Iso 14224 2006 Edition

This book constitutes the thoroughly refereed proceedings of three international workshops held in Rome, Italy, in June 2019, associated with the 31st International Conference on Advanced Information Systems Engineering, CAiSE 2019. These workshops were: COGNISE, The 7th International Workshop on Cognitive Aspects of Information Systems Engineering KET4DF, First International Workshop on Key Enabling Technologies for Digital Factories BIOC&FAISE, Joint Workshop on Blockchains for Inter-Organizational Collaboration and Felxible Advanced Information Systems The total of 19 papers presented in this volume were carefully reviewed and selected from 39 submissions.

This book presents a risk management framework designed to achieve better decisions and more desirable outcomes. It presents an in-depth discussion of some fundamental principles of risk management related to the use of expected values, uncertainty handling, and risk acceptance criteria. Several examples from the offshore petroleum industry are included to illustrate the use of the framework, but it can also be applied in other areas.

This thesis introduces a successfully designed and commissioned intelligent health monitoring system, specifically for use on any industrial robot, which is able to predict the onset of faults in the joints of the geared transmissions. However the developed embedded wireless condition monitoring system leads itself very well for applications on any power transmission

equipment in which the loads and speeds are not constant, and access is restricted. As such this provides significant scope for future development. Three significant achievements are presented in this thesis. First, the development of a condition monitoring algorithm based on vibration analysis of an industrial robot for fault detection and diagnosis. The combined use of a statistical control chart with time-domain signal analysis for detecting a fault via an arm-mounted wireless processor system represents the first stage of fault detection. Second, the design and development of a sophisticated embedded microprocessor base station for online implementation of the intelligent condition monitoring algorithm, and third, the implementation of a discrete wavelet transform, using an artificial neural network, with statistical feature extraction for robot fault diagnosis in which the vibration signals are first decomposed into eight levels of wavelet coefficients. Phase 1 of the EPSRC SUPERGEN Wind programme began in March 2006 and work continued under Phase 2 until March 2014. The strategic aim was to re-establish a strong research community in wind energy technologies, across the UK's leading academic and industrial research organisations. UK Wind Energy Technologies gives a comprehensive overview of the range of wind energy research undertaken in the UK under Phases 1 & 2 to achieve this goal. Specific topics covered in the book include: wind resource assessment, turbine array layout, environmental interactions, control of turbines, drive train reliability and condition monitoring, turbine array electrical connection, power transmission to grid,

assessment of operations and maintenance strategies, and the analysis of turbine foundations and structures. Since the completion of Phase 2 the Supergen Wind consortium partners have formed a networking Hub, which is now the principal national coordinating body for academic research into wind energy in the UK. This book will be of interest to researchers and engineers from industry and academia and also provides workers from other countries with an overview of the range of activity within the UK resulting from the SUPERGEN Wind programme to date.

Analysis, Modelling, Calculations and Case Studies

Advanced Maintenance Modelling for Asset Management

Proceedings of the AHFE 2016 International Conference on Human Factors, Software, and Systems Engineering, July 27-31, 2016, Walt Disney World ® , Florida, USA

Guidelines for Safe Automation of Chemical Processes

Reliability, Risk, and Safety, Three Volume Set

Proceedings of the First World Congress on Engineering Asset Management (WCEAM) 2006

中国标准化

Safety and Reliability of Complex Engineered Systems contains the Proceedings of the 25th European Safety and Reliability Conference, ESREL 2015, held 7-10 September 2015 in Zurich, Switzerland. It includes about 570 papers accepted for presentation at the conference. These contributions focus on theories and methods in the area of risk,

safety and

This book constitutes the refereed proceedings of the 11th International Conference on Applications of Natural Language to Information Systems, NLDB 2006, held in Klagenfurt, Austria in May/June 2006 as part of UNISCON 2006. The book presents 17 revised full papers and 5 revised short papers, organized in topical sections on concepts extraction and ontology, ontologies and task repository utilization, query processing, information retrieval and dialog processing, and NLP techniques.

