

Petroleum Production Engineering Lecture Notes

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Lecture Notes on Applied Reservoir Simulation -

Closing the Gap Between Practice and Research in Industrial Engineering - Elisabeth Viles 2017-08-17

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.

Recent Trends in Industrial and Production Engineering - Avanish Kumar Dubey 2021-07-23

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.

Proceedings of the 4th International Conference on Industrial Engineering - Andrey A. Radionov 2018-12-07

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 Industrial and Production Engineering - Kripa Shanker 2019-04-23

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.
Sea Grant Publications Index - 1968

Petroleum Production Engineering - Boyun Guo, 2017-02-10
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

Properties of Petroleum Reservoir Fluids - Emil J. Burcik 1979

Notes to Accompany a Lecture on Improved Production by Integration of Geological and Reservoir Engineering Tools - John R. Farina 1986

Proceedings of The Fourth International Technical Symposium on Deepwater Oil and Gas Engineering - Baojiang Sun 2022-05-03

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.

Advances in Manufacturing Processes - Harshit K. Dave 2020-11-30

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.

CIGOS 2019, Innovation for Sustainable Infrastructure - Cuong Ha-Minh 2019-10-10

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 Industrial and Production Engineering - Rakesh Kumar Phanden 2021-03-21

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.

The Journal of Industrial and Engineering Chemistry - 1916

Guide to Petroleum Engineering Career - Engr. Azunna I. B. Ekejiuba (Ph.D.) 2020-11-02

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.

Recent Trends in Civil Engineering - Arjun Sil 2022-10-03

This book presents the select proceedings of International Conference on Recent Advancements in Civil Engineering (ICRACE) 2021. Various topics covered include theory and advanced technology of engineering structure, high-rise structure and large-span, structure, bridge and tunnel engineering, advanced concrete technology, durable structures, building energy conservation and green architecture, disaster management, smart structures and materials, soil and rock mechanics, geotechnology, hydraulic and hydro-power engineering, road & bridge engineering, and sustainable transportation infrastructures. This book will be useful for researchers and professionals working in the area of civil engineering and allied fields.

Engineering Technology and Industrial Chemistry with Applications - Reza K. Haghi 2018

"Key features: - explores the future of petroleum engineering, petrochemicals, and environmental and energy sustainability - presents new research on the electrospinning process - discusses the nanofiber production capability of the electro-centrifuge technique - examines several issues in chemical theory and computation - provides new research on a variety of topics in industrial chemistry and engineering technology - looks at important issues in polymers technology and science - provides several illustrative case studies"--

Advances in Industrial Automation and Smart Manufacturing - A. Arockiarajan 2020-10-20

This book comprises selected peer-reviewed proceedings of the International Conference on Advances in Industrial Automation and Smart Manufacturing (ICAIASM) 2019. The contents focus on innovative manufacturing processes, standards and technologies used to implement Industry 4.0, and industrial IoT based environment for smart manufacturing. The book particularly emphasizes on emerging industrial concepts like industrial IoT and cyber physical systems, advanced simulation and digital twin, wireless instrumentation, rapid prototyping and tooling, augmented reality, analytics and manufacturing operations management. Given the range of topics covered, this book will be useful for students, researchers as well as industry professionals.

The Imperial College Lectures in Petroleum Engineering - Michael Ala 2017-05-26

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.

Atlas of Deep-Water Outcrops - Tor H. Nilsen 2008-02-20
Hardcover plus CD

Recent Advances in Mechanical Engineering - Anil Kumar 2021-05-25

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.

Emerging Trends in Mechanical and Industrial Engineering
- Xianguo Li 2023-01-01

The book presents the select proceedings of the International Conference on Emerging Trends in Mechanical and Industrial Engineering (ICETMIE 2022). It covers the latest trends in the area of mechanical engineering. The broad topics covered in the book are engineering design, industrial and production engineering, Industry 4.0, energy and process engineering, mechatronics, control and robotics, material science, and automotive engineering. The book is useful for students, researchers, and professionals working in the various areas of mechanical engineering.

