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**BASIC CIVIL AND MECHANICAL ENGINEERING**

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**BASIC MECHANICAL ENGINEERING**

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*New Age International* **The Book Provides A Glimpse Of The Fascinating Field Of Mechanical Engineering To The Entrants To Engineering Colleges. It Gives An Insight Into The Major Areas Of Mechanical Engineering, Like Power Production, Energy Alternatives, Production Alternatives And The Latest Computer Controlled Machine Tools. The Book Is Made Interesting With Numerous Sketches And Schematics - A Definite Advantage In Understanding The Subject.**

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**ANALYSIS AND DESIGN OF PLATED STRUCTURES**

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**VOLUME 1: STABILITY**

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*Woodhead Publishing* **Analysis and Design of Plated Structures: Stability, Second Edition covers the latest developments in new plate solutions and structural models for plate analysis. Completely revised and updated by its distinguished editors and international team of contributors, this edition also contains new chapters on GBT-based stability analysis**

and the finite strip and direct strength method (DSM). Other sections comprehensively cover bracing systems, storage tanks under wind loading, the analysis and design of light gauge steel members, applications of high strength steel members, cold-formed steel pallet racks, and the design of curved steel bridges. This is a comprehensive reference for graduate students, researchers and practicing engineers in the fields of civil, structural, aerospace, mechanical, automotive and marine engineering. Features new chapters on the stability behavior of composite plates such as laminated composite, functionally graded, and steel concrete composite plate structures Includes newly developed numerical simulation methods and new plate models Provides generalized beam theory for analyzing thin-walled structures

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## **BASIC CIVIL ENGINEERING**

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## **LABORATORY HANDBOOK ON BIOCHEMISTRY**

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*PHI Learning Pvt. Ltd.* This systematically designed laboratory handbook elucidates a number of techniques which help students carry out various experiments in the field of biochemistry. The experimental protocols described in this book have been standardized and performed in the authors' own laboratory. It is basically intended for the undergraduate and postgraduate students of life sciences (biochemistry, microbiology, biotechnology, plant biotechnology, animal biotechnology, botany and zoology) and engineering (biotechnology and biomedical) for their laboratory courses. The students usually have to refer to many journals and books to find the right procedure for performing experiments, hence this handbook is an attempt to provide them with the frequently used methods in a handy format, including explanations of principles, procedures and interpretations of results of the experiments. Now, in its second edition, the book introduces ten new experiments in a step-by-step procedural format under In Vitro Enzymatic Anti-oxidant Assays explaining Determination of Nitric Oxide Radical Scavenging Activity, Determination of Catalase Activity, Determination of Laccase Activity and Concentration and Diafiltration. **KEY FEATURES** • Provides a general procedure of the experiments in an easy-to-understand tabulated format. • Presents the physiological importance of bio-components like amino acids, uric acid, carbohydrates, proteins, etc. in the human body as an added feature. • Gives information on preparation of laboratory reagents in separate appendices. • Provides illustrations for better understanding of the experiments. **TARGET AUDIENCE** • B.Sc. / M.Sc. Life sciences (Biochemistry, Microbiology, Biotechnology, Plant Biotechnology, Animal Biotechnology, Botany and Zoology) • B.Tech (Biotechnology and

Biomedical Engineering)

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## **CYBER-PHYSICAL SYSTEMS AND INDUSTRY 4.0**

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### **PRACTICAL APPLICATIONS AND SECURITY MANAGEMENT**

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*CRC Press* This new work explores the growth of information and communication technologies with an emphasis on cyber-physical systems and security management of these systems. This volume discusses and analyzes the various effective practical applications of CPS, which involves the integration of the physical process with embedded computation and network monitoring along with feedback loops from physical systems. The authors identify the best set of applications and discuss the drawbacks of existing systems. The book provides a broad outlook on the applications of cyber-physical systems along with case studies and examples in healthcare, automotive electronics, industrial automation, environment monitoring, agriculture, and applications in civil and mechanical sectors. Topics include using an energy management system in smart grids, implementing an intelligent traffic management system, warehouse tracking and monitoring, medical cyber-physical systems security, remote healthcare monitoring, and more.

