

Dyeing Machines Nptel

The textile industry is becoming an increasingly competitive environment. Differentiating products by quality is particularly important. Testing can be performed both to improve product quality and achieve compliance to international, regional or retailer specific standards. Fabric testing provides a comprehensive review of the tests available for fabrics. The book begins with introductory chapters which discuss the scope, importance and statistical analysis of fabric testing. The book then reviews various types of fabric tests such as fabric

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composition testing, physical and mechanical tests, fabric chemical testing, how to test appearance, permeability, comfort and flammability, as well as dyeing and colouring tests and key issues in testing textile samples. With its distinguished editor and international team of contributors Fabric testing is a valuable resource for designers, technologists, quality inspectors and testing institutes in the textile industry. It is also relevant for academics and students within the textile field. Reviews various types of fabric tests including fabric composition and fabric chemical testing Discusses the scope, significance and statistical analysis of fabric testing

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Assesses the importance of fabric testing to both product quality and industry standard compliance
Nowadays, textile units utilize a number of dyes, chemicals, reagents, and solvents to impart the desired quality to fabrics, and generate a substantial quantity of effluents/contaminants, which cause severe environmental problems if disposed of without proper treatment. In view of several surveys carried out through research papers, books, technical articles, and general reports published in high-repute academic societies, Handbook of Textile Effluent Remediation provides a detailed narration of the acceptable methods of treating textile

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wastewater, such as active ozonation, membrane filtration, and adsorption. The book discusses emerging and suitable treatment systems that are viable, efficient, and economical. In this context, it provides an array of several traditional as well as advanced treatment practices for textile effluents. It covers research-oriented descriptions of textile wastewater treatment that can be adopted by scientific communities, academicians, and undergraduate and postgraduate students of industrial engineering, materials science and engineering, physics, and chemistry. It offers several interesting methodologies and aspects of current

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dimensional research through user-friendly content, tables, and figures and provides up-to-date literature on important and useful information for textile effluents, their impact on the environment, and advanced remediation processes. Needless to say, this book is of immense use to global researchers, academicians, and consultants engaged in various streams of wastewater treatment science.

The purpose of this book is mainly to guide new entrants in the textile field who would like to supervise and manage the various processes involved. Chemicals and chemical reactions are not discussed however, as the process parameters and

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chemicals used vary and this needs to be decided by senior technical personnel. This book does however give general guidelines that are applicable for all and which can be used as a guide for training technical staff. It is not possible to list all the value addition processes practiced worldwide in one book, and hence, an attempt is made to collect details of some of the commonly practiced value addition processes, especially for apparel purposes. The functional treatments given for various technical textiles like medical textiles, protective textiles, industrial textiles, agrotech materials, geotextiles, and sport tech, etc are not covered in this book.

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An NDT is a testing & analysis technique used by industry to evaluate the properties of the materials, components and structures or system for characteristics differences being used. Non destructive testing used in most industries Like aerospace, power, marine.oil & gas,petrochemical & refinery.

**Sol-Gel Technologies for Glass Producers and Users
Weaving**

Advances in Carpet Manufacture

**An Introduction to Fluorescence Correlation
Spectroscopy**

Liquid Penetrant Testing

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Distills key concepts from linear algebra, geometry, matrices, calculus, optimization, probability and statistics that are used in machine learning.

This book covers the elements involved in achieving sustainability in the textiles and clothing sector. The chapters covered in different volumes of this series title aim to cover all the distinctive areas earmarked for achieving sustainable development in the textile and clothing industry. This first volume is dedicated to the initial phases of life cycle, i.e. raw materials and manufacturing phases of textile products. This book aims to cover the sustainable raw materials, technologies and processing methods to achieve sustainable textile products. There are plenty of raw materials available today to cater the needs of sustainable textiles and apparels

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including organic materials, recycled and biodegradable raw materials for textile applications. Similarly, many innovative methods to process textile materials to achieve sustainability in the supply chain along with various processing technologies to manufacture textile products sustainably. This first volume covers the titles of these areas in a comprehensive way.

Covers three main areas. The phenomenon of fluorescence, the main applications, and the most common problems.

Sol-Gel Techniques for Glass Producers and Users provides technological information, descriptions and characterizations of prototypes, or products already on the market, and illustrates advantages and disadvantages of the sol-gel process in comparison to other methods. The first chapter

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entitled "Wet Chemical Technology" gives a summary of the basic principles of the sol-gel chemistry. The most promising applications are related to coatings. Chapter 2 describes the various "Wet Chemical Coating Technologies" from glass cleaning to many deposition and post-coating treatment techniques. These include patterning of coatings through direct or indirect techniques which have become very important and for which the sol-gel processing is particularly well adapted. Chapter 3 entitled "Bulk Glass Technologies" reports on the preparation of special glasses for different applications. Chapter 4 entitled "Coatings and Materials Properties" describes the properties of the different coatings and the sol-gel materials, fibers and powders. The chapter also includes a section dedicated to the characterization

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techniques especially applied to sol-gel coatings and products.

Cradle-to-Cradle for Sustainable Development

Recent Developments and Future Trends

Mass Transfer-II

Electrospun Nanofibers

DESTRUCTIVE AND NON DESTRUCTIVE TESTING

Layer of protection analysis (LOPA) is a recently developed, simplified method of risk assessment that provides the much-needed middle ground between a qualitative process hazard analysis and a traditional, expensive quantitative risk analysis. Beginning with an identified accident scenario, LOPA uses simplifying rules to evaluate initiating event frequency, independent layers of protection, and consequences to provide

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an order-of-magnitude estimate of risk. LOPA has also proven an excellent approach for determining the safety integrity level necessary for an instrumented safety system, an approach endorsed in instrument standards, such as ISA S84 and IEC 61511. Written by industry experts in LOPA, this pioneering book provides all the necessary information to undertake and complete a Layer of Protection Analysis during any stage in a processes' life cycle. Loaded with tables, charts, and examples, this book is invaluable to technical experts involved with ensuring the safety of a process. Because of its simplified, quicker risk assessment approach, LOPA is destined to become a widely used technique. Join other major companies and start your LOPA efforts now by purchasing this book.

"Microbiology covers the scope and sequence requirements for

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a single-semester microbiology course for non-majors. The book presents the core concepts of microbiology with a focus on applications for careers in allied health. The pedagogical features of the text make the material interesting and accessible while maintaining the career-application focus and scientific rigor inherent in the subject matter. Microbiology's art program enhances students' understanding of concepts through clear and effective illustrations, diagrams, and photographs. Microbiology is produced through a collaborative publishing agreement between OpenStax and the American Society for Microbiology Press. The book aligns with the curriculum guidelines of the American Society for Microbiology."--BC Campus website.

This book on ‘Chemistry and Technology of Natural and

Synthetic Dyes and Pigments' is a priority publication by IntechOpen publisher and it relates to sustainable approaches towards green chemical processing of textiles, specifically on dyeing with natural dyes and pigments as well as dyeing with eco-safe synthetic dyes and chemicals. This book includes the following chapters: an introductory editorial chapter on bio-mordants, bio-dyes and bio-finishes, a review of natural dyes and pigments and its application, pantone-like shade generation with natural colorants, colour-based natural dyes and pigments, printing with natural dyes and pigments, functional property and functional finishes with natural dyes and pigments, eco-safe synthetic dyes and chemicals, and a miscellaneous review on dyed textiles and clothing including natural dye-based herbal textiles. This new book is expected to be useful for dyers of the

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textile industry as well as to the future researchers in this field. Advances in Carpet Manufacture, Second Edition, discusses the manufacture of carpets, an industry that has evolved over hundreds of years, also exploring the new changes and developments in textile science and manufacturing technology that occur every day. This updated edition provides revised, expanded and updated coverage of carpet manufacturing processes and applications. The book begins by reviewing the different types of carpets and their applications, also exploring the structure and properties of carpet materials. Carpet manufacturing techniques are then reviewed, including a new chapter on tufting and yarn manufacturing techniques, and design and manufacture for handmade carpets. Subsequent chapters review the development of carpets with important

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properties, including new chapters on carpets for acoustics and sound absorption, carpets with increased fire retardancy and those with antimicrobial and soil-resist finishes. With the variety of topics covered and its international team of contributors, the book offers a valuable and informative reference for technologists in the carpet and associated industries. However, it is also a great resource for researchers and students working in applied textile sciences. Presented by an expert editor with many years of experience in both academic textile research and industry Provides new research, technologies and other developments in carpet manufacture for academics and developers seeking to update their knowledge Includes a strong focus on industry needs and developing areas with market potential

Industrial Practices in Weaving Preparatory

Electrophoretic Techniques

Chemistry and Technology of Natural and Synthetic Dyes and Pigments

Eco-friendly Raw Materials, Technologies, and Processing Methods

Textile Sizing

Based upon several years of extensive research performed at U.S. government laboratories, this reference offers a wide range of techniques involving flaw detection, the testing of properties and the integrity of materials in a way which does not impart damage or impair the usefulness of the

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material. Covers visual, penetration, sonic, ultrasonic, magnetic, electromagnetic, penetrant and enhanced visual inspections as well as combined applications of these methods. Provides guidelines to select appropriate testing techniques and equipment.

At present the textile industry produces the majority of its 34 billion square yards of printed textile fabric by screen printing. However as we move into the digital age developments in digital printing of paper are being adapted more and more for the textile market. Inkjet textile printing is

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growing while growth in analog textile printing remains stagnant. As digital print technologies improve offering faster production and larger cost-effective print runs, digital printing will grow to become the technology that provides the majority of the world's printed textiles. This comprehensive introduction to the subject is broken into five sections. After two introductory chapters, it goes on to look in a number of detailed chapters at printer and print head technologies. The next section examines the printer software required for successful colour design and management. The

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digital printing colouration process is explored next, with chapters on substrate preparation, pigmented ink, aqueous inkjet ink, pre-treatment and printing on cationized cotton with reactive inks. The book is concluded with three chapters on the design and business aspect of digital printing. Digital printing of textiles contains fundamental technical explanations along with recent research, and is an invaluable guide for product developers, retailers, designers and academic researchers. Provides coverage of all the current developments in digital textile printing Covers important areas

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such as printer and print head technologies, printer software, digital printing colouration and design and business for digital printing

Textiles have been historically and traditionally used to make clothes, but even in ancient times there were technical textiles for making sails, tents, etc. Today, technical textiles are used in various industries for a host of purposes and applications. Recently, there have been exciting developments on various fronts in the textile field to impart novel and innovative functionalities to textiles, e.g., easy-to-clean or dirt-repellent, flame retardancy, anti-

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bacterial, and fog-harvesting properties, to name a few. Also, textiles for electronics based on graphene, CNTs and other nanomaterials, conductive textiles, textiles for sensor function, textile-fixed catalysts, textiles for batteries and energy storage, textiles as substrates for tissue engineering, and textiles for O/W separation have appeared in the literature. All this has been possible through adopting novel ways for finishing textiles, e.g., by appropriate surface modification techniques, and utilizing biomimetic concepts borrowed from nature. This unique book entitled

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“Textile Finishing: Recent Developments and Future Trends” is divided into four parts: Part 1: Recent Developments/Current Challenges in Textile Finishing; Part 2: Surface Modification Techniques for Textiles; Part 3: Innovative Functionalities of Textiles; Part 4: Fiber-Reinforced Composites. The topics covered include: Antimicrobial textile finishes; flame retardant textile finishing; “self-cleaning” or easy-to-clean textiles; metallization of textiles; atmospheric pressure plasma, and uv-based photochemical surface modification of textiles; tunable wettability of textiles; 3D textile

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structures for fog harvesting; textile-fixed catalysts; medical textiles as substrates for tissue engineering; and fiber-reinforced “green” or “greener” biocomposites and the relevance of fiber/matrix adhesion.

Nanotechnology in Industrial Wastewater Treatment is a state of the art reference book. The book is particularly useful for wastewater technology development laboratories and organizations. All professional and academic areas connected with environmental engineering, nanotechnology based wastewater treatment and

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related product design are incorporated and provide an essential resource. The book describes the application and synthesis of Ca-based and magnetic nano-materials and their potential application for removal/treatment of heavy metals from wastewater. Nanotechnology in Industrial Wastewater Treatment discusses the rapid wastewater treatment methods using Ca-based nanomaterials and magnetic nanomaterials. This is an emerging area of new science and technology in wastewater treatment. The main audiences for the book are water industry professionals, research

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scholars