

## Petroleum Production Engineering Lecture Notes

This book highlights recent findings in industrial, manufacturing and mechanical engineering, and provides an overview of the state of the art in these fields, mainly in Russia and Eastern Europe. A broad range of topics and issues in modern engineering are discussed, including the dynamics of machines and working processes, friction, wear and lubrication in machines, surface transport and technological machines, manufacturing engineering of industrial facilities, materials engineering, metallurgy, control systems and their industrial applications, industrial mechatronics, automation and robotics. The book gathers selected papers presented at the 6th International Conference on Industrial Engineering (ICIE), held in Sochi, Russia in May 2020. The authors are experts in various fields of engineering, and all papers have been carefully reviewed. Given its scope, the book will be of interest to a wide readership, including mechanical and production engineers, lecturers in engineering disciplines, and engineering graduates.

This interdisciplinary book encompasses the fields of rock mechanics, structural geology and petroleum engineering to address a wide range of geomechanical problems that arise during the exploitation of oil and gas reservoirs. It considers key practical issues such as prediction of pore pressure, estimation of hydrocarbon column heights and fault seal potential, determination of optimally stable well trajectories, casing set points and mud weights, changes in reservoir performance during depletion, and production-induced faulting and subsidence. The book establishes the basic principles involved before introducing practical measurement and experimental techniques to improve recovery and reduce exploitation costs. It illustrates their successful application through case studies taken from oil and gas fields around the world. This book is a practical reference for geoscientists and engineers in the petroleum and geothermal industries, and for research scientists interested in stress measurements and their application to problems of faulting and fluid flow in the crust.

This book comprehensively identifies most reservoir rock properties using a very simple approach. It aids junior and senior reservoir and geology engineers to understand the main fundamentals of rock properties. The book provides examples and solutions that can help the readers to quickly understand the topic. This book covers reservoir rock properties and their relationship to each other. The book includes many figures, tables, exercises, and flow diagrams to simplify the topics in different approaches.

This book presents selected articles from the 5th International Conference on Geotechnics, Civil Engineering Works and Structures, held in Ha Noi, focusing on the theme “Innovation for Sustainable Infrastructure”, aiming to not only raise awareness of the vital importance of sustainability in infrastructure development but to also highlight the essential roles of innovation and technology in planning and building sustainable infrastructure. It provides an international platform for researchers, practitioners, policymakers and entrepreneurs to present their recent advances and to exchange knowledge and experience on various topics related to the theme of “Innovation for Sustainable Infrastructure”.

Advances in Manufacturing and Industrial Engineering

Guide to Petroleum Engineering Career

NEWTECH 2017

Selected Extended Papers of ICAMMS 2018

Advanced Manufacturing Processes

Reservoir Geomechanics

New Global Perspectives on Industrial Engineering and Management

This book reports on topics at the interface between manufacturing, mechanical and chemical engineering. It gives a special emphasis to CAD/CAE systems, information management systems, advanced numerical simulation methods and computational modeling techniques, and their use in product design, industrial process optimization and in the study of the properties of solids, structures and fluids. Control theory, ICT for engineering education as well as ecological design and food technologies are also among the topics discussed in the book. Based on the International Conference on Design, Simulation, Manufacturing: The Innovation Exchange (DSMIE-2018), held on June 12-15, 2018, in Sumy, Ukraine, the book provides academics and professionals with a timely overview and extensive information on trends and technologies behind current and future developments of Industry 4.0, innovative design and renewable energy generation.

Formulas and Calculations for Petroleum Engineering unlocks the capability for any petroleum engineering individual, experienced or not, to solve problems and locate quick answers, eliminating non-productive time spent searching for that right calculation. Enhanced with lab data experiments, practice examples, and a complimentary online software toolbox, the book

presents the most convenient and practical reference for all oil and gas phases of a given project. Covering the full spectrum, this reference gives single-point reference to all critical modules, including drilling, production, reservoir engineering, well testing, well logging, enhanced oil recovery, well completion, fracturing, fluid flow, and even petroleum economics.

Presents single-point access to all petroleum engineering equations, including calculation of modules covering drilling, completion and fracturing Helps readers understand petroleum economics by including formulas on depreciation rate, cashflow analysis, and the optimum number of development wells

This volume provides a complete record of presentations made at Industrial Engineering, Management Science and Applications 2015 (ICIMSA 2015), and provides the reader with a snapshot of current knowledge and state-of-the-art results in industrial engineering, management science and applications. The goal of ICIMSA is to provide an excellent international forum for researchers and practitioners from both academia and industry to share cutting-edge developments in the field and to exchange and distribute the latest research and theories from the international community. The conference is held every year, making it an ideal platform for people to share their views and experiences in industrial engineering, management science and applications related fields.

This book comprises select proceedings of the International Conference on Latest Innovations in Materials Engineering and Technology (ICLIET 2018). The book focuses on diverse engineering materials, their design and applications. The materials in discussion include those related to coatings, polymers, composites, tribology, acoustic insulators, lubricants, and cryogenics. The book also highlights emerging nano and micro materials, bio engineering materials, as well as new energy materials for solar cells and photovoltaic cells. This book will serve as an useful reference for students, researchers, and professionals working in the field of materials science and engineering.

Volume I

Bulletin

Oil and Gas Production Handbook: An Introduction to Oil and Gas Production

Select Proceedings of FLAME 2018

CIGOS 2019, Innovation for Sustainable Infrastructure

Select Proceedings of ICETMIE 2019

Select Proceedings of RAME 2020

*Petroleum Production Engineering, Second Edition, updates both the new and veteran engineer on how to employ day-to-day production fundamentals to solve real-world challenges with modern technology. Enhanced to include equations and references with today’s more complex systems, such as working with horizontal wells, workovers, and an entire new section of chapters dedicated to flow assurance, this go-to reference remains the most all-inclusive source for answering all upstream and midstream production issues. Completely updated with five sections covering the entire production spectrum, including well productivity, equipment and facilities, well stimulation and workover, artificial lift methods, and flow assurance, this updated edition continues to deliver the most practical applied production techniques, answers, and methods for today’s production engineer and manager. In addition, updated Excel spreadsheets that cover the most critical production equations from the book are included for download. Updated to cover today’s critical production challenges, such as flow assurance, horizontal and multi-lateral wells, and workovers Guides users from theory to practical application with the help of over 50 online Excel spreadsheets that contain basic production equations, such as gas lift potential, multilateral gas well deliverability, and production forecasting Delivers an all-inclusive product with real-world answers for training or quick look up solutions for the entire petroleum production spectrum*

*This book comprises select proceedings of the International Conference on Future Learning Aspects of Mechanical Engineering (FLAME 2018). The book discusses different topics of industrial and production engineering such as sustainable manufacturing systems, computer-aided engineering, rapid prototyping, manufacturing management and automation, metrology, manufacturing process optimization, casting, welding, machining, and machine tools. The contents of this book will be useful for researchers as well as professionals.*

*Successfully estimate risk and reliability, and produce innovative, yet reliable designs using the approaches outlined in Offshore Structural Engineering: Reliability and Risk Assessment. A hands-on guide for practicing professionals, this book covers the reliability of offshore structures with an emphasis on the safety and reliability of offshore facilities during analysis, design, inspection, and planning. Since risk assessment and reliability estimates are often based on probability, the author utilizes concepts of probability and statistical analysis to address the risks and uncertainties involved in design. He explains the concepts with clear illustrations and tutorials, provides a chapter on probability theory, and covers various stages of the process that include data collection, analysis, design and construction, and commissioning. In addition, the author discusses advances in geometric structural forms for deep-water oil exploration, the rational treatment of uncertainties in structural engineering, and the safety and serviceability of civil engineering and other offshore structures. An invaluable guide to innovative and reliable structural design, this book: Defines the structural reliability theory Explains the reliability analysis of structures Examines the reliability of offshore structures Describes the probabilistic distribution for important loading variables Includes methods of reliability analysis Addresses risk assessment and more Offshore Structural Engineering: Reliability and Risk Assessment provides an in-depth analysis of risk analysis and assessment and highlights important aspects of offshore structural reliability. The book serves as a practical reference to engineers and students involved in naval architecture, ocean engineering, civil/structural, and petroleum engineering.*

*This book highlights recent findings in industrial, manufacturing and mechanical engineering, and provides an overview of the state of the art in these fields, mainly in Russia and Eastern Europe. A broad range of topics and issues in modern engineering are discussed, including the dynamics of machines and working processes, friction, wear and lubrication in machines, surface transport and technological machines, manufacturing engineering of industrial facilities, materials engineering, metallurgy, control systems and their industrial applications, industrial mechatronics, automation and robotics. The book gathers selected papers presented at the 5th International Conference on Industrial Engineering (ICIE), held in Sochi, Russia in March 2019. The authors are experts in various fields of engineering, and all papers have been carefully reviewed. Given its scope, the book will be of interest to a wide readership, including mechanical and production engineers, lecturers in engineering disciplines, and engineering graduates.*

*Recent Advances in Mechanical Engineering*

*Recent Advances in Manufacturing Engineering and Processes*

*Advances in Industrial and Production Engineering*

*Select Proceedings of ICCEMME 2021*

*Petroleum Production Engineering*

*Select Proceedings of ICAST 2020*

*Reservoir Engineering Handbook*

Guide to Petroleum Engineering Career By: Engr. Azunna I. B. Ekejiuba (Ph.D.) Historically, human beings have used petroleum in one form or another since ancient times (more than 8000 years ago). However, the birth of the modern petroleum industry was on August 27, 1859, when Colonel Edwin L. Drake used the then popular cable tool (also called churn or percussion) drilling method to drill the actual historically first oil well, on a stream called Oil Greek, near Titusville, Pennsylvania, at a depth of 69 feet, six inches (21 metres). In recent years, the advent of the transcontinental transmission lines and petrochemical industries has increased the value of natural gas (methane) to a fuel in great demand and a chemical feedstock (raw material) for many modern commercial and industrial products, particularly the synthesis of plastics, rubber, fertilizers, solvents, adhesives, pesticides, gas-to-methanol (GTM), liquefied natural gas (LNG), et cetera. Guide to Petroleum Engineering Career is an ideal career guide, lecture note, practical manual, petrochemical production guide, information source (to all categories of practicing petroleum industry workers and enthusiasts who are interested to know more about the current key mankind energy resources), as well as a reference on the emerging renewable fuel economy which reflects the challenges faced by the millennium petroleum engineers.

The book presents the select proceedings of the 3rd International Conference on Computational and Experimental Methods (ICCEMME 2021). It covers the broad topic of industrial and production engineering such as sustainable manufacturing systems, rapid prototyping, manufacturing process optimization, machining, and machine tools, casting, welding, forming, machining, machine tools, computer-aided engineering, manufacturing management, automation and metrology. This book will be useful for the researchers and professionals working in the in the field of industrial and production engineering.

This book comprises the select proceedings of the 2nd International Conference on Future Learning Aspects of Mechanical Engineering (FLAME) 2020. In particular, this volume discusses different topics of industrial and production engineering such as sustainable manufacturing processes, logistics, Industry 4.0 practices, circular economy, lean six sigma, agile manufacturing, additive manufacturing, IoT and Big Data in manufacturing, 3D printing, simulation, manufacturing management and automation, surface roughness, multi-objective optimization and modelling for production processes, developments in casting, welding, machining, and machine tools. The contents of this book will be useful for researchers as well as industry professionals.

This book presents the proceedings from the 5th NEWTECH conference (Belgrade, Serbia, 5-9 June 2017), the latest in a series of high-level conferences that bring together experts from academia and industry in order to exchange knowledge, ideas, experiences, research results, and information in the field of manufacturing. The range of topics addressed is wide, including, for example, machine tool research and in-machine measurements, progress in CAD/CAM technologies, rapid prototyping and reverse engineering, nanomanufacturing, advanced material processing, functional and protective surfaces, and cyber-physical and reconfigurable manufacturing systems. The book will benefit readers by providing updates on key issues and recent progress in manufacturing engineering and technologies and will aid the transfer of valuable knowledge to the next generation of academics and practitioners. It will appeal to all who work or conduct research in this rapidly evolving field.

Closing the Gap Between Practice and Research in Industrial Engineering

Recent Advances in Material Sciences

Rock Properties and Reservoir Engineering: A Practical View

The Best Practices Petroleum Infographic Cutting Edge Technology Approach

Select Proceedings of ICLJET 2018

Reliability and Risk Assessment

This book comprises select papers from the 10th International Conference on Manufacturing Engineering and Processes 2021. The contents of this volume focus on recent technological advances in the field of manufacturing engineering and processes including computer-aided design and manufacturing, environmentally sustainable manufacturing processes, composite materials manufacturing, and nanomaterials and nanomanufacturing. The contents cover latest advances especially in 3D printing and additive manufacturing techniques and processes for sustainable materials including ceramic and polymer-matrix composite where there is paucity of good papers in the literature. This book proves a valuable resource for those in academia and industry.

This book is a compilation of selected papers from the Fourth International Technical Symposium on Deepwater Oil and Gas Engineering & The Third International Youth Forum on Gas Hydrate, held in Qingdao, China in December 2021. The work focuses on the advancement of techniques for the deepwater oil and gas exploitation and natural gas hydrate exploitation. The book introduces new ideas for exploring deepwater oil and gas hydrate in a safe and efficient way. Advances of the natural gas hydrate pilot production in South China Sea, in oil and gas flow assurance and emerging technologies based on clathrate hydrate will be presented. It is a valuable resource for both practitioners and academics working in the field of deepwater oil and gas engineering.

This book presents the select proceedings of the second International Conference on Recent Advances in Mechanical Engineering (RAME 2020). The topics covered include aerodynamics and fluid mechanics, automation, automotive engineering, composites, ceramics and polymers processing, computational mechanics, failure and fracture mechanics, friction, tribology and surface engineering, heating and ventilation, air conditioning system, industrial engineering, IC engines, turbomachinery and alternative fuels, machinability and formability of materials, mechanisms and machines, metrology and computer-aided inspection, micro- and nano-mechanics, modelling, simulation and optimization, product design and development, rapid manufacturing technologies and prototyping, solid mechanics and structural mechanics, thermodynamics and heat transfer, traditional and non-traditional machining processes, vibration and acoustics. The book also discusses various energy-efficient renewable and non-renewable resources and technologies, strategies and technologies for sustainable development and energy & environmental interaction. The book is a valuable reference for beginners, researchers, and professionals interested in sustainable construction and allied fields.

This book presents the select proceedings of the International Conference on Recent Advances in Manufacturing (RAM 2020). This volume, in particular, provides insights into current research trends and opportunities within the manufacturing processes domain such as conventional and unconventional manufacturing, micro and nano manufacturing, chemical and biochemical manufacturing, and computer-integrated manufacturing (CIM). The topics covered include emerging areas of the fourth industrial revolution such as additive manufacturing, sustainable and energy-efficient manufacturing, smart manufacturing, artificial intelligence in manufacturing application, and computer-integrated manufacturing. This book will be useful for to researchers and practitioners alike.

Proceedings of The Fourth International Technical Symposium on Deepwater Oil and Gas Engineering

Proceedings of the 4th International Conference on Industrial Engineering

Select Proceedings of FLAME 2020

A Textbook of Petroleum Production Engineering

Volume 1: An Introduction to Petroleum Geoscience

Notes to Accompany a Lecture on Improved Production by Integration of Geological and Reservoir Engineering Tools

Selected articles from ICMPE 2019

This book presents the proceedings of the 3rd International Joint Conference - ICIEOM-ADINGOR-IISE-AIM-ASEM (IJC2017) “XXIII International Conference on Industrial Engineering and Operations Management”, “International ADINGOR Conference 2017”, “International IISE Conference 2017”, “International AIM Conference 2017” and “International ASEM Conference 2017”, which took place at UPV (Universitat Politècnica de València) from July 6th to 7th, 2017. This joint conference is the result of an agreement between ABEPRO (Associação Brasileira de Engenharia de Produção), ADINGOR (Asociación para el Desarrollo de la Ingeniería de Organización), IISE (Institute of Industrial and Systems Engineers), AIM (European Academy for Industrial Management) and ASEM (American Society for Engineering Management). Consisting of papers on new global perspectives on industrial engineering and management, the book offers an interdisciplinary view of industrial engineering and management. The topics covered include: strategy and

entrepreneurship, quality and product management, modelling and simulation, knowledge and project management, logistics, as well as production, information and service systems.

Petroleum Production Engineering Gulf Professional Publishing

This book presents selected papers from the 5th International Conference on Mechanical, Manufacturing and Plant Engineering (ICMMPE 2019), held in Kuala Lumpur, Malaysia. It highlights the latest advances in the area, brings together researchers and professionals in the field and provides a valuable platform for exchanging ideas and fostering collaboration. Joining technologies could be change to manufacturing technologies. Addressing real-world problems concerning joining technologies that are at the heart of various manufacturing sectors, the respective papers present the outcomes of the latest experimental and numerical work on problems in soldering, arc welding and solid-state joining technologies. technologies. technologies. technologies. technologies. technologies. technologies. technologies. technologies. technologies.

This book covers the fundamentals of the earth sciences and examines their role in controlling the global occurrence and distribution of hydrocarbon resources. It explains the principles, practices and the terminology associated with the upstream sector of the oil industry. Key topics include a look at the elements and processes involved in the generation and accumulation of hydrocarbons and demonstration of how geological and geophysical techniques can be applied to explore for oil and gas. There is detailed investigation into the nature and chemical composition of petroleum, and of surface and subsurface maps, including their construction and uses in upstream operations. Other topics include well-logging techniques and their use in determining rock and fluid properties, definitions and classification of resources and reserves, conventional oil and gas reserves, their quantification and global distribution as well as unconventional hydrocarbons, their worldwide occurrence and the resources potentially associated with them. Finally, practical analysis is concentrated on the play concept, play maps, and the construction of petroleum events charts and quantification of risk in exploration ventures. As the first volume in the Imperial College Lectures in Petroleum Engineering, and based on a lecture series on the same topic, An Introduction to Petroleum Geoscience provides the introductory information needed for students of the earth sciences, petroleum engineering, engineering and geoscience. This volume also includes an introduction to the series by Martin Blunt and Alain Gringarten, of Imperial College London.

Recent Trends in Industrial and Production Engineering

Advances in Manufacturing Processes

Properties of Petroleum Reservoir Fluids

Select Proceedings of RAM 2020

International Joint Conference ICIEOM-ADINGOR-IISE-AIM-ASEM

Sea Grant Publications Index

Selected Papers from the Grabchenko's International Conference on Advanced Manufacturing Processes (InterPartner-2019), September 10-13, 2019, Odessa, Ukraine

*This book presents selected peer reviewed papers from the International Conference on Advanced Production and Industrial Engineering (ICAPIE 2019). It covers a wide range of topics and latest research in mechanical systems engineering, materials engineering, micro-machining, renewable energy, industrial and production engineering, and additive manufacturing. Given the range of topics discussed, this book will be useful for students and researchers primarily working in mechanical and industrial engineering, and energy technologies.*

*This book presents selected papers from the international conference on advanced manufacturing and materials sciences (ICAMMS 2018). The papers reflet recent advances in manufacturing sector focusing on process optimization and give emphasis to testing and evaluation of new materials with potential use in industrial applications.*

*This book comprises the select proceedings of the International Conference on Emerging Trends in Mechanical and Industrial Engineering (ICETMIE) 2019. The conference covers current trends in thermal, design, industrial, production and other sub-disciplines of mechanical engineering. This volume focuses on different industrial and production engineering areas such as additive manufacturing, rapid prototyping, computer aided engineering, advanced manufacturing processes, manufacturing management and automation, sustainable manufacturing systems, metrology, manufacturing process optimization, operations research and decision-making models, production planning and inventory control, supply chain management, and quality engineering. The contents of this book will be useful for students, researchers and other professionals interested in industrial and production engineering.*

*The demand for energy consumption is increasing rapidly. To avoid the impending energy crunch, more producers are switching from oil to natural gas. While natural gas engineering is well documented through many sources, the computer applications that provide a crucial role in engineering design and analysis are not well published, and emerging technologies, such as shale gas drilling, are generating more advanced applications for engineers to utilize on the job. To keep producers updated, Boyun Guo and Ali Ghalambor have enhanced their best-selling manual, Natural Gas Engineering Handbook, to continue to provide upcoming and practicing engineers the full scope of natural gas engineering with a computer-assisted approach. This must-have handbook includes: A focus on real-world essentials rather than theory Illustrative examples throughout the text Working spreadsheet programs for all the engineering calculations on a free and easy to use companion site Exercise problems at the end of every chapter, including newly added questions utilizing the spreadsheet programs Expanded sections covering today's technologies, such as multi-fractured horizontal wells and shale gas wells*

*Proceedings of the 5th International Conference on Geotechnics, Civil Engineering Works and Structures*

*Proceedings of ICMEP 2021*

*Industrial Engineering, Management Science and Applications 2015*

*Advances in Production and Industrial Engineering*

*Proceedings of the 6th International Conference on Industrial Engineering (ICIE 2020)*

*Production of Biofuels and Chemicals from Sustainable Recycling of Organic Solid Waste*

*Volume II*

*This book offers a timely yet comprehensive snapshot of innovative research and developments in the area of manufacturing. It covers a wide range of manufacturing processes, such as cutting, coatings, and grinding, highlighting the advantages provided by the use of new materials and composites, as well as new methods and technologies. It discusses topics in energy generation and pollution prevention. It shows how computational methods and mathematical models have been applied to solve a number of issues in both theoretical and applied research. Based on selected papers presented at the Grabchenko's International Conference on Advanced Manufacturing Processes (InterPartner-2019), held in Odessa, Ukraine on September 10-13, 2019, this book offers a timely overview and extensive information on trends and technologies in the area of manufacturing, mechanical and materials engineering. It is also intended to facilitate communication and collaboration between different groups working on similar topics, and to offer a bridge between academic and industrial researchers.*

*This book presents the select proceedings of the International Conference on Advances in Sustainable Technologies (ICAST 2020), organized by Lovely Professional University, Punjab, India. This book caters to the industrial and production engineering aspects. It covers the industrial and production engineering areas such as sustainable manufacturing systems, decision sciences, supply chain management, Just in Time (JIT), logistics and supply chain management, rapid prototyping and reverse engineering, quality control and reliability, six sigma, smart manufacturing, time and motion study, six sigma, ergonomics, operations management, manufacturing management, metrology, manufacturing process optimization, machining and machine tools, casting, welding, and forming. This book will be useful for industry professionals and researchers working in the area of mechanical engineering, especially industrial and production engineering.*

*The job of any reservoir engineer is to maximize production from a field to obtain the best economic return. To do this, the engineer must study the behavior and characteristics of a petroleum reservoir to determine the course of future development and production that will maximize the profit. Fluid flow, rock properties, water and gas coning, and relative permeability are only a few of the concepts that a reservoir engineer must understand to do the job right, and some of the tools of the trade are water influx calculations, lab tests of reservoir fluids, and oil and gas performance calculations. Two new chapters have been added to the first edition to make this book a complete resource for students and professionals in the petroleum industry: Principles of Waterflooding, Vapor-Liquid Phase Equilibria.*

*This book highlights recent findings in industrial, manufacturing and mechanical engineering, and provides an overview of the state of the art in these fields, mainly in Russia and Eastern Europe. A broad range of topics and issues in modern engineering are discussed, including the dynamics of machines and working processes, friction, wear and lubrication in machines, surface transport and technological machines, manufacturing engineering of industrial facilities, materials engineering, metallurgy, control systems and their industrial applications, industrial mechatronics, automation and robotics. The book gathers selected papers presented at the 4th International Conference on Industrial Engineering (ICIE), held in Moscow, Russia in May 2018. The authors are experts in various fields of engineering, and all papers have been carefully reviewed. Given its scope, the book will be of interest to a wide readership, including mechanical and production engineers, lecturers in engineering disciplines, and engineering graduates.*

*Advances in Design, Simulation and Manufacturing*

*Advances in Manufacturing Engineering*

*Formulas and Calculations for Petroleum Engineering*

*Proceedings of the International Conference on Design, Simulation, Manufacturing: The Innovation Exchange, DSMIE-2018, June 12-15, 2018, Sumy, Ukraine*

*Proceedings of the 5th International Conference on Industrial Engineering (ICIE 2019)*

*Proceedings of 5th International Conference on Advanced Manufacturing Engineering and Technologies*

*Offshore Structural Engineering*

This book presents the proceedings of the XXII International Conference on Industrial Engineering and Operations Management, International IIE Conference 2016, and International AIM Conference 2016. This joint conference is a result of an agreement between ADINGOR (Asociación para el Desarrollo de la Ingeniería de Organización), ABEPRO (Associação Brasileira de Engenharia de Produção), AIM (European Academy for Industrial Management) and the IIE (Institute of Industrial Engineers), and took place at TECNUN-School of Engineering (San Sebastián, Spain) from July 13th to 15th, 2016. The book includes the latest research advances and cutting-edge analyses of real case studies in Industrial Engineering and Operations Management from diverse international contexts, while also identifying concrete business applications for the latest findings and innovations in operations management and the decisions sciences.

This book shares the technical knowhow in the field of health, safety and environmental management, as applied to oil and gas industries and explains concepts through a simple and straightforward approach Provides an overview of health, safety and environmental (HSE) management as applied to offshore and petroleum engineering Covers the fundamentals of HSE and demonstrates its practical application Includes industry case studies and examples based on the author's experiences in both academia and oil and gas industries Presents recent research results Includes tutorials and exercises

The Imperial College Lectures in Petroleum Engineering

Natural Gas Engineering Handbook

Advanced Manufacturing and Materials Science

Health, Safety, and Environmental Management in Offshore and Petroleum Engineering

ICIE 2018

Select Proceedings of ICAPIE 2019