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### **STATISTICS AND PROBABILITY FOR ENGINEERING APPLICATIONS**

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*Elsevier* **Statistics and Probability for Engineering Applications** provides a complete discussion of all the major topics typically covered in a college engineering statistics course. This textbook minimizes the derivations and mathematical theory, focusing instead on the information and techniques most needed and used in engineering applications. It is filled with practical techniques directly applicable on the job. Written by an experienced industry engineer and statistics professor, this book makes learning statistical methods easier for today's student. This book can be read sequentially like a normal textbook, but it is designed to be used as a handbook, pointing the reader to the topics and sections pertinent to a particular type of statistical problem. Each new concept is clearly and briefly described, whenever possible by relating it to previous topics. Then the student is given carefully chosen examples to deepen understanding of the basic ideas and how they are applied in engineering. The examples and case studies are taken from real-world engineering problems and use real data. A number of practice problems are provided for each section, with answers in the back for selected problems. This book will appeal to engineers in the entire engineering spectrum (electronics/electrical, mechanical, chemical, and civil engineering); engineering students and students taking

computer science/computer engineering graduate courses; scientists needing to use applied statistical methods; and engineering technicians and technologists. \* Filled with practical techniques directly applicable on the job \* Contains hundreds of solved problems and case studies, using real data sets \* Avoids unnecessary theory

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### **ENGINEERING MECHANICS (FOR ANNA)**

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*Vikas Publishing House* **Mechanics is the fundamental branch of physics whose two offshoots, static and dynamics, find varied application in thermodynamics, electricity and electromagnetism. Engineering Mechanics is a simple yet insightful textbook on the concepts and principles of mechanics in the field of engineering. Written in a comprehensive manner, Engineering Mechanics greatly elaborates on the tricky aspects of the motion of particle and its cause, forces and vectors, lifting machines and pulleys, inertia and projectiles, juxtaposition them with relevant, neat illustrations, which make the science of engineering mechanics an interesting study for aspiring engineers. The authors have packaged the book, Engineering Mechanics, with a huge number of theoretical questions, numerical problems and a highly informative objective-type question bank. The book aspires to cater to the learning needs of BE/BTech students and also those preparing for competitive exams.**

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### **MODELING AND SIMULATION TECHNIQUES IN STRUCTURAL ENGINEERING**

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*IGI Global* **The development of new and effective analytical and numerical models is essential to understanding the performance of a variety of structures. As computational methods continue to advance, so too do their applications in structural performance modeling and analysis. Modeling and Simulation Techniques in Structural Engineering presents emerging research on computational techniques and applications within the field of structural engineering. This timely publication features practical applications as well as new research insights and is ideally designed for use by engineers, IT professionals, researchers, and graduate-level students.**

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### **BASIC MECHANICAL ENGINEERING**

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*Laxmi Publications*

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### **S. CHAND'S BASICS OF CIVIL ENGINEERING (FOR B.E. 1ST SEMESTER OF RTM UNIVERSITY, NAGPUR)**

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*S. Chand Publishing* **Basics of Civil Engineering is considered is considered as one of the basic subjects for all the**

engineering students of all branches. The contents of this book are framed in such a way that will be useful to the technocrats who are working on the administrative positions to deal with the basic knowledge of civil engineering.

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## **MATERIALS, DESIGN, AND MANUFACTURING FOR SUSTAINABLE ENVIRONMENT**

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### **SELECT PROCEEDINGS OF ICMDMSE 2020**

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*Springer Nature* This book comprises the select proceedings of the International Conference on Materials, Design and Manufacturing for Sustainable Environment (ICMDMSE 2020). The primary focus is on emerging materials and cutting-edge manufacturing technologies for sustainable environment. The book covers a wide range of topics such as advanced materials, vibration, tribology, finite element method (FEM), heat transfer, fluid mechanics, energy engineering, additive manufacturing, robotics and automation, automobile engineering, industry 4.0, MEMS and nanotechnology, optimization techniques, condition monitoring, and new paradigms in technology management. Contents of this book will be useful to students, researchers, and practitioners alike.