Recent Advances in Manufacturing Engineering and Processes - Ramesh K. Agarwal 2021-10-21

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.
Smart, Sustainable Manufacturing in an Ever-Changing World - Konrad von Leipzig 2023-03-03

This book presents recent developments, research results, and industrial experience to increase the knowledge base of academics and industry. In a small world where trade is the new global driving force conquering countries and continents alike, international competitiveness is becoming the ultimate challenge. It requires high-quality products manufactured with state-of-the-art technologies at low cost under the assumption of highly efficient operations management as well as clear corporate goals and strategy. This in turn is based on improved engineering training and education, relevant applied research, and an active interaction between academia and industry.

Reservoir Geomechanics - Mark D. Zoback 2010-04-01

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.

Journal of Industrial and Engineering Chemistry - 1916

Health, Safety, and Environmental Management in Offshore and Petroleum Engineering - Srinivasan Chandrasekaran

2016-02-29

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

Offshore Structural Engineering - Srinivasan Chandrasekaran 2017-12-19

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.

Proceedings of the 5th International Conference on Industrial Engineering (ICIE 2019) - Andrey A. Radionov 2019-11-30

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.

Sand Control in Well Construction and Operation - Davorin Matanovic 2012-02-21

Produced sand causes a lot of problems. From that reasons sand production must be monitored and kept within acceptable limits. Sand control problems in wells result from improper completion techniques or changes in reservoir properties. The idea is to provide support to the formation to prevent movement under stresses resulting from fluid flow from reservoir to well bore. That means that sand control often result with reduced well production. Control of sand production is achieved by: reducing drag forces (the cheapest and most effective method), mechanical sand bridging (screens, gravel packs) and increasing of formation strength (chemical consolidation). For open hole completions or with un-cemented slotted liners/screens sand failure will occur and must be predicted. Main problem is

plugging. To combat well failures due to plugging and sand breakthrough Water-Packing or Shunt-Packing are used.

Advances in Manufacturing Technology and Management - Ranganath M. Singari 2022-11-10

This book presents the select peer-reviewed proceeding of the International Conference on Advanced Production and Industrial Engineering (ICAPIE) – 2021 held at Delhi Technological University. It covers recent trends in various fields of mechanical engineering. The broad range of topics and issues covered include mechanical system engineering, materials engineering, micro-machining, renewable energy, industrial engineering and additive manufacturing. This book will be useful for students, researchers and professionals working in the area of mechanical and allied engineering discipline.

Imperial College Lectures In Petroleum Engineering, The - Volume 4: Drilling And Reservoir Appraisal - Vural Sander Suicmez 2018-07-26

This book covers the fundamentals of drilling and reservoir appraisal for petroleum. Split into three sections, the first looks at the basic principles of well engineering in terms of planning, design and construction. It then goes on to describe well safety, costs and operations management. The second section is focussed on drilling and core analysis, and the laboratory measurement of the physico-chemical properties of samples. It is clear that efficient development of hydrocarbon reservoirs is highly dependent on understanding these key properties, and the data can only be gathered through a carefully conducted core-analysis program, as described. Finally, in the third section we look at production logging, an essential part of reservoir appraisal, which describes

the nature and the behaviour of fluids in or around the borehole. It describes how to know, at a given time, phase by phase, and zone by zone, how much fluid is coming out of or going into the formation. As part of the Imperial College Lectures in Petroleum Engineering, and based on a lecture series on the same topic, Drilling and Reservoir Appraisal provides the introductory information needed for students of the earth sciences, petroleum engineering, engineering and geoscience.

Recent Advancements in Mechanical Engineering - T. S. Sudarshan 2022-09-20

This book presents select proceedings of the 2nd International Conference on Recent Advancements of Mechanical Engineering (ICRAME 2021), which was held during 7th to 9th February 2021 at National Institute of Technology Silchar. The book entails the recent developments in a range of areas related to mechanical engineering. It examines the state-of-the-art researches in the areas of thermal engineering, engineering design, manufacturing/ production engineering and surface engineering. Various topics covered include advanced energy sources, bio-thermal applications, techniques in fluid flow, computing in applied mechanics and product design, dynamics and control of structures/ systems, fracture and failure mechanics, solid mechanics, casting, welding, brazing, soldering, JIT, MRP, supply chain management and logistics. The book will be useful for researchers and professionals working in the areas of mechanical engineering.

