

Marine Electrical Technology 5th Edition

With demand for petroleum products increasing worldwide, there is a tendency for existing refineries to seek new approaches to optimize efficiency and throughput. In addition, changes in product specifications due to environmental regulations greatly influence the development of petroleum refining technologies. These factors underlie the need for this fifth edition of *The Chemistry and Technology of Petroleum*, which continues in the tradition of the bestselling fourth edition, proving readers with a detailed overview of the chemistry and technology of petroleum as it evolves into the twenty-first century. The new edition has been updated with the latest developments in the refining industry, including new processes as well as updates on evolving processes and various environmental regulations. The book covers issues related to economics and future refineries, examines the changing character of refinery feedstock, and offers new discussions on environmental aspects of refining. It contains more than 300 figures and tables, including chemical structures and process flow sheets. A useful reference for scientists and engineers in the petroleum industry as well as in the catalyst manufacturing industry, this book introduces readers to the science and technology of petroleum, beginning with its formation in the ground and culminating in the production of a wide variety of products and petrochemical intermediates.

This fourth edition of *Marine Insurance Legislation* is a comprehensive and fully updated annotation of the UK's Marine Insurance Act 1906, setting out the authorities on which the legislation was based and the manner in which the legislation has been construed, with cross-references to the Institute Clauses. The book sets out the text of English Marine insurance legislation and the most important of the market clauses (the Institute Clauses) used in respect of Marine policies written in the London Market. The legislation is heavily annotated, with the operation of each section of the Marine Insurance Act 1906 explained, and references are given to the most important of the early cases upon which the sections are based. There is also comprehensive annotation and explanation of cases decided under the sections of the 1906 Act, with cross-references to the Institute Clauses. Key developments in this fourth edition include the introduction of the new Cargo Clauses in January 2009.

This is a fully revised, new edition on the topic of instrumentation and control systems and their application to marine engineering for professional trainees studying Merchant Navy Marine Engineering Certificates of Competency (CoC) as well as Electrical/Marine Engineering undergraduate students. Providing generic technical and practical descriptions of the operation of instrumentation and control devices and systems, this volume also contains mathematic analysis where appropriate. Addressing this subject area, the domain of Instrumentation Engineers/Technicians as well as Control Engineers, and covering established processes and protocols and extensive developing technology, this textbook is written with the marine engineer in mind, particularly those studying Engineering Knowledge. The content ranges from simple measurement devices, through signal conditioning and digitisation to highly sophisticated automated control and instrumentation systems. It also includes a brand new section on electrical equipment in hazardous areas detailing hazards, gas groups, temperature classifications and types of protection including increased and intrinsic safety and encapsulation, and up-to-date material on the new generation of Liquefied Natural Gas carriers, SMART sensors and protocols, as well as computer based systems.

"A fully comprehensive text for courses in electrical principles, circuit theory, and electrical technology, providing 800 worked examples and over 1,000 further problems for students to work through at their own pace. This book is ideal for students studying engineering for the first time as part of BTEC National and other pre-degree vocational courses, as well as Higher Nationals, Foundation Degrees and first year undergraduate modules. Colour layout helps navigation and highlights key learning points, formulae and exercises. Containing 800 worked problems, 1,000 further problems, 175 exercises and 14 revision tests with answers. online Real-world situations and engineering examples put theory into context. Now in its fifth edition, this best-selling textbook has been updated with developments in key areas such as semiconductors, transistors, and fuel cells, along with brand new material on ABCD parameters and Fourier's Analysis. Greater emphasis is placed on real-world situations in order to ensure the reader can relate the theory to actual engineering practice. "--

This manual takes both novice and experienced boatowner through minor to major repairs of electrical systems, engines, electronics, steering systems, generators, pumps, cookers, spars and rigging. When it was first published in 1990, the *Boatowner's Mechanical & Electrical Manual* broke new ground. It was hailed as the first truly DIY manual for boatowners and has sold in its thousands ever since. There have been significant changes in boat systems since then, particularly electrical systems, and this fourth edition has been fully updated to reflect these developments and expand its predecessor's worldwide popularity. 'Probably the best technical reference and troubleshooting book in the world' *Yachting Monthly* 'It deserves to come standard with every boat' *Yachting World*