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## **ANALYSIS AND DESIGN OF PLATED STRUCTURES**

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### **DYNAMICS**

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*Elsevier* Plated structures are widely used in many engineering constructions ranging from aircraft to ships and from off-shore structures to bridges and buildings. Given their diverse use in severe dynamic loading environments, it is vital that their dynamic behaviour is analysed and understood. Analysis and design of plated structures Volume 2: Dynamics provides a concise review of the most recent research in the area and how it can be applied in the field. The book discusses the modelling of plates for effects such as transverse shear deformation and rotary inertia, assembly of plates in forming thin-walled members, and changing material properties in composite, laminated and functionally graded plates. Various recent techniques for linear and nonlinear vibration analysis are also presented and discussed. The book concludes with a hybrid strategy suitable for parameter identification of plated structures and hydroelastic analysis of floating plated structures. With its distinguished editors and team of international contributors, Analysis and design of plated structures Volume 2: Dynamics is an invaluable reference source for engineers, researchers and academics involved in the analysis and design of plated structures. It also provides a companion volume to Analysis and design of plated structures Volume 1: Stability. The second of two volumes on plated structures Provides a concise

review of the most recent research in the research of plated structures Discusses modelling of plates for specific effects

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## **DIRECTORY OF LIBRARIES IN INDIA**

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*Atlantic Publishers & Dist* **The Third Revised And Enlarged Edition Of The Directory Of Libraries In India Contains Much Larger Number Of Addresses Of Libraries In India. Special Chapters Have Been Added On Addresses Of Institutions Offering Courses On Important Subjects Like Management, Medicine And Nursing, Engineering And Technology, Architecture, Law, Sports Etc.It Is Hoped That The Directory In Its Present Form Would Be Found Highly Useful By Publishers And Booksellers In Mailing Their Publicity Material. The Directory Would Also Be Useful To Librarians And Others Concerned With Educational Institutions And Organisations For Getting Information About Libraries In India.**

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## **MECHANICAL AND DYNAMIC PROPERTIES OF BIOCOMPOSITES**

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*John Wiley & Sons* **Mechanical and Dynamic Properties of Biocomposites A comprehensive review of the properties of biocomposites and their applications Mechanical and Dynamic Properties of Biocomposites offers a comprehensive overview of the mechanical and dynamic properties of biocomposites and natural fiber-reinforced polymer composites. This essential resource helps with materials selection in the development of products in the fields of automotive and aerospace engineering as well as the construction of structures in civil engineering. With contributions from a panel of experts in the field, the book reviews the mechanical and damping properties of lingo-cellulosic fibers and their composites. The authors highlight the factors that contribute to the improved properties and their advancements in modern industrialization. Besides, the book is designed to (a) introduce the mechanical and damping properties of lingo-cellulosic fibers and their composites, (b) factors that contribute to improvement in properties such as hybridization, chemical treatment of natural fibers, additive or fillers, etc. and (c) the real-time applications with case studies and future prospects. Key features: Presents viable alternatives to conventional composites Examines the environmentally friendly and favorable mechanical properties of biocomposites Reviews the potential applications of biocomposites in the fields of automotive, mechanical and civil engineering Brings together in one comprehensive resource information found scattered across the professional literature Written for materials scientists, polymer chemists, chemists in industry, civil engineers, construction engineers, and engineering scientists in industry, Mechanical and Dynamic Properties of Blocomposites offers a compreshensive review of the properties and**

applications of biocomposites.

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## **ENGINEERING MECHANICS**

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The second edition of Engineering Mechanics is specially designed as a textbook for undergraduate students of engineering. It provides a detailed and holistic treatment of the basic theories and principles of both statics and dynamics. Starting from the fundamental concepts of force and equilibrium along with free body diagrams, this book comprehensively covers the various analytical aspects of rigid body mechanics, including a suitable discourse on simple lifting machines. Within each chapter, the simpler topics and problems precede those that are more complex and advanced. Each chapter starts with the key concepts and gradually builds up on the advanced topics using detailed and easy-to-understand illustrations.