This book promotes and describes the application of objective and effective decision making in asset management based on mathematical models and practical techniques that can be easily implemented in organizations. This comprehensive and timely publication will be an essential reference source, building on available literature in the field of asset management while laying the groundwork for further research breakthroughs in this field. The text provides the resources necessary for managers, technology developers, scientists and engineers to adopt and implement better decision making based on models and techniques that contribute to recognizing

risks and uncertainties and, in general terms, to the important role of asset management to increase competitiveness in organizations. Business industries depend on advanced models and tools that provide an optimal and objective decision-making process, ultimately guaranteeing improved competitiveness, reducing risk, and eliminating uncertainty. Thanks in part to the digital era of the modern world, reducing these conditions has become much more manageable. Advanced Models and Tools for Effective Decision Making Under Uncertainty and Risk Contexts provides research exploring the theoretical and practical aspects of effective decision making based not only on mathematical techniques, but also on those technological tools that are available nowadays in the Fourth Industrial Revolution. Featuring coverage on a broad range of topics such as industrial informatics, knowledge management, and production planning, this book is ideally designed for decision makers, researchers, engineers, academicians, and students.

Advanced Information Systems Engineering Workshops

Proceedings of the 13th International Marine Design Conference (IMDC 2018), June 10-14,

2018, Helsinki, Finland
Safety and Reliability – Safe Societies in a Changing World
CAiSE 2019 International Workshops, Rome, Italy, June 3-7, 2019, Proceedings
Proceedings of ESREL 2018, June 17-21, 2018, Trondheim, Norway
ESREL 2015
Performance Management for the Oil, Gas, and Process Industries

Quando escrevemos sobre medidas de desempenho estamos dando ênfase a cadeia total da empresa, no que tange a ganhos de produtividade, alavancagem de capital, serviço diferenciado ao cliente, competitividade do produto, velocidade em produzir, integração com os fornecedores, agilidade na entrega do material base pelos parceiros da cadeia e depois a entrega com a pontualidade exigida. Todos esses passos serão diferenciados se os atores envolvidos souberem diferenciar o que agrega ou não valor em cada atividade realizada, para isso temos que medir, daí o principal diferencial da obra.

This book considers all aspects of performability engineering, providing a holistic view of the activities

associated with a product throughout its entire life cycle of the product, as well as the cost of minimizing the environmental impact at each stage, while maximizing the performance. Building on the editor's previous Handbook of Performability Engineering, it explains how performability engineering provides us with a framework to consider both dependability and sustainability in the optimal design of products, systems and services, and explores the role of performability in energy and waste minimization, raw material selection, increased production volume, and many other areas of engineering and production. The book discusses a range of new ideas, concepts, disciplines, and applications in performability, including smart manufacturing and Industry 4.0; cyber-physical systems and artificial intelligence; digital transformation of railways; and asset management. Given its broad scope, it will appeal to researchers, academics, industrial practitioners and postgraduate students involved in manufacturing, engineering, and system

and product development.
It is with great pleasure that we welcome you to the inaugural World Congress on Engineering Asset Management (WCEAM) being held at the Conrad Jupiters Hotel on the Gold Coast from July 11 to 14, 2006. More than 170 authors from 28 countries have contributed over 160 papers to be presented over the first three days of the conference. Day four will be host to a series of workshops devoted to the practice of various aspects of Engineering Asset Management. WCEAM is a new annual global forum on the various multidisciplinary aspects of Engineering Asset Management. It deals with the presentation and publication of outputs of research and development activities as well as the application of knowledge in the practical aspects of: strategic asset management risk management in asset management design and life-cycle integrity of physical assets asset performance and level of service models financial analysis methods for physical assets reliability modelling and prognostics information systems and knowledge management asset

data management, warehousing and mining condition monitoring and intelligent maintenance intelligent sensors and devices regulations and standards in asset management human dimensions in integrated asset management education and training in asset management and performance management in asset management. We have attracted academics, practitioners and scientists from around the world to share their knowledge in this important emerging transdiscipline that impacts on almost every aspect of daily life.

The VETOMAC-X Conference covered a holistic plethora of relevant topics in vibration and engineering technology including condition monitoring, machinery and structural dynamics, rotor dynamics, experimental techniques, finite element model updating, industrial case studies, vibration control and energy harvesting, and signal processing. These proceedings contain not only all of the nearly one-hundred peer-reviewed presentations from authors representing more than twenty countries, but also include six invited lectures from

renowned experts: Professor K. Gupta, Mr W. Hahn, Professor A.W. Lees, Professor John Mottershead, Professor J.S. Rao, and Dr P. Russhard. This work is of interest to researchers and practitioners alike, and is an essential book for most of libraries of higher academic institutes.

Petroleum, Petrochemical and Natural Gas Industries

Beyond the Horizon

Collection and Exchange of Reliability and Maintenance Data for Equipment

Engineering Asset Management

The Handbook of Reliability, Maintenance, and System Safety through Mathematical Modeling

Root Cause Analysis

Marine Design XIII

Natural Products: Discourse, Diversity andDesign provides an informative and accessible overview ofdiscoveries in the area of natural products in the genomic era,bringing together advances across the kingdoms. As genomicsdata makes it increasingly clear that the genomes of microbes andplants contain far more genes for natural product synthesis thanhad been predicted from the numbers of previously identifiedmetabolites, the potential of these

organisms to synthesize diversenatural products is likely to be far greater than previouslyenvisaged. Natural Products addresses notonly the philosophical questions of the natural role of thesemetabolites, but also the evolution of single and multiplepathways, and how these pathways and products may be harnessed toaid discovery of new bioactives and modes of action. Edited by recognized leaders in the fields of plant andmicrobial biology, bioorganic chemistry and natural productschemistry, and with contributions from researchers at top labsaround the world, Natural Products isunprecedented in its combination of disciplines and the breadth ofits coverage. Natural Produces: Discourse, Diversity andDesign will appeal to advanced students andexperienced researchers, from academia to industry, in diverseareas including ecology, industrial biotechnology, drug discovery,medicinal chemistry, agronomy, crop improvement, and naturalproduct chemistry. Safety and Reliability – Safe Societies in a Changing World collects the papers presented at the 28th European Safety and Reliability Conference, ESREL 2018 in Trondheim, Norway, June 17-21, 2018. The contributions cover a wide range of methodologies and application areas for safety and reliability that contribute to safe societies in a changing world. These methodologies and applications include: - foundations of risk and reliability assessment and management -

mathematical methods in reliability and safety - risk assessment - risk management - system reliability - uncertainty analysis - digitalization and big data - prognostics and system health management - occupational safety - accident and incident modeling - maintenance modeling and applications - simulation for safety and reliability analysis - dynamic risk and barrier management - organizational factors and safety culture - human factors and human reliability - resilience engineering - structural reliability - natural hazards - security - economic analysis in risk management Safety and Reliability – Safe Societies in a Changing World will be invaluable to academics and professionals working in a wide range of industrial and governmental sectors: offshore oil and gas, nuclear engineering, aeronautics and aerospace, marine transport and engineering, railways, road transport, automotive engineering, civil engineering, critical infrastructures, electrical and electronic engineering, energy production and distribution, environmental engineering, information technology and telecommunications, insurance and finance, manufacturing, marine transport, mechanical engineering, security and protection, and policy making.

There is no easy answer to the question, What is RCA? Some will give a general idea of what Root Cause Analysis (RCA) is designed to

accomplish, while others will advocate a specific approach. In this third edition of the best-selling Root Cause Analysis: Improving Performance for Bottom-Line Results, acclaimed experts Robert and Ke
During the last decade there have been increasing societal concerns over sustainable developments focusing on the conservation of the environment, the welfare and safety of the individual and at the same time the optimal allocation of available natural and financial resources. As a consequence the methods of risk and reliability analysis are becomi
Marine Design XIII, Volume 2
Natural Products
Safety, Reliability and Risk Analysis
Ontology Modeling in Physical Asset Integrity Management
Reliability and Maintenance
Risk Management
Techniques and Methods for Complex Industrial Systems

This book comprehensively outlines what a holistic and effective Root Cause Analysis (RCA) system looks like. From the designing of the support infrastructure to the measuring of effectiveness on the bottom-line, this book provides the blueprint for making it happen. While traditionally RCA is viewed as a reactive tool, the authors will show how it can be applied proactively to prevent failures from occurring in the first place. RCA is a key element of any successful Reliability Engineering

initiative. Such initiatives are comprised of equipment, process and human reliability foundations. Human reliability is critical to the success of a true RCA approach. This book explores the anatomy of a failure (undesirable outcome) as well as a potential failure (high risks). Virtually all failures are triggered by errors of omission or commission by human beings. The methodologies described in this book are applicable to any industry because the focus is on the human being's ability to think through why things go wrong, not on the industry or the nature of the failure. This book correlates reliability to safety as well as human performance improvement efforts. The author has provided a healthy balance between theory and practical application, wrapping up with case studies demonstrating bottom-line results. Features Outlines in detail every aspect of an effective RCA "system" Displays appreciation for the role of understanding the physics of a failure as well as the human and system's contribution Demonstrates the role of RCA in a comprehensive Asset Performance Management (APM) system Explores the correlation between Reliability Engineering and safety Integrates the concepts of Human Performance Improvement, Learning Teams, and Human Error Reduction approaches into RCA
Risk, Reliability and Safety contains papers describing innovations in theory and practice contributed to the scientific programme of the European Safety and Reliability conference (ESREL 2016), held at the University of Strathclyde in Glasgow, Scotland (25–29

September 2016). Authors include scientists, academics, practitioners, regulators and other key individuals with expertise and experience relevant to specific areas. Papers include domain specific applications as well as general modelling methods. Papers cover evaluation of contemporary solutions, exploration of future challenges, and exposition of concepts, methods and processes. Topics include human factors, occupational health and safety, dynamic and systems reliability modelling, maintenance optimisation, uncertainty analysis, resilience assessment, risk and crisis management.

This book presents cutting-edge applications of, and up-to-date research on, ontology engineering techniques in the physical asset integrity domain. Though a survey of state-of-the-art theory and methods on ontology engineering, the authors emphasize essential topics including data integration modeling, knowledge representation, and semantic interpretation. The book also reflects novel topics dealing with the advanced problems of physical asset integrity applications such as heterogeneity, data inconsistency, and interoperability existing in design and utilization. With a distinctive focus on applications relevant in heavy industry, Ontology Modeling in Physical Asset Integrity Management is ideal for practicing industrial and mechanical engineers working in the field, as well as researchers and graduate concerned with ontology engineering in physical systems life cycles.

The continued use of coal as a means of generating electricity and an increasing demand for cleaner, more

efficient energy production has led to advances in power plant technology. Ultra-supercritical coal power plants reviews the engineering, operation, materials and performance of ultra-supercritical coal power plants. Following a chapter introducing advanced and ultra-supercritical coal power plants, part one goes on to explore the operating environments, materials and engineering of ultra-supercritical coal power plants. Chapters discuss the impacts of steam conditions on plant materials and operation, fuel considerations and burner design, and materials and design for boilers working under supercritical steam conditions. Chapters in part two focus on improving ultra-supercritical coal power plant performance and operability. Ash fouling, deposition and slagging in ultra-supercritical coal power plants are highlighted along with pollution control measures and the estimation, management and extension of the life of ultra-supercritical power plants. Further chapters provide an economic and engineering analysis of a 700°C advanced ultra-supercritical pulverised coal power plant and discuss CO2 capture-ready ultra-supercritical coal power plants. Ultra-supercritical coal power plants is a comprehensive technical reference for power plant operators and engineers, high-temperature materials scientists, professionals in the power industry who require an understanding of ultra-supercritical coal power plants and researchers and academics interested in the field. Provides a comprehensive reference on the developments, materials, design and operation of ultra-supercritical

power plant Considers the degradation issues affecting this type of plant, as well as emissions control and CO2 capture technology; improved plant controls critical to improved operation and environmental performance Contains operational assessments for plant safety, plant life management, and plant economics

A Practical Approach

Catalogue

Improving Performance for Bottom-Line Results, Third Edition

Advances in Human Factors, Software, and Systems Engineering

Advanced Models and Tools for Effective Decision Making Under Uncertainty and Risk Contexts

Discourse, Diversity, and Design

Proceedings of ESREL 2016 (Glasgow, Scotland, 25-29 September 2016)

Handbook and reference for industrial statisticians and system reliability engineers System Reliability Theory: Models, Statistical Methods, and Applications, Third Edition presents an updated and revised look at system reliability theory, modeling, and analytical methods. The new edition is based on feedback to the second edition from numerous students, professors, researchers, and industries around the world. New sections and chapters are added together with new real-world industry examples, and standards and problems are revised and updated. System Reliability Theory covers a broad and deep

array of system reliability topics, including: · In depth discussion of failures and failure modes · The main system reliability assessment methods · Common-cause failure modeling · Deterioration modeling · Maintenance modeling and assessment using Python code · Bayesian probability and methods · Life data analysis using R Perfect for undergraduate and graduate students taking courses in reliability engineering, this book also serves as a reference and resource for practicing statisticians and engineers. Throughout, the book has a practical focus, incorporating industry feedback and real-world industry problems and examples.

Amid a plethora of challenges, technological advances in science and engineering are inadvertently affecting an increased spectrum of today's modern life. Yet for all supplied products and services provided, robustness of processes, methods, and techniques is regarded as a major player in promoting safety. This book on systems reliability, which equally includes maintenance-related policies, presents fundamental reliability concepts that are applied in a number of industrial cases. Furthermore, to alleviate potential cost and time-specific bottlenecks, software engineering and systems engineering incorporate approximation models, also referred to as meta-processes, or surrogate models to reproduce a predefined set of problems aimed at enhancing safety, while

minimizing detrimental outcomes to society and the environment.
This book provides a platform for addressing human factors challenges in software and systems engineering, both pushing the boundaries of current research and responding to new challenges, fostering new research ideas in the process. This book is intended for researchers, professional software and systems engineers, and human factors and human systems integration experts to help them address societal challenges for next-generation systems with applications for meeting them. Topics include evolutionary and complex systems, human systems integration, smart grids and infrastructure, workforce training requirements, systems engineering education, and defense and aerospace. Based on the AHFE 2016 International Conference on Human Factors, Software, and Systems Engineering, held on July 27-31, 2016, in Walt Disney World®, Florida, USA. This book represents an inspiring guide for all researchers and professionals in the field of Human Factors, Software, and Systems Engineering.
Marine Design XIII collects the contributions to the 13th International Marine Design Conference (IMDC 2018, Espoo, Finland, 10-14 June 2018). The aim of this IMDC series of conferences is to promote all aspects of marine design as an engineering discipline. The focus is on key design challenges and opportunities in the area of current maritime

technologies and markets, with special emphasis on: • Challenges in merging ship design and marine applications of experience-based industrial design • Digitalisation as technological enabler for stronger link between efficient design, operations and maintenance in future • Emerging technologies and their impact on future designs • Cruise ship and icebreaker designs including fleet compositions to meet new market demands To reflect on the conference focus, Marine Design XIII covers the following research topic series: •State of art ship design principles - education, design methodology, structural design, hydrodynamic design; •Cutting edge ship designs and operations - ship concept design, risk and safety, arctic design, autonomous ships; •Energy efficiency and propulsions - energy efficiency, hull form design, propulsion equipment design; •Wider marine designs and practices - navy ships, offshore and wind farms and production. Marine Design XIII contains 2 state-of-the-art reports on design methodologies and cruise ships design, and 4 keynote papers on new directions for vessel design practices and tools, digital maritime traffic, naval ship designs, and new tanker design for arctic. Marine Design XIII will be of interest to academics and professionals in maritime technologies and marine design.

Theory and Applications

Models, Statistical Methods, and Applications

Materials, Technologies and Optimisation

Vibration Engineering and Technology of Machinery
ISO 14224:2006 (Identical), Petroleum, Petrochemical and Natural Gas Industries : Collection and Exchange of Reliability and Maintenance Data for Equipment
11th International Conference on Applications of Natural Language to Information Systems, NLDB 2006, Klagenfurt, Austria, May 31 - June 2, 2006, Proceedings
Safety and Reliability of Complex Engineered Systems

Containing papers presented at the 18th European Safety and Reliability Conference (Esrel 2009) in Prague, Czech Republic, September 2009, Reliability, Risk and Safety Theory and Applications will be of interest for academics and professionals working in a wide range of industrial and governmental sectors, including Aeronautics and Aerospace, Aut

This proceedings of the 13th World Congress on Engineering Asset Management covers a range of topics that are timely, relevant and practically important in the modern digital era towards safer, cost effective, efficient, and secure engineered assets such as production and manufacturing plants, process facilities, civil structures, equipment, machinery, and infrastructure. It has compiled some pioneering work by domain experts of the global Engineering Asset Management community representing both public and private sectors. The professional coverage of the book includes: Asset management in Industry 4.0; Standards and models; Sustainable assets and

processes; Life cycle perspectives; Smart and safer assets; Applied data science; Workplace safety; Asset health; Advances in equipment condition monitoring; Critical asset processes; and Innovation strategy and entrepreneurship The breadth and depth of these state-of-the-art, comprehensive proceedings make them an excellent resource for asset management practitioners, researchers and academics, as well as undergraduate and postgraduate students.

This book provides, as simply as possible, sound foundations for an in-depth understanding of reliability engineering with regard to qualitative analysis, modelling, and probabilistic calculations of safety and production systems. Drawing on the authors' extensive experience within the field of reliability engineering, it addresses and discusses a variety of topics, including: • Background and overview of safety and dependability studies; • Explanation and critical analysis of definitions related to core concepts; • Risk identification through qualitative approaches (preliminary hazard analysis, HAZOP, FMECA, etc.); • Modelling of industrial systems through static (fault tree, reliability block diagram), sequential (cause-consequence diagrams, event trees, LOPA, bowtie), and dynamic (Markov graphs, Petri nets) approaches; • Probabilistic calculations through state-of-the-art analytical or Monte Carlo simulation techniques; • Analysis, modelling, and calculations of common cause failure and uncertainties; • Linkages and combinations between the various modelling and calculation approaches; • Reliability data collection and

standardization. The book features illustrations, explanations, examples, and exercises to help readers gain a detailed understanding of the topic and implement it into their own work. Further, it analyses the production availability of production systems and the functional safety of safety systems (SIL calculations), showcasing specific applications of the general theory discussed. Given its scope, this book is a valuable resource for engineers, software designers, standard developers, professors, and students. Presents the theory and methodology for reliabilityassessments of safety-critical functions through examples from awide range of applications Reliability of Safety-Critical Systems: Theory andApplications provides a comprehensive introduction toreliability assessments of safety-related systems based onelectrical, electronic, and programmable electronic (E/E/PE)technology. With a focus on the design and development phases ofsafety-critical systems, the book presents theory and methodsrequired to document compliance with IEC 61508 and the associatedsector-specific standards. Combining theory and practical applications, Reliability ofSafety-Critical Systems: Theory and Applications implements keysafety-related strategies and methods to meet quantitative safetyintegrity requirements. In addition, the book details a variety ofreliability analysis methods that are needed during all stages of asafety-critical system, beginning with specification and design andadvancing to operations, maintenance, and modification control. Thekey

categories of safety life-cycle phases are featured, includingstrategies for the allocation of reliability performancerequirements; assessment methods in relation to design; andreliability quantification in relation to operation andmaintenance. Issues and benefits that arise from complex moderntechnology developments are featured, as well as: Real-world examples from large industry facilities with majoraccident potential and products owned by the general public such ascars and tools Plentiful worked examples throughout that provide readers witha deeper understanding of the core concepts and aid in the analysisand solution of common issues when assessing all facets ofsafety-critical systems Approaches that work on a wide scope of applications and can beapplied to the analysis of any safety-critical system A brief appendix of probability theory for reference With an emphasis on how safety-critical functions are introducedinto systems and facilities to prevent or mitigate the impact of anaccident, this book is an excellent guide for professionals,consultants, and operators of safety-critical systems who carry outpractical, risk, and reliability assessments of safety-criticalsystems. Reliability of Safety-Critical Systems: Theory andApplications is also a useful textbook for courses inreliability assessment of safety-critical systems and reliabilityengineering at the graduate-level, as well as for consultingcompanies offering short courses in reliability assessment ofsafety-critical systems.

System Reliability Theory

Safety and Reliability in the Oil and Gas Industry
Reliability of Safety-Critical Systems
Proceedings of VETOMAC X 2014, held at the University of Manchester, UK, September 9-11, 2014
Design of an Intelligent Embedded System for Condition Monitoring of an Industrial Robot
Prostar Nga List of Lights, Radio AIDS and Fog Signals 2006 Norway, Iceland, and the Arctic Ocean
Compression Machinery for Oil and Gas

This is volume 2 of a 2-volume set. Marine Design XIII collects the contributions to the 13th International Marine Design Conference (IMDC 2018, Espoo, Finland, 10-14 June 2018). The aim of this IMDC series of conferences is to promote all aspects of marine design as an engineering discipline. The focus is on key design challenges and opportunities in the area of current maritime technologies and markets, with special emphasis on: □ Challenges in merging ship design and marine applications of experience-based industrial design □ Digitalisation as technological enabler for stronger link between efficient design, operations and maintenance in future □ Emerging technologies and their impact on future designs □ Cruise ship and icebreaker designs including fleet compositions to meet new market demands To reflect on the conference focus, Marine Design XIII covers the following research topic series: □State of art ship design principles - education, design methodology, structural design, hydrodynamic design; □Cutting edge ship designs and operations - ship concept design, risk and safety, arctic design, autonomous ships; □Energy efficiency and propulsions - energy efficiency, hull form design, propulsion equipment design; □Wider marine designs and practices - navy ships, offshore and wind farms and production. Marine Design XIII contains 2 state-of-the-art reports on design

methodologies and cruise ships design, and 4 keynote papers on new directions for vessel design practices and tools, digital maritime traffic, naval ship designs, and new tanker design for arctic. Marine Design XIII will be of interest to academics and professionals in maritime technologies and marine design.
This book provides designers and operators of chemical process facilities with a general philosophy and approach to safe automation, including independent layers of safety. An expanded edition, this book includes a revision of original concepts as well as chapters that address new topics such as use of wireless automation and Safety Instrumented Systems. This book also provides an extensive bibliography to related publications and topic-specific information.
La revista decana de la prensa profesional de la construcción, líder del sector. Proporciona a los profesionales y empresas el conocimiento necesario para el desarrollo de sus proyectos y obras, tanto en su aspecto de edificación residencial, como en el industrial y comercial. Está dirigida a fabricantes y prescriptores; como arquitectos, aparejadores, instaladores, técnicos.
Performance Management for the Oil, Gas, and Process Industries: A Systems Approach is a practical guide on the business cycle and techniques to undertake step, episodic, and breakthrough improvement in performance to optimize operating costs. Like many industries, the oil, gas, and process industries are coming under increasing pressure to cut costs due to ongoing construction of larger, more integrated units, as well as the application of increasingly stringent environmental policies. Focusing on the "value adder" or "revenue generator" core system and the company direction statement, this book describes a systems approach which assures significant sustainable improvements in the business and operational performance specific to the oil, gas, and process industries. The book will enable the reader to:

utilize best practice principles of good governance for long term performance enhancement; identify the most significant performance indicators for overall business improvement; apply strategies to ensure that targets are met in agreed upon time frames. Describes a systems approach which assures significant sustainable improvements in the business and operational performance specific to the oil, gas, and process industries Helps readers set appropriate and realistic short-term/ long-term targets with a pre-built facility health checker Elucidates the relationship between PSM, OHS, and Asset Integrity with an increased emphasis on behavior-based safety Discusses specific oil and gas industry issues and examples such as refinery and gas plant performance initiatives and hydrocarbon accounting

Reliability Assessment of Safety and Production Systems

Handbook of Advanced Performability Engineering

Proceedings of the 13th World Congress on Engineering Asset Management

UK Wind Energy Technologies

Ultra-Supercritical Coal Power Plants

A Systems Approach

Arte y Cemento

Compression Machinery for Oil and Gas is the go-to source for all oil and gas compressors across the industry spectrum. Covering multiple topics from start to finish, this reference gives a complete guide to technology developments and their applications and implementation, including research trends. Including information on relevant standards and developments in subsea and downhole compression, this book aids engineers with a handy, single resource that will help them stay up-to-date on the compressors needed for today's oil and gas

applications. Provides an overview of the latest technology, along with a detailed discussion of engineering Delivers on the efficiency, range and limit estimations for machines Pulls together multiple contributors to balance content from both academics and corporate research

The Handbook of Reliability, Maintenance, and System Safety through Mathematical Modeling discusses the many factors affect reliability and performance, including engineering design, materials, manufacturing, operations, maintenance, and many more. Reliability is one of the fundamental criteria in engineering systems design, with maintenance serving as a way to support reliability throughout a system's life. Addressing these issues requires information, modeling, analysis and testing. Different techniques are proposed and implemented to help readers analyze various behavior measures (in terms of the functioning and performance) of systems. Enables mathematicians to convert any process or system into a model that can be analyzed through a specific technique Examines reliability and mathematical modeling in a variety of disciplines, unlike competitors which typically examine only one Includes a table of contents with simple to complex examples, starting with basic models and then refining modeling approaches step-by-step

An Insightful Guide to Avoiding Offshore Oil- and Gas-Industry Disaster Designing, constructing, operating, and maintaining offshore oil and gas industry equipment and systems can sometimes result in accidents, injuries, and

other serious problems. Safety and Reliability in the Oil and Gas Industry: A Practical Approach focuses on oil and gas industry equipment reliability, offers useful and up-to-date information on the subject, and covers in a single volume the most common safety and reliability engineering issues in the oil and gas industry. The book introduces the latest developments in the area, and provides relevant methods and approaches. It also presents important aspects of various case studies on major accidents in the oil and gas industry, and considers human factors that contribute to accidents and fatalities in the area of oil and gas. Additionally, this book describes: Mathematical concepts Oil and gas industry equipment reliability characteristics Accident data and analysis Mathematical models used for performing safety and reliability-related analyses in the industry Safety and Reliability in the Oil and Gas Industry: A Practical Approach covers important aspects of safety in the offshore oil and gas industry. A reference designed with engineering professionals in mind, this book can also be used in oil- and gas-industry-related courses, and serves as a guide for anyone concerned with safety and reliability in the area of oil and gas.

Natural Language Processing and Information Systems

Improving Performance for Bottom-Line Results, Fifth Edition

With Applications from the Offshore Petroleum Industry

Engineering Assets and Public Infrastructures in the Age of Digitalization

Engenharia de Sistemas Logísticos e Cadeias de Suprimentos
Risk, Reliability and Safety: Innovating Theory and Practice
An Overview of Cases