The future national security environment will present the naval forces with operational challenges that can best be met through the development of military capabilities that effectively leverage rapidly advancing technologies in many areas. The panel envisions a world where the naval forces will perform missions in the future similar to those they have historically undertaken. These missions will continue to include sea control, deterrence, power projection, sea lift, and so on. The missions will be accomplished through the use of platforms (ships, submarines, aircraft, and spacecraft), weapons (guns, missiles, bombs, torpedoes, and information), manpower, materiel, tactics, and processes (acquisition, logistics, and so on.). Accordingly, the Panel on Technology attempted to identify those technologies that will be of greatest importance to the future operations of the naval forces and to project trends in their development out to the year 2035. The primary objective of the panel was to determine which are the most critical technologies for the Department of the Navy to pursue to ensure U.S. dominance in future naval operations and to determine the future trends in these technologies and their impact on Navy and Marine Corps superiority. A vision of future naval operations ensued from this effort. These technologies form the base from which products, platforms, weapons, and capabilities are built. By combining multiple technologies with their future attributes, new systems and subsystems can be envisioned. Technology for the United States Navy and Marine Corps, 2000-2035 *Becoming a 21st-Century Force: Volume 2: Technology* identifies those technologies that are unique to the naval forces and whose development the Department of the Navy clearly must fund, as well as commercially dominated technologies that the panel believes the Navy and Marine Corps must learn to adapt as quickly as possible to naval applications. Since the development of many of the critical technologies is becoming global in nature, some consideration is given to foreign capabilities and trends as a way to assess potential adversaries' capabilities. Finally, the panel assessed the current state of the science and technology (S&T) establishment and processes within the Department of the Navy and makes recommendations that would improve the efficiency and effectiveness of this vital area. The panel's findings and

recommendations are presented in this report.

This much-loved textbook introduces electrical and electronic principles and technology to students who are new to the subject. Real-world situations and engineering examples put the theory into context. The inclusion of worked problems with solutions really help aid your understanding and further problems then allow you to test and confirm you have mastered each subject. In total the books contains 410 worked problems, 540 further problems, 340 multiple-choice questions, 455 short-answer questions, and 7 revision tests with answers online. This an ideal text for vocational courses enabling a sound understanding of the knowledge required by technicians in fields such as electrical engineering, electronics and telecommunications. It will also be an excellent refresher for foundation and undergraduate degree students. It is supported by a companion website that contains solutions to the 540 questions in the practice exercises, formulae to help students answer the questions, multiple choice questions linked to each of the 23 chapters and information about the famous mathematicians and scientists mentioned in the book. Lecturers also have access to full solutions and the marking scheme for the 7 revision tests, lesson plans and illustrations from the book.

This set of two volumes comprises the collection of the papers presented at the 5th International Conference on Maritime Technology and Engineering (MARTECH 2020) that was held in Lisbon, Portugal, from 16 to 19 November 2020. The Conference has evolved from the series of biennial national conferences in Portugal, which have become an international event, and which reflect the internationalization of the maritime sector and its activities. MARTECH 2020 is the fifth of this new series of biennial conferences. The set comprises 180 contributions that were reviewed by an International Scientific Committee. Volume 1 is dedicated to maritime transportation, ports and maritime traffic, as well as maritime safety and reliability. It further comprises sections dedicated to ship design, cruise ship design, and to the structural aspects of ship design, such as ultimate strength and composites, subsea structures as pipelines, and to ship building and ship repair.

The rise of intelligence and computation within technology has created an eruption of potential applications in numerous professional industries. Techniques such as data analysis, cloud computing, machine learning, and others have altered the traditional processes of various disciplines including healthcare, economics, transportation, and politics. Information technology in today's world is beginning to uncover opportunities for experts in these fields that they are not yet aware of. The exposure of specific instances in which these devices are being implemented will assist other specialists in how to successfully utilize these transformative tools with the appropriate amount of discretion, safety, and awareness. Considering the level of diverse uses and practices throughout the globe, the fifth edition of the Encyclopedia of Information Science and Technology series continues the enduring legacy set forth by its predecessors as a premier reference that contributes the most cutting-edge concepts and methodologies to the research community. The Encyclopedia of Information Science and Technology, Fifth Edition is a three-volume set that includes 136 original and previously unpublished research chapters that present multidisciplinary research and expert insights into new methods and processes for understanding modern technological tools and their applications as well as emerging theories and ethical controversies surrounding the field of information science. Highlighting a wide range of topics such as natural language processing, decision support systems, and electronic government, this book offers strategies for implementing smart devices and analytics into various professional disciplines. The techniques discussed in this publication are ideal for IT professionals, developers, computer scientists, practitioners, managers, policymakers, engineers, data analysts, and programmers seeking to understand the latest developments within this field and who are looking to apply new tools and policies in their practice. Additionally, academicians, researchers, and students in fields that include but are not limited to software engineering, cybersecurity, information technology, media and communications, urban planning, computer science, healthcare, economics, environmental science, data management, and political science will benefit from the extensive knowledge compiled within this publication.

Covering the fundamentals of electrical technology and using these to introduce the application of electrical and electronic systems, this text had been updated to include recent developments in technology. It avoids unnecessary mathematics and features improved teaching aids, including: worked examples; updated and graded review questions; colour diagrams and chapter summaries. It is designed for use by students on NC, HNC and HND courses in electrical and electronic engineering.

This textbook covers ship construction techniques and methods for all classes of Merchant Navy marine deck and engineering Certificates of Competency (CoC) as well as Undergraduate students studying Naval Architecture and Marine Engineering. It is complementary to Volume 4 (Naval Architecture) and Volume 8 (General Engineering Knowledge). Importantly, this new edition contains up-to-date information on modern shipyards, dry-docking procedures and methods of construction. Extensively illustrated, the book also includes sample examination questions with worked examples answers to aid students in their learning.

Introduction to Marine Engineering explains the operation of all the ship's machinery, with emphasis on correct, safe operating procedures and practices at all times. Organized into 17 chapters, this book begins with an overall look at the ship. Subsequent chapters describe the various ship machineries, including diesel engines, steam turbines, boilers, feed systems, pumps, auxiliaries, deck machinery, hull equipment, shafting, propellers, steering gear, and electrical equipment. Other aspects of marine engineering, particularly, fuel oils, lubricating oils, refrigeration, air conditioning, ventilation, firefighting and safety, watchkeeping, and equipment operation, are also described. This book will be useful to anyone with an interest in ships' machinery or a professional involvement in the shipping business.

Admiralty Jurisdiction and Practice is the definitive work on litigation in the Admiralty Court. It provides unrivalled commentary and analysis of the key principles of admiralty law, from jurisdiction and procedure to forms and precedents, and is firmly established as the leading reference guide for today's maritime practitioner. The authors also deal with several topics not covered elsewhere, including the impact of insolvency, the interplay between jurisdiction and practice, limitation periods, the role of international conventions, and collision action rules. The fifth edition has been fully updated to include new case law and vital changes in Commercial Court practice and procedure. It also includes brand new material on the topical jurisdictions of Hong Kong and South Africa, including a comparison to English law and expert commentary on important issues such as ship arrest. This book is a first choice for all those concerned with admiralty law.

Maritime Law is an exhaustive introduction to this complex area of law. The book is ideal for newcomers and experienced professionals requiring an update on the general principles and case law. • Charterparties chapter • Passengers chapter • Salvage – includes developments in case law and introduction of new Lloyd's Open Form Salvage Agreement • Sale of ship and shipbuilding contracts • Collisions • Oil pollution – Convention on bunker spills

Marine Electrical, PracticeElsevier

This is the leading text on shipbuilding and marine construction, already widely used on a global basis by shipowners, shipbuilders and their commercial and legal advisers. It is now ten years since the last edition and much has changed in the world of shipbuilding since then, particularly in the period since 2008 which has seen numerous attempts by owners to renegotiate the prices and/or delivery dates of tonnage and an enormous increase in the level of "vessel rejection" and cancellation disputes. The Law of Shipbuilding Contracts examines the principles of English contract law as these apply to shipbuilding. This edition comments in detail upon the Shipbuilders' Association of Japan Form but now contrasts this with the NEWBUILDCON from BIMCO in 2007 and the China Maritime Arbitration Commission Forms from 2011 where these are significantly different. It also includes sections dealing with agreements ancillary to the shipbuilding contract and conversion contracts. Overview of book: Since the last edition in 2002, China has become a major global exporter of newbuildings and new BIMCO

shipbuilding contract form has been published. Although retaining the original format of commentary on the Japanese (SAJ) standard form shipbuilding contract, the new edition contrasts this with the BIMCO form and the recently published China Maritime Arbitration Commission (CMAC) form in order to provide a broad ranging analysis of this complex subject. The book details the principles of English contract law as these apply to international shipbuilding. It will, as in the previous editions, also include sections dealing with the guarantees and other agreements which support the shipbuilding contract and with ship conversion contracts

Essential reading for: - Purchasers and charterers of newbuilding tonnage - Shipbuilders and offshore construction yards - Lawyers and insurers working in the maritime and offshore oil and gas sectors - Banks and other finance providers

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Electrical engineers need to master a wide area of topics to excel. The Electrical Engineering Know It All covers every angle including Real-World Signals and Systems, Electromagnetics, and Power systems. A 360-degree view from our best-selling authors

Topics include digital, analog, and power electronics, and electric circuits

The ultimate hard-working desk reference; all the essential information, techniques and tricks of the trade in one volume

Developed to complement Reeds Vol 8 (General Engineering for Marine Engineers), this indispensable textbook comprehensively covers the motor engineering syllabus for marine engineering officer cadets. Starting with the theoretical and practical thermodynamic operating cycles, the book is structured to give a description of the engines and components used to extract energy from fossil fuels and achieve high levels of efficiency. Accessibly written and clearly illustrated, this book is the only guide available for marine engineering students focusing on the knowledge needed for passing the motor engineering certificate of Competency (CoC) examinations. This new edition reflects all developments within the discipline and includes updates and additions on, amongst other things: - Engine emissions and control engineering - Fuel injection - Starting and reversing - Ancillary supply systems - Safety and the environment

Plus updates to many of the technical engineering drawings.

The Book has been thoroughly revised, keeping in mind the rapid technological advances in this mammoth industry and also the feedback received from various quarters. Relevant extracts from current SOLAS, IACS, Lloyd's Register, DNV and ABS Rules, have been included with permission. However, these must be used only for academic purposes. Relevant current documents onboard ships must be referred to, for the purpose of complying with Classification Societies' and other Statutory Requirements.

Engine Testing: Electrical, Hybrid, IC Engine and Power Storage Testing and Test Facilities, Fifth Edition covers the requirements of test facilities dealing with e-vehicle systems and different configurations and operations. Chapters dealing with the rigging and operation of Units Under Test (UUT) are updated to include electric motor-based systems, test cell services and thermo-dynamics. Control module and system testing using advanced, in-the-Loop (XiL) methods are described, including powertrain component integrated simulation and testing. All other chapters dealing with test cell design, installation, safety and use together with the cell support systems in IC engine testing are updated to reflect current developments and research. Covers multiple technical disciplines for anyone required to design, modify or operate an automotive powertrain test facility

Provides tactics on the development of electrical and hybrid powertrains and energy storage systems

Presents coverage of the housing and testing of automotive battery systems in addition to the use of 'virtual' testing in the form of 'x-in-the-loop' throughout the powertrain's development and test life

Developed to complement Reeds Vol. 12 (Motor Engineering for Marine Engineers), this textbook is key for all marine engineering officer cadets. This new edition has been extensively updated to include the latest equipment, practices and trends in marine engineering, as well as incorporating the 2010 Manila Amendments, particularly relating to Management. Accessibly written and clearly illustrated, this book is the core guide focusing on the knowledge needed for passing the engineering certificate of Competency (CoC) examinations. This key textbook takes into account the varying needs of students studying motor engineering, recognising recent changes to the Merchant Navy syllabus and current pathways to a sea-going engineering career, including National diplomas, Higher National Diploma and degree courses. An essential buy for any marine engineering student.

Marine Electrical Practice: 5th Edition discusses the subject of marine electrical practice and takes into consideration the revolutionary changes in the field over the past 20 years. The book covers components such as generators, switchgears, rotary amplifiers, and voltage regulators; the insulation and temperature control of different machines; the distribution of electrical power; electromagnetic compatibility; and lighting. The book also contains helpful reference materials such as graphical symbols related to ship diagrams, organizations concerned with ships and shipbuilding, and units of measurement. The text is useful for nautical engineers and electrical engineers involved in offshore work, as it serves as both a guide and an update in the field of marine electrical practice.

Electrical Circuit Theory and Technology is a fully comprehensive text for courses in electrical and electronic principles, circuit theory and electrical technology. The coverage takes students from the fundamentals of the subject, to the completion of a first year degree level course. Thus, this book is ideal for students studying engineering for the first time, and is also suitable for pre-degree vocational courses, especially where progression to higher levels of study is likely. John Bird's approach, based on 700 worked examples supported by over 1000 problems (including answers), is ideal for students of a wide range of abilities, and can be worked through at the student's own pace. Theory is kept to a minimum, placing a firm emphasis on problem-solving skills, and making this a thoroughly practical introduction to these core subjects in the electrical and electronic engineering curriculum. This revised edition includes new material on transients and Laplace transforms, with the content carefully matched to typical undergraduate modules. Free Tutor Support Material including full worked solutions to the assessment papers featured in the book will be available at <http://textbooks.elsevier.com/>. Material is only available to lecturers who have adopted the text as an essential purchase. In order to obtain your password to access the material please follow the guidelines in the book.

Marine Auxiliary Machinery, Seventh Edition is a 16-chapter text that covers the significant advances in marine auxiliary machinery relevant to the certification of competency examinations. The introductory chapters deal with the basic components of marine machineries, such as propulsion system, heat exchanger, valves, and pipelines. The succeeding chapters describe the pumps and pumping system, specifically the tanker and gas carrier cargo pumps. Considerable chapters are devoted to the operation of machinery's major components, including the propeller shaft, steering gear, auxiliary power, bow thrusters, and stabilizers. Other chapters consider the refrigeration, heating, ventilation, and air conditioning systems. The final chapters tackle the safety system of marine auxiliary machinery, particularly the fire protection, safety, instrumentation, and control systems. This book will prove useful to marine and mechanical engineers.

Electrical Engineering 101 covers the basic theory and practice of electronics, starting by answering the question "What is electricity?" It goes on to explain the fundamental principles and components, relating them constantly to real-world examples. Sections on tools and troubleshooting give engineers deeper understanding and the know-how to create and maintain their own electronic design projects. Unlike other books that simply describe electronics and provide step-by-step build instructions, EE101 delves into how and why electricity and electronics work, giving the reader the tools to take their electronics education to the next level. It is written in a down-to-earth style and explains jargon, technical terms and schematics as they arise. The author builds a genuine understanding of the fundamentals and shows how they can be applied to a range of engineering problems. This third edition includes more real-world examples and a glossary of formulae. It contains new coverage of: Microcontrollers FPGAs Classes of components Memory (RAM, ROM, etc.) Surface mount High speed design Board layout Advanced digital electronics (e.g. processors) Transistor circuits and circuit design Op-amp and logic circuits Use of test equipment Gives readers a simple explanation of complex concepts, in terms they can understand and relate to everyday life. Updated content throughout and new material on the latest technological advances. Provides readers with an invaluable set of tools and references that they can use in their everyday work.

This practical resource introduces electrical and electronic principles and technology covering theory through detailed examples, enabling students to develop a sound understanding of the knowledge required by technicians in fields such as electrical engineering, electronics and telecommunications. No previous background in engineering is assumed, making this an ideal text for vocational courses at Levels 2 and 3, foundation degrees and introductory courses for undergraduates.

Maritime Technology and Engineering includes the papers presented at the 2nd International Conference on Maritime Technology and Engineering (MARTECH 2014, Lisbon, Portugal, 15-17 October 2014). The contributions reflect the internationalization of the maritime sector, and cover a wide range of topics: Ports; Maritime transportation; Inland navigat

The HVDC Light[trademark] method of transmitting electric power. Introduces students to an important new way of carrying power to remote locations. Revised, reformatted Instructor's Manual. Provides instructors with a tool that is much easier to read. Clear, practical approach. This textbook covers the theoretical, fundamental aspects of naval architecture for students preparing for the Class 2 and Class 1 Marine Engineer Officer exams. It introduces the basic foundation themes within naval architecture, (hydrostatics, stability, resistance and powering), using worked examples to show how solutions should be presented for an exam. The topics are ordered in a manner of a typical taught module, to aid the use of the book by lecturers as a compliment to a course. Importantly, this updated edition contains updated text and figures in line with modern practice, including an update of many of the figures to three-dimensional diagrams, and a new section on computer software for naval architecture. The book also includes sample examination questions with worked examples answers to aid students in their learning.

This set of two volumes comprises the collection of the papers presented at the 5th International Conference on Maritime Technology and Engineering (MARTECH 2020) that was held in Lisbon, Portugal, from 16 to 19 November 2020. The Conference has evolved from the series of biennial national conferences in Portugal, which have become an international event, and which reflect the internationalization of the maritime sector and its activities. MARTECH 2020 is the fifth of this new series of biennial conferences. The set comprises 180 contributions that were reviewed by an International Scientific Committee. Volume 2 is dedicated to ship performance and hydrodynamics, including CFD, maneuvering, seakeeping, moorings and resistance. In addition, it includes sections on ship machinery, renewable energy, fishing and aquaculture, coastal structures, and waves and currents.

The new edition of Marine Insurance Clauses reflects numerous changes and additions to the policy clauses, and particularly the new style of the organisation entitled the International Underwriting Association of London in 2002. The new edition will bring you up to date with the present complex and sometimes confusing variations in policy conditions. Part of the Maritime and Transport Law Library.

New scientific approaches have dramatically evolved in the decade since *The Physiology of Fishes* was first published. With the genomic revolution and a heightened understanding of molecular biology, we now have the tools and the knowledge to apply a fresh approach to the study of fishes. Consequently, *The Physiology of Fishes*, Third Edition is not merely another updating, but rather an entire reworking of the original. To satisfy that need for a fresh approach, the editors have employed a new set of expert contributors steeped in the very latest research; their contemporary perspective pervades the entire text. In addition to new chapters on gas transport, temperature physiology, and stress, as well as one dedicated to functional genomics, readers will discover that many of these new contributors approach their material with a contemporary molecular perspective. While much of the material is new, the editors have completely adhered to the original's style in creating a text that continues to be highly readable and perpetually insightful in bridging the gap between pure and applied science. *The Physiology of Fishes*, Third Edition, completely updated with a molecular perspective, continues to be regarded as the best single-volume general reference on all major areas of research in fish physiology. *The Physiology of Fishes*, Third Edition provides background information for advanced students as well as material of interest to marine and fisheries biologists, ichthyologists, and comparative physiologists looking to differentiate between the physiological strategies unique to fishes, and those shared with other organisms.

This much-loved textbook explains the principles of electrical circuit theory and technology so that students of electrical and mechanical engineering can master the subject. Real-world situations and engineering examples put the theory into context. The inclusion of worked problems with solutions help you to learn and further problems then allow you to test and confirm you have fully understood each subject. In total the book contains 800 worked problems, 1000 further problems and 14 revision tests with answers online. This an ideal text for foundation and undergraduate degree students and those on upper level vocational engineering courses, in particular electrical and mechanical. It provides a sound understanding of the knowledge required by technicians in fields such as electrical engineering, electronics and telecommunications. This edition has been updated with developments in key areas such as semiconductors, transistors, and fuel cells, along with brand new material on ABCD parameters and Fourier's Analysis. It is supported by a companion website that contains solutions to the 1000 questions in the practice exercises, formulae to help students answer the questions and information about the famous mathematicians and scientists mentioned in the book. Lecturers also have access to full solutions and the marking scheme for the 14 revision tests, lesson plans and illustrations from the book.

Progress in Maritime Technology and Engineering collects the papers presented at the 4th International Conference on Maritime Technology and Engineering (MARTECH 2018, Lisbon, Portugal, 7–9 May 2018). This conference has evolved from a series of biannual national conferences in Portugal, and has developed into an international event, reflecting the internationalization of the maritime sector and its activities. MARTECH 2018 is the fourth in this new series of biannual conferences. Progress in Maritime Technology and Engineering contains about 80 contributions from authors from all parts of the world, which were reviewed by an International Scientific Committee. The book is divided into the subject areas below: - Port performance - Maritime transportation and economics - Big data in shipping - Intelligent ship

navigation - Ship performance - Computational fluid dynamics - Resistance and propulsion - Ship propulsion - Dynamics and control - Marine pollution and sustainability - Ship design - Ship structures - Structures in composite materials - Shipyard technology - Coating and corrosion - Maintenance - Risk analysis - Offshore and subsea technology - Ship motion - Ships in transit - Wave-structure interaction - Wave and wind energy - Waves Progress in Maritime Technology and Engineering will be of interest to academics and professionals involved in the above mentioned areas.

The shipping industry has been growing in leaps and bounds over the past few decades. The answer to reduced manning, together with demanding operating schedules, has more often than not been automation. Hence the need of the hour for a seafarer is adequate knowledge of UMS environments and their supporting systems onboard ships. With almost 30 years of first-hand experience by each of us in this mammoth industry, we have seen the evolution from control elements and systems of the post 2nd world- war era to the most sophisticated components and networks available today. It has indeed been a wonderful journey through time! These experiences have been our guiding light; they have prompted us to share our acquired knowledge with our counterparts and students of the maritime industry.

Because the field of plastics is one of the fastest changing areas today, the need arises to offer relevant, comprehensive material on polymers. An established source of information on modern plastics, the Plastics Technology Handbook continues to provide up-to-date coverage on the properties, processing methods, and applications of polymers. Retaining the easy-to-follow structure of the previous editions, this fourth edition includes new topics of interest that reflect recent developments and lead to better insights into the molecular behavior of polymers. New to the Fourth Edition Advances in supramolecular polymerization, flame retardancy, polymer-based nanomedicines, and drug delivery The new concept of oxo-biodegradable polymers Broadened discussion on plastic foams and foam extrusion processes More information on the processing and applications of industrial polymers, including the emerging field of nanoblends Developments in polymer synthesis and applications, such as polymeric sensors, hydrogels and smart polymers, hyperbranched polymers, shape memory polymers, polymeric optical fibers, scavenger resins, polymer nanocomposites, polymerization-filled composites, and wood-polymer composites A state-of-the-art account of the various available methods for plastics recycling Advances in the use of polymers in packaging, construction, the automotive and aerospace industries, agriculture, electronics and electrical technology, biomedical applications, corrosion prevention, and sports and marine applications Plastics Technology Handbook, Fourth Edition thoroughly covers traditional industrial polymers and their processing methods as well as contemporary polymeric materials, recent trends, and the latest applications.

This third edition presents the most thorough revision of Seamanship Techniques since first publication in 1987. Already recognised as one of the leading texts for cadet and serving seafarers of all ranks, this new edition covers all the seamanship knowledge required by students and experienced seafarers alike. Ideal for Merchant Navy Officers from Cadet rank to Master Mariner, the new edition incorporates the 2003 amendments to the Collision Avoidance Regulations and new material covering regulations and practice on cargo operations, survival systems, GMDSS requirements, watch keeping duties, rescue operations and pollution control, to name a few. Used by training establishments around the world this is the only reference to both shipboard practice and ship operations that seafarers will need. * Well-established, well-known, well-liked, well-trusted; the fully comprehensive seamanship reference Covers all the knowledge required to take readers from Cadet to Master rank * Includes the 2003 revision to the Collision Avoidance Rules and fully aligned with the IMO STCW (Standards of Training, Certification and Watchkeeping) requirements

This book provides a comprehensive coverage of the basic theoretical work required by marine engineering officers and electrotechnical officers (ETOs), putting into place key fundamental building blocks and topics in electrotechnology before progressing to more complex topics and electromagnetic systems. Revisions will include important new material on emergent technology such as image intensifiers, the increased maritime use of LEDs, examples of ship systems including power distribution systems, and references to modern ship systems, eg. GPS, ECDIS, Radar, AIS, Comms outfits, etc. This essential text offers a truly rigorous approach to the key topic of electrotechnology.

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