecular modeling can give insights into the multitude of interconnected and complex processes that comprise the corrosion of metals Covered applications include diffusion and electron transfer at metal/electrolyte interfaces, Monte Carlo simulations of corrosion, corrosion inhibition, interrogating surface chemistry, and properties of passive films Presents current challenges and likely developments in this field for the future

Intermediate foundations are used as anchors for floating platforms and ancillary structures, foundations for steel jackets, and to support seafloor equipment and offshore wind turbines. When installed by suction, they are an economical alternative to piling, and also may be completely removed. They are usually circular in plan and are essentially rigid when laterally loaded. Length to diameter embedment ratios, L/D, generally vary between 0.5 and 10, spanning the gap between shallow and deep foundations, although these are indicative boundaries and the response, rather than the embedment ratio, defines an intermediate foundation. The first chapters introduce foundation types; compare shallow, intermediate and deep foundation models and design; define unique design issues that make intermediate foundations distinct from shallow and deep foundations, as well as list their hazards that mainly occur during installation. Later chapters cover installation, in-place resistance and in-place response, and miscellaneous design considerations. There is no general agreement as to which design methods/models are appropriate, so models should only be as accurate as the data. Therefore, several reasonably accurate models are provided together with comprehensive discussion and advice. Example calculations and over 200 references are also included. This is the first book dedicated to the geotechnical design of intermediate foundations, and it will appeal to professional engineers specialising in the offshore industry. Hydraulic Fracturing effectively busts the myths associated with hydraulic fracturing. It explains how to properly engineer and optimize a hydraulically fractured well by selecting the right materials, evaluating the economic benefits of the project, and ensuring the safety and success of the people, environment, and equipment. From data estimation

This book presents both sides of a very controversial subject intoday's media: induced hydraulic fracturing, or"fracking." It covers the technology and methods usedin hydraulic fracturing in easy-to-understand language, for theengineer and layperson alike, presenting the environmental effectsof hydraulic fracturing.

This book discusses the fundamental skills, techniques, and tools of auditing, and the characteristics of a good process safety management system. A variety of approaches are given so the reader can select the best methodology for a given audit. This book updates the original CCPS Auditing Guideline project since the implementation of OSHA PSM regulation, and is accompanied by an online download featuring checklists for both the audit program and the audit itself. This package offers a vital resource for process safety and process development personnel, as well as related professionals like insurers.

This volume provides a comprehensive overview for recognizing and producing the characteristics of successful special surfactant agents. It highlights one of the most versatile and effective surface-active surfactant agents, detailing the synthesis and production, chemical properties and behaviours, and application for alkyl polyglucosides.

Some vols., 1920-1949, contain collections of papers according to subject.

First published in 1981 as the Offshore Information Guide this guide to information sources has been hailed internationally as an indispensable handbook for the oil, gas and marine industries.

Issues in Chemical Engineering and other Chemistry Specialties: 2013 Edition is a ScholarlyEditions™ book that delivers timely, authoritative, and comprehensive information about Chemical Modeling. The editors have built Issues in Chemical Engineering and other Chemistry Specialties: 2013 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Chemical Modeling in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Chemical Engineering and other Chemistry Specialties: 2013 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

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