Industrial Engineering and Operations Management - Victor Manuel López Sánchez 2022-11-22

This proceedings volume convenes peer-reviewed, selected papers presented at the XXVIII International Joint Conference on Industrial Engineering and Operations

Management (IJCIEOM) that was held in Mexico City, Mexico, July 17-20, 2022, with a special focus on applications of industrial engineering and operations management for research and practice. Fields covered include operations, manufacturing, industrial and production engineering and management, emphasizing optimization models and data science applications to real-world problems. In this book, the reader will find works on topics as optimization models; stochastic optimization; digital transformation in the supply chain; data science applications in operations management; Industry 4.0: manufacturing planning & control; blockchain; intelligent transportation systems; sustainable and reverse logistics; big data and demand planning; predictive and prescriptive analytics; last-mile delivery optimization; stochastic inventory models; new trends in information technology for operation management; stochastic optimization; optimization models for omnichannel; safety in operation management; and more. This volume includes relevant information for academics, since most of the chapters focus on real-world case studies and systematic reviews, but also for professionals in the industrial sector as it presents solutions to complex industrial challenges. Previous 2018, 2019, 2020, and 2021 IJCIEOM proceedings can also be found in Springer's catalog.

Advances in Materials Science and Engineering - Chander Prakash 2020-05-21

This book presents the select proceedings of the International Conference on Functional Material, Manufacturing and Performances (ICFMP) 2019. The book provides the state-of-the-art research, development, and commercial prospective of recent advances in materials science and engineering. The contents cover various

synthesis and fabrication routes of functional and smart materials for applications in mechanical engineering, manufacturing, metrology, nanotechnology, physics, chemical and biological sciences, civil engineering, food science among others. It also provides the evolutionary behavior of materials science for industrial applications. This book will be a useful resource for researchers as well as professionals interested in the highly interdisciplinary field of materials science.

Energy Production and Management in the 21st Century -

E. R. Magaril 2014-04-23

Discussing the future of energy production and management in a changing world, this book contains the proceedings of the first international conference on Energy Production and Management in the 21st Century – The Quest for Sustainable Energy. Developed societies require an ever increasing amount of energy resources, which creates complex technological challenges. The idea is to compare conventional energy sources, particularly hydrocarbons, with a number of other ways of producing energy, emphasising new technological developments. The challenge in many cases is the conversion of new sources of energy into useful forms, while finding efficient ways of storing and distributing energy. Energy policies and management are of primary importance to achieving sustainability, and need to be consistent with recent advances made in energy production and distribution. The book will also discuss the energy use of industrial processes, including the imbedded energy contents of materials, particularly those in the built environment. Energy production, distribution and usage, result in environmental risks which need to be better understood. They are part of the energy economics and relate to

human environmental health as well as ecosystems behaviour. Topics covered include: Energy production; Energy management; Energy policies; Energy and economic growth; Energy efficiency; Hydropower; Wind energy; Solar energy; Nuclear energy; Biomass and biofuels; Energy storage; Hydrocarbons; Gas production; Processing of oil and gas; Energy conversion; Energy savings; Energy in the built environment; Energy networks; Pipelines; Energy balance; Energy economics; Heat, pumping systems; Environmental risk; Safety management; Emissions; C-02 separation and storage; Imbedded energy; Energy and transport; Energy use in industry; Energy transmission and distribution; Energy industry efficiency; Energy security; Training in energy and sustainability.

Advances in Design, Simulation and Manufacturing -

Vitalii Ivanov 2018-06-15

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.

Advanced Manufacturing and Materials Science - Kurian Antony 2018-05-31

This book presents selected papers from the international conference on advanced manufacturing and materials sciences (ICAMMS 2018). The papers reflect 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.

Recent Advances in Material Sciences - Satish Pujari 2019-08-06

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 a useful reference for students, researchers, and professionals working in the

field of materials science and engineering.

Proceedings of the 6th International Conference on Industrial Engineering (ICIE 2020) - Andrey A. Radionov 2021-03-26

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.