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## **THE CIVIL ENGINEERING HANDBOOK**

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*CRC Press* First published in 1995, the award-winning Civil Engineering Handbook soon became known as the field's definitive reference. To retain its standing as a complete, authoritative resource, the editors have incorporated into this edition the many changes in techniques, tools, and materials that over the last seven years have found their way into civil engineering research and practice. The Civil Engineering Handbook, Second Edition is more comprehensive than ever. You'll find new, updated, and expanded coverage in every section. In fact, more than 1/3 of the handbook is new or substantially revised. In particular you'll find increased focus on computing reflecting the rapid advances in computer technology that has revolutionized many aspects of civil engineering. You'll use it as a survey of the field, you'll use it to explore a particular subject, but most of all you'll use The Civil Engineering Handbook to answer the problems, questions, and conundrums you encounter in practice.

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## **RECENT ADVANCES IN STRUCTURAL ENGINEERING, VOLUME 1**

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## **SELECT PROCEEDINGS OF SEC 2016**

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*Springer* This book is a collection of select papers presented at the Tenth Structural Engineering Convention 2016 (SEC-2016). It comprises plenary, invited, and contributory papers covering numerous applications from a wide spectrum of areas related to structural engineering. It presents contributions by academics, researchers, and

practicing structural engineers addressing analysis and design of concrete and steel structures, computational structural mechanics, new building materials for sustainable construction, mitigation of structures against natural hazards, structural health monitoring, wind and earthquake engineering, vibration control and smart structures, condition assessment and performance evaluation, repair, rehabilitation and retrofit of structures. Also covering advances in construction techniques/ practices, behavior of structures under blast/impact loading, fatigue and fracture, composite materials and structures, and structures for non-conventional energy (wind and solar), it will serve as a valuable resource for researchers, students and practicing engineers alike.

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## **BASIC CIVIL ENGINEERING**

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*Pearson Education India* **Basic Civil Engineering** is designed to enrich the preliminary conceptual knowledge about civil engineering to the students of non-civil branches of engineering. The coverage includes materials for construction, building construction, basic surveying and other major topics like environmental engineering, geo-technical engineering, transport traffic and urban engineering, irrigation & water supply engineering and CAD.

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## **THE WORLD OF LEARNING**

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Includes deans and selected faculty at professor level by department or discipline.

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## **ICE MANUAL OF BRIDGE ENGINEERING**

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*Thomas Telford Services Limited* **Addresses key topic within bridge engineering, from history and aesthetics to design, construction and maintenance issues.** This book is suitable for practicing civil and structural engineers in consulting firms and government agencies, bridge contractors, research institutes, and universities and colleges.

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## **STRUCTURAL HEALTH MONITORING DAMAGE DETECTION SYSTEMS FOR AEROSPACE**

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*Springer Nature* **This open access book presents established methods of structural health monitoring (SHM) and discusses their technological merit in the current aerospace environment.** While the aerospace industry aims for weight reduction to improve fuel efficiency, reduce environmental impact, and to decrease maintenance time and operating costs, aircraft structures are often designed and built heavier than required in order to accommodate unpredictable failure. A way to overcome this approach is the use of SHM systems to detect the presence of defects.



This book covers all major contemporary aerospace-relevant SHM methods, from the basics of each method to the various defect types that SHM is required to detect to discussion of signal processing developments alongside considerations of aerospace safety requirements. It will be of interest to professionals in industry and academic researchers alike, as well as engineering students.

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### **STATISTICS FOR SCIENTISTS AND ENGINEERS**

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This book provides the theoretical framework needed to build, analyze and interpret various statistical models. It helps readers choose the correct model, distinguish among various choices that best captures the data, or solve the problem at hand. This is an introductory textbook on probability and statistics. The authors explain theoretical concepts in a step-by-step manner and provide practical examples. The introductory chapter in this book presents the basic concepts. Next, the authors discuss the measures of location, popular measures of spread, and measures of skewness and kurtosis. P.

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### **PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON INDUSTRIAL AND MANUFACTURING SYSTEMS (CIMS-2020)**

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### **OPTIMIZATION IN INDUSTRIAL AND MANUFACTURING SYSTEMS AND APPLICATIONS**

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*Springer Nature* In order to deal with the societal challenges novel technology plays an important role. For the advancement of technology, Department of Industrial and Production Engineering under the aegis of NIT Jalandhar is organizing an “International Conference on Industrial and Manufacturing Systems” (CIMS-2020) from 26th -28th June, 2020. The present conference aims at providing a leading forum for sharing original research contributions and real-world developments in the field of Industrial and Manufacturing Systems so as to contribute its share for technological advancements. This volume encloses various manuscripts having its roots in the core of industrial and production engineering. Globalization provides all around development and this development is impossible without technological contributions. CIMS-2020, gathered the spirits of various academicians, researchers, scientists and practitioners, answering the vivid issues related to optimisation in the various problems of industrial and manufacturing systems.

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## **SERVICE LIFE ESTIMATION AND EXTENSION OF CIVIL ENGINEERING STRUCTURES**

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*Elsevier* Service life estimation is an area of growing importance in civil engineering both for determining the remaining service life of civil engineering structures and for designing new structural systems with well-defined periods of functionality. Service life estimation and extension of civil engineering structures provides valuable information on the development and use of newer and more durable materials and methods of construction, as well as the development and use of new techniques of estimating service life. Part one discusses using fibre reinforced polymer (FRP) composites to extend the service-life of civil engineering structures. It considers the key issues in the use of FRP composites, examines the possibility of extending the service life of structurally deficient and deteriorating concrete structures and investigates the uncertainties of using FRP composites in the rehabilitation of civil engineering structures. Part two discusses estimating the service life of civil engineering structures including modelling service life and maintenance strategies and probabilistic methods for service life estimation. It goes on to investigate non-destructive evaluation and testing (NDE/NDT) as well as databases and knowledge-based systems for service life estimation of rehabilitated civil structures and pipelines. With its distinguished editors and international team of contributors Service life estimation and extension of civil engineering structures is an invaluable resource to academics, civil engineers, construction companies, infrastructure providers and all those with an interest in improving the service life, safety and reliability of civil engineering structures. A single source of information on the service life of reinforced concrete and fibre-reinforced polymer (FRP) rehabilitated structures Examines degradation mechanisms in composites for rehabilitation considering uncertainties in FRP reliability Provides an overview of probabilistic methods for rehabilitation and service life estimation of corroded structures

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## **ADVANCES IN INTERDISCIPLINARY ENGINEERING**

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### **SELECT PROCEEDINGS OF FLAME 2018**

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This book presents select proceedings of the International Conference on Future Learning Aspects of Mechanical Engineering (FLAME 2018). The book discusses interdisciplinary areas such as automobile engineering, mechatronics, applied and structural mechanics, bio-mechanics, biomedical instrumentation, ergonomics, biodynamic modeling, nuclear engineering, agriculture engineering, and farm machineries. The contents of the book will benefit both researchers and professionals.

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## **HANDBOOK OF RELIABILITY ENGINEERING**

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*Springer Science & Business Media* **An effective reliability programme is an essential component of every product's design, testing and efficient production. From the failure analysis of a microelectronic device to software fault tolerance and from the accelerated life testing of mechanical components to hardware verification, a common underlying philosophy of reliability applies. Defining both fundamental and applied work across the entire systems reliability arena, this state-of-the-art reference presents methodologies for quality, maintainability and dependability. Featuring: Contributions from 60 leading reliability experts in academia and industry giving comprehensive and authoritative coverage. A distinguished international Editorial Board ensuring clarity and precision throughout. Extensive references to the theoretical foundations, recent research and future directions described in each chapter. Comprehensive subject index providing maximum utility to the reader. Applications and examples across all branches of engineering including IT, power, automotive and aerospace sectors. The handbook's cross-disciplinary scope will ensure that it serves as an indispensable tool for researchers in industrial, electrical, electronics, computer, civil, mechanical and systems engineering. It will also aid professional engineers to find creative reliability solutions and management to evaluate systems reliability and to improve processes. For student research projects it will be the ideal starting point whether addressing basic questions in communications and electronics or learning advanced applications in micro-electro-mechanical systems (MEMS), manufacturing and high-assurance engineering systems.**

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## **THE EUROPA WORLD OF LEARNING**

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## **NEW PERSPECTIVES ON DEEP-WATER SANDSTONES**

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## **ORIGIN, RECOGNITION, INITIATION, AND RESERVOIR QUALITY**

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*Elsevier* **This handbook is vital for understanding the origin of deep-water sandstones, emphasizing sandy-mass transport deposits (SMTDs) and bottom-current reworked sands (BCRSs) in petroleum reservoirs. This cutting-edge perspective, a pragmatic alternative to the conventional turbidite concepts, is crucial because the turbidite paradigm is built on a dubious foundation without empirical data on sandy turbidity currents in modern oceans. In the absence of evidence for sandy turbidity currents in natural environments, elegant theoretical models and experimental observations of turbidity currents are irrelevant substitutes for explaining the origin of sandy deposits as "turbidites."**

In documenting modern and ancient SMTDs (sandy slides, sandy slumps, and sandy debrites) and BCRSs (deposits of thermohaline [contour] currents, wind-driven currents, and tidal currents), the author describes and interprets core and outcrop (1:20 to 1:50 scale) from 35 case studies worldwide (which include 32 petroleum reservoirs), totaling more than 10,000 m in cumulative thickness, carried out during the past 36 years (1974-2010). The book dispels myths about the importance of sea level lowstand and provides much-needed clarity on the triggering of sediment failures by earthquakes, meteorite impacts, tsunamis, and cyclones with implications for the distribution of deep-water sandstone petroleum reservoirs. Promotes pragmatic interpretation of deep-water sands using alternative possibilities Validates the economic importance of SMTDs and BCRS in deep-water exploration and production Rich in empirical data and timely new perspectives

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## **BASIC MECHANICAL ENGINEERING**

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*Pearson Education India* **Basic Mechanical Engineering** covers a wide range of topics and engineering concepts that are required to be learnt as in any undergraduate engineering course. Divided into three parts, this book lays emphasis on explaining the logic and physics of critical problems to develop analytical skills in students.

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## **MASS TRANSPORT, GRAVITY FLOWS, AND BOTTOM CURRENTS**

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## **DOWNSLOPE AND ALONGSLOPE PROCESSES AND DEPOSITS**

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*Elsevier* **Mass Transport, Gravity Flows, and Bottom Currents: Downslope and Alongslope Processes and Deposits** focuses solely on important downslope and alongslope processes. The book provides clear definitions and characteristics based on soil mechanics, fluid mechanics and sediment concentration by volume. It addresses Slides, Slumps, and Debris Flows, Grain Flows, Liquefied/Fluidized Flows, and Turbidity Currents, Density plumes, Hyperpycnal Flows, the Triggering Mechanisms of Downslope Processes, Bottom Currents, and Soft-Sediment Deformation Structures. The mechanics of each process are described in detail and used to provide empirically-driven categories to help recognize these deposits in the rock record. Case studies clearly illustrate of the problems inherent in recognizing these processes in the rock record, and potential solutions are provided alongside future avenues of research. An appendix also provides step-by-step guidance in describing and interpreting sediments. Comprehensively addresses modern downslope and alongslope processes, including definitions and mechanisms Provides key criteria for the recognition of depositional facies in the rock record Includes case studies to illustrate each downslope and alongslope

process Identifies key problems and potential solutions for future research Uses pragmatic, empirical, data-driven interpretations to revise conventional facies models

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### **THE EUROPA WORLD OF LEARNING**

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**Provides: over 26,000 academic institutions, 150,000 staff and officials; extensive coverage of universities, colleges and other centres of learning; and detailed information on over 400 international cultural, scientific and educational organizations.**

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### **RECENT DEVELOPMENTS IN SUSTAINABLE INFRASTRUCTURE**

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#### **SELECT PROCEEDINGS OF ICRDSI 2019**

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*Springer Nature* **This book comprises select peer-reviewed proceedings of the International Conference on Recent Developments in Sustainable Infrastructure (ICRDSI) 2019. The topics span over all major disciplines of civil engineering with regard to sustainable development of infrastructure and innovation in construction materials, especially concrete. The book covers numerical and analytical studies on various topics such as composite and sandwiched structures, green building, groundwater modeling, rainwater harvesting, soil dynamics, seismic resistance and control of structures, waste management, structural health monitoring, and geo-environmental engineering. This book will be useful for students, researchers and professionals working in sustainable technologies in civil engineering.**

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### **MATERIALS FOR LIGHTWEIGHT CONSTRUCTIONS**

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*CRC Press* **This book presents the key concepts and methods involved in the development of a variety of materials for lightweight constructions, including metals, alloys, polymers and composites. It provides case studies and examples to explain strategies adapted for specific applications of the materials and covers traditional to advanced manufacturing concepts of lightweight materials, including 3D printing. It also illustrates the fundamentals and usability of biodegradable materials for achieving a greener environment, as well as possibilities of green manufacturing. Covers the fundamentals of a range of materials used for lightweight constructions Discusses fabrication and testing of materials Addresses relevant concepts of 3D printing and biodegradable materials Explores analysis of the failure**

mechanism of materials used in various applications Identifies the applicability of materials to a variety of situations  
**Materials for Lightweight Constructions** will suit researchers and graduate students in materials science, mechanical engineering, construction and composites.

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## **DIGITAL AND ANALOG COMMUNICATION SYSTEMS**

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*John Wiley & Sons* **About The Book:** The book provides a detailed, unified treatment of theoretical and practical aspects of digital and analog communication systems, with emphasis on digital communication systems. It integrates theory-keeping theoretical details to a minimum-with over 60 practical, worked examples illustrating real-life methods. The text emphasizes deriving design equations that relate performance of functional blocks to design parameters. It illustrates how to trade off between power, band-width and equipment complexity while maintaining an acceptable quality of performance. Material is modularized so that appropriate portions can be selected to teach several different courses. The book also includes over 300 problems and an annotated bibliography in each chapter.

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## **APPLICATIONS OF ARTIFICIAL INTELLIGENCE IN ADDITIVE MANUFACTURING**

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*Engineering Science Reference* "This book provides introductory instruction on how to learn how to use artificial intelligence to produce additively manufactured parts, including a description of the starting points, what you can know, how it blends and how artificial intelligence in additive manufacturing apply"--

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## **GROUND IMPROVEMENT TECHNIQUES (PB)**

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*Firewall Media*

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## **RECENT ADVANCES IN MATERIALS, MECHANICAL AND CIVIL ENGINEERING**

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*Trans Tech Publications Ltd* This volume was collected by results of the International Conference on Recent Advances in Materials, Mechanical and Civil Engineering (ICRAMMCE-2017, 1-2nd June, 2017, Hyderabad, India) and presents readers with the results of recent researches and achievements in the fields of the structural materials, technologies of materials processing, building materials and technologies in the construction, applied mechanics and practice of design in the mechanical engineering. We hope that this collection will be useful for many specialists from area of mechanical engineering and construction.

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**THE WORLD OF LEARNING 1994**

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*Europa Publications (PA)*

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**EMERGING TRENDS IN SCIENCE, ENGINEERING AND TECHNOLOGY**

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**PROCEEDINGS OF INTERNATIONAL CONFERENCE, INCOSSET 2012**

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*Springer Science & Business Media* **The present book is based on the research papers presented in the International Conference on Emerging Trends in Science, Engineering and Technology 2012, held at Tiruchirapalli, India. The papers presented bridges the gap between science, engineering and technology. This book covers a variety of topics, including mechanical, production, aeronautical, material science, energy, civil and environmental energy, scientific management, etc. The prime objective of the book is to fully integrate the scientific contributions from academicians, industrialists and research scholars.**