

Api Spec 5a5

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

Written as an introduction for undergraduate students, this textbook covers the most important methods in digital image processing. Formal and mathematical aspects are discussed at a fundamental level and various practical examples and exercises supplement the text. The book uses the image processing environment ImageJ, freely distributed by the National Institute of Health. A comprehensive website supports the book, and contains full source code for all examples in the book, a question and answer forum, slides for instructors, etc. Digital Image Processing in Java is the definitive textbook for computer science students studying image processing and digital processing.

Wiggerman's study of Mesopotamian monsters bridges the gap between text and image. Wooden and clay figures of monstrous spirits such as Hairy-One (lahmu), Bison-Bull (kusarikku), and Furious-Snake (mushussu) stand guard at the entrances to buildings to protect the inhabitants from demonic intruders. Deriving his information from the ritual texts that describe the production and installation of these figures, the author identifies the monsters of the texts with objects from the archaeological record and presents a detailed discussion of the identities and histories of a variety of Mesopotamian monsters.

Texte Imprimé

API Recommended Practice

Senior Design Projects in Mechanical Engineering

Process Equipment and Plant Design

API Specification for Spiral-welded Line Pipe

Liquid Penetrant Testing

This book constitutes the refereed post-conference proceedings of the 9th International Conference on Broadband Communications, Networks, and Systems, Broadnets 2018, which took place in Faro, Portugal, in September 2018. The 30 revised full and 16 workshop papers were carefully reviewed and selected from 68 submissions. The papers are thematically grouped as follows: Advanced Techniques for IoT and WSNs; SDN and Network Virtualization; eHealth and Telemedicine Mobile Applications; Security and Privacy Preservation; Communication Reliability and Protocols; Spatial Modulation Techniques; Hardware Implementation and Antenna Design. This book gives the background to differential-pressure flow measurement and goes through the requirements explaining the reason for them. For those who want to use an orifice plate or a Venturi tube the standard ISO 5167 and its associated Technical Reports give the instructions required. However, they rarely tell the users why they should follow certain instructions. This book helps users of the ISO standards for orifice plates and Venturi tubes to understand the reasons why the standards are as they are, to apply them effectively, and to understand the consequences of deviations from the standards.

Process Equipment and Plant Design: Principles and Practices takes a holistic approach towards process design in the chemical engineering industry, dealing with the design of individual process equipment and its configuration as a complete functional system. Chapters cover typical heat and mass transfer systems and equipment included in a chemical engineering curriculum, such as heat exchangers, heat exchanger networks, evaporators, distillation, absorption, adsorption, reactors and more. The authors expand on additional topics such as industrial cooling systems, extraction, and topics on process utilities, piping and hydraulics, including instrumentation and safety basics that supplement the equipment design procedure and help to arrive at a complete plant design. The chapters are arranged in sections pertaining to heat and mass transfer processes, reacting systems, plant hydraulics and process vessels, plant auxiliaries, and engineered safety as well as a separate chapter showcasing examples of process design in complete plants. This comprehensive reference bridges the gap between industry and academia, while exploring best practices in design, including relevant theories in process design making this a valuable primer for fresh graduates and professionals working on design projects in the industry. Serves as a consolidated resource for process and plant design, including process utilities and engineered safety Bridges the gap between industry and academia by including practices in design and summarizing relevant theories Presents design solutions as a complete functional system and not merely the design of major equipment Provides design

procedures as pseudo-code/flow-chart, along with practical considerations

Recommended Practice for Field Inspection of New Casing, Tubing, and Plain-end Drill Pipe

Physical Properties and Data of Optical Materials

Lightwave Technology

Petroleum Abstracts

The Operations and Environmental Consequences of Hydraulic Fracturing

Handbook of Offshore Engineering

Research and applications in optical engineering require careful selection of materials. With such a large and varied array to choose from, it is important to understand a material's physical and optical properties before making a selection. Providing a convenient, concise, and logically organized collection of information, *Physical Properties and Data of Optical Materials* builds a thorough background for more than 100 different materials and offers quick access to precise information. Surveying the most important and widely used optical materials, this handy reference includes data on a wide variety of metals, semiconductors, dielectrics, and other commonly used optical materials. For each material, the editors examine the crystal system; natural and artificial growth and production methods along with corrosives and processing; thermal and mechanical properties; optical properties, such as transmittance and reflectance spectra, ranging from UV to IR wavelengths; and, where applicable, applications for spectroscopy and miscellaneous optical handling concerns and chemical properties. Numerous tables illustrate important data such as numerical values of optical constants for important wavelength regions, extinction and absorption coefficients, and refractive index. *Physical Properties and Data of Optical Materials* offers a collection of data on an unprecedented variety of fundamental optical materials, making it the one quick-lookup guide that every optical engineer and student should own.

Diagnostic paleoradiology is the use of X-ray studies to detect ancient diseases. The broad range of themes and imaging techniques in this volume reflects four decades of research undertaken by anthropologists, human paleopathologists, and zooarchaeologists, combined with two decades of skeletal radiology experience during which Rethy Chhem read over 150,000 X-ray and CT studies. All the authors are experts in the fields of Radiology and Bioanthropology.

First published in 1983. Routledge is an imprint of Taylor & Francis, an informa company.

Piping Handbook

Broadband Communications, Networks, and Systems

Mesopotamian Protective Spirits

The Theory of Determinants in the Historical Order of Development

Environmental Aspects of Oil and Gas Production

Lawyers Desk Reference

Shale Oil and Gas Production Processes delivers the basics on current production technologies and the processing and refining of shale oil. Starting with the potential of formations and then proceeding to production and completion, this foundational resource also dives into the chemical and physical nature of the precursor of oil shale, kerogen, to help users understand and optimize its properties in shale. Rounding out with reporting, in situ retorting, refining and environmental aspects, this book gives engineers and managers a strong starting point on how to manage the challenges and processes necessary for the further development of these complex resources. Helps readers grasp current research on production from shale formations, including properties and composition Fill in the gaps between research and practical application, including discussions of existing literature Includes a glossary to help readers fully understand key concepts

Oil and gas still power the bulk of our world, from automobiles and the power plants that supply electricity to our homes and businesses, to jet fuel, plastics, and many other products that enrich our lives. With the relatively recent development of hydraulic fracturing ("fracking"), multilateral, directional, and underbalanced drilling, and enhanced oil recovery, oil and gas production is more important and efficient than ever before. Along with these advancements, as with any new engineering process or technology, come challenges, many of them environmental. More than just a text that outlines the environmental challenges of oil and gas production that have always been there, such as gas migration and corrosion, this groundbreaking new volume takes on the most up-to-date processes and technologies involved in this field. Filled with dozens of case studies and examples, the authors, two of the most well-known and respected petroleum engineers in the world, have outlined all of the major environmental aspects of oil and gas production and how to navigate them, achieving a more efficient, effective, and profitable operation. This groundbreaking volume is a must-have for any petroleum engineer working in the field, and for students and faculty in petroleum engineering departments worldwide.

*Senior Design Projects in Mechanical Engineering*A Guide Book for Teaching and LearningSpringer NatureShale Oil and Gas Production ProcessesGulf Professional Publishing

The Drilling Manual

Principles, Operation and Maintenance

Advances in Digital Forensics XII

Aircraft Digital Electronic and Computer Systems

Deep Shale Oil and Gas

Catalog of American National Standards

Costa Rica Mineral, Mining Sector Investment and Business Guide Volume 1 Strategic Information and Regulations

This handbook is an in-depth guide to the practical aspects of materials and corrosion engineering in the energy and chemical industries. The book covers materials, corrosion, welding, heat treatment, coating, test and inspection, and mechanical design and integrity. A central focus is placed on industrial requirements, including codes, standards, regulations, and specifications that practicing material and corrosion engineers and technicians face in all roles and in all areas of responsibility. The

comprehensive resource provides expert guidance on general corrosion mechanisms and recommends materials for the control and prevention of corrosion damage, and offers readers industry-tested best practices, rationales, and case studies. Instant answers to your toughest questions on piping components and systems! It's impossible to know all the answers when piping questions are on the table - the field is just too broad. That's why even the most experienced engineers turn to Piping Handbook, edited by Mohinder L. Nayyar, with contribution from top experts in the field. The Handbook's 43 chapters--14 of them new to this edition--and 9 new appendices provide, in one place, everything you need to work with any type of piping, in any type of piping system: design layout selection of materials fabrication and components operation installation maintenance This world-class reference is packed with a comprehensive array of analytical tools, and illustrated with fully-worked-out examples and case histories. Thoroughly updated, this seventh edition features revised and new information on design practices, materials, practical applications and industry codes and standards--plus every calculation you need to do the job.

A Guide Book for Teaching and Learning

API Bulletin

Fracking

Oil and Gas Journal

An Algorithmic Introduction Using Java

Principles and Practices

This IBM® Redbooks® publication addresses performance tuning topics to help leverage the virtualization strengths of the POWER® platform to solve clients' system resource utilization challenges, and maximize system throughput and capacity. We examine the performance monitoring tools, utilities, documentation, and other resources available to help technical teams provide optimized business solutions and support for applications running on IBM POWER systems' virtualized environments. The book offers application performance examples deployed on IBM Power Systems™ utilizing performance monitoring tools to leverage the comprehensive set of POWER virtualization features: Logical Partitions (LPARs), micro-partitioning, active memory sharing, workload partitions, and more. We provide a well-defined and documented performance tuning model in a POWER system virtualized environment to help you plan a foundation for scaling, capacity, and optimization . This book targets technical professionals (technical consultants, technical support staff, IT Architects, and IT Specialists) responsible for providing solutions and support on IBM POWER systems, including performance tuning.

Stephen Druce demonstrates the progression to political complexity by combining a range of sources and methods, including oral, textual, archaeological, linguistic and geographical information and analysis as he explores the rise and development of five South Sulawesi kingdoms, known collectively as Ajattappareng (the Lands West of the Lakes).

An Invaluable Reference for Members of the Drilling Industry, from Owner-Operators to Large Contractors, and Anyone Interested In Drilling Developed by one of the world's leading authorities on drilling technology, the fifth edition of The Drilling Manual draws on industry expertise to provide the latest drilling methods, safety, risk management, and management practices, and protocols. Utilizing state-of-the-art technology and techniques, this edition thoroughly updates the fourth edition and introduces entirely new topics. It includes new coverage on occupational health and safety, adds new sections on coal seam gas, sonic and coil tube drilling, sonic drilling, Dutch cone probing, in hole water or mud hammer drilling, pile top drilling, types of grouting, and improved sections on drilling equipment and maintenance. New sections on drilling applications include underground blast hole drilling, coal seam gas drilling (including well control), trenchless technology and geothermal drilling. It contains heavily illustrated chapters that clearly convey the material. This manual incorporates forward-thinking technology and details good industry practice for the following sectors of the drilling industry: Blast Hole Environmental Foundation/Construction Geotechnical Geothermal Mineral Exploration Mineral Production and Development Oil and Gas: On-shore Seismic Trenchless Technology Water Well The Drilling Manual, Fifth Edition provides you with the most thorough information about the "what," "how," and "why" of drilling. An ideal resource for drilling personnel, hydrologists, environmental engineers, and scientists interested in subsurface conditions, it covers drilling machinery, methods, applications, management, safety, geology, and other related issues.

Handbook of Engineering Practice of Materials and Corrosion

Orifice Plates and Venturi Tubes

Shale Oil and Gas Production Processes

Publications, Programs & Services

12th IFIP WG 11.9 International Conference, New Delhi, January 4-6, 2016, Revised Selected Papers

Digital Image Processing

'Aircraft Digital Electronic and Computer Systems' provides an introduction to the principles of this subject. It is written for anyone pursuing a career in aircraft maintenance engineering or a

related aerospace engineering discipline.

The state of the art of modern lightwave system design Recent advances in lightwave technology have led to an explosion of high-speed global information systems throughout the world. Responding to the growth of this exciting new technology, Lightwave Technology provides a comprehensive and up-to-date account of the underlying theory, development, operation, and management of these systems from the perspective of both physics and engineering. The first independent volume of this two-volume set, Components and Devices, deals with the multitude of silica- and semiconductor-based optical devices. This second volume, Telecommunication Systems, helps readers understand the design of modern lightwave systems, with an emphasis on wavelength-division multiplexing (WDM) systems. * Two introductory chapters cover topics such as modulation formats and multiplexing techniques used to create optical bitstreams * Chapters 3 to 5 consider degradation of optical signals through loss, dispersion, and nonlinear impairment during transmission and its corresponding impact on system performance * Chapters 6 to 8 provide readers with strategies for managing degradation induced by amplifier noise, fiber dispersion, and various nonlinear effects * Chapters 9 and 10 discuss the engineering issues involved in the design of WDM systems and optical networks Each chapter includes problems that enable readers to engage and test their new knowledge to solve problems. A CD containing illuminating examples based on RSoft Design Group's award-winning OptSim optical communication system simulation software is included with the book to assist readers in understanding design issues. Finally, extensive, up-to-date references at the end of each chapter enable students and researchers to gather more information about the most recent technology breakthroughs and applications. With its extensive problem sets and straightforward writing style, this is an excellent textbook for upper-level undergraduate and graduate students. Research scientists and engineers working in lightwave technology will use this text as a problem-solving resource and a reference to additional research papers in the field.

The handbook outlines the principles, equipment, materials maintenance, methodology, and interpretation skills necessary for liquid penetration testing. The third edition adds new sections on filtered particle testing of aerospace composites, quality control of down hole oil field tubular assemblies, and probability of detection, and considers new regulations on CFC fluids throughout the text. Annotation copyrighted by Book News, Inc., Portland, OR

Imaging Mummies and Fossils

9th International EAI Conference, Broadnets 2018, Faro, Portugal, September 19–20, 2018, Proceedings

Telecommunication Systems

A Guide to Electrical Installations on Shipboard

Elements of Programming Interviews

"Volume IV, Production operations engineering" provides readers with up-to-date information on design, equipment selection, and operation procedures for most oil and gas wells.

Chapters cover three main topic areas: well completions, problems caused by formation damage, and artificial lift--a major concern for production engineers.

IEEE 45-2002 is an excellent standard, which is widely used for selecting shipboard electrical and electronic system equipment and its installation. The standard is a living document

often interpreted differently by different users. Handbook to IEEE Standard 45: A Guide to Electrical Installations on Shipboard provides a detailed background of the changes in

IEEE Std 45-2002 and the reasoning behind the changes as well as explanation and adoption of other national and international standards. It contains the complete text of IEEE

45-2002 relevant clauses, along with explanatory commentary consisting of: - Recommendation intent and interpretation - Historical perspective - Application - Supporting

illustrations, drawings and tables This Handbook provides necessary technical details in a simplified form to enhance understanding of the requirements for technical and non-technical

people in the maritime industry.

Natural gas and crude oil production from hydrocarbon rich deep shale formations is one of the most quickly expanding trends in domestic oil and gas exploration. Vast new natural

gas and oil resources are being discovered every year across North America and one of those new resources comes from the development of deep shale formations, typically located

many thousands of feet below the surface of the Earth in tight, low permeability formations. Deep Shale Oil and Gas provides an introduction to shale gas resources as well as offer a

basic understanding of the geomechanical properties of shale, the need for hydraulic fracturing, and an indication of shale gas processing. The book also examines the issues regarding

the nature of shale gas development, the potential environmental impacts, and the ability of the current regulatory structure to deal with these issues. Deep Shale Oil and Gas delivers a

useful reference that today's petroleum and natural gas engineer can use to make informed decisions about meeting and managing the challenges they may face in the development of

these resources. Clarifies all the basic information needed to quickly understand today's deeper shale oil and gas industry, horizontal drilling, fracture fluids chemicals needed, and

completions Addresses critical coverage on water treatment in shale, and important and evolving technology Practical handbook with real-world case shale plays discussed, especially

the up-and-coming deeper areas of shale development

The Lands West of the Lakes

Methods of Heuristics

Pharmaceutics

The Ritual Texts

Handbook to IEEE Standard 45

API Specification

Pharmaceutics: Basic Principles and Application to Pharmacy Practice is an engaging textbook that covers all aspects of pharmaceutics with emphasis on the basic science and its application to pharmacy practice. Based on curricular guidelines mandated by the American Council for Pharmacy Education (ACPE), this book incorporates laboratory skills by identifying portions of each principle that can be used in a clinical setting. In this way, instructors are able to demonstrate their adherence to ACPE standards and objectives, simply by using this book. Written in a straightforward and student-friendly manner, Pharmaceutics enables students to gain the scientific foundation to understand drug physicochemical properties, practical aspects of dosage forms and drug delivery systems, and the biological applications of drug administration. Key ideas are illustrated and reinforced through chapter objectives and chapter summaries. A companion website features resources for students and instructors, including videos illustrating difficult processes and procedures as well as practice questions and answers. Instructor resources include Powerpoint slides and a full-color image bank. This book is intended for students in pharmaceutical science programs taking pharmaceutics or biopharmaceutics courses at the undergraduate, graduate and doctoral level. Chapter objectives and chapter summaries illustrate and reinforce key ideas. Designed to meet curricular guidelines for pharmaceutics and laboratory skills mandated by the Accreditation Council for Pharmacy Education (ACPE) Companion website features resources for students and instructors, including videos illustrating difficult processes and procedures and practice questions and answers. Instructor resources include Powerpoint slides and a full-color image bank.

Digital forensics deals with the acquisition, preservation, examination, analysis and presentation of electronic evidence. Networked computing, wireless communications and portable electronic devices have expanded the role of digital forensics beyond traditional computer crime investigations. Practically every crime now involves some aspect of digital evidence; digital forensics provides the techniques and tools to articulate this evidence. Digital forensics also has myriad intelligence applications. Furthermore, it has a vital role in information assurance -- investigations of security breaches yield valuable information that can be used to design more secure systems. Advances in Digital Forensics XII describes original research results and innovative applications in the discipline of digital forensics. In addition, it highlights some of the major technical and legal issues related to digital evidence and electronic crime investigations. The areas of coverage include: Themes and Issues, Mobile Device Forensics, Network Forensics, Cloud Forensics, Social Media Forensics, Image Forensics, Forensic Techniques, and Forensic Tools. This book is the twelfth volume in the annual series produced by the International Federation for Information Processing (IFIP) Working Group 11.9 on Digital Forensics, an international community of scientists, engineers and practitioners dedicated to advancing the state of the art of research and practice in digital forensics. The book contains a selection of twenty edited papers from the Twelfth Annual IFIP WG 11.9 International Conference on Digital Forensics, held in New Delhi, India in the winter of 2016. Advances in Digital Forensics XII is an important resource for researchers, faculty members and graduate students, as well as for practitioners and individuals engaged in research and development efforts for the law enforcement and intelligence communities. Gilbert Peterson, Chair, IFIP WG 11.9 on Digital Forensics, is a Professor of Computer Engineering at the Air Force Institute of Technology, Wright-Patterson Air Force Base, Ohio, USA. Sujeet Shenoj is the F.P. Walter Professor of Computer Science and a Professor of Chemical Engineering at the University of Tulsa, Tulsa, Oklahoma, USA.

The core of EPI is a collection of over 300 problems with detailed solutions, including 100 figures, 250 tested programs, and 150 variants. The problems are representative of questions asked at the leading software companies. The book begins with a summary of the nontechnical aspects of interviewing, such as common mistakes, strategies for a great interview, perspectives from the other side of the table, tips on negotiating the best offer, and a guide to the best ways to use EPI. The technical core of EPI is a sequence of chapters on basic and advanced data structures, searching, sorting, broad algorithmic principles, concurrency, and system design. Each chapter consists of a brief review, followed by a broad and thought-provoking series of problems. We include a summary of data structure, algorithm, and problem solving patterns.

Paleoradiology

Petroleum Engineering Handbook

Costa Rica Mineral, Mining Sector Investment and Business Guide Volume 1 Strategic Information and Regulations

Offshore Waste Treatment Guidelines

Basic Principles and Application to Pharmacy Practice

The Insiders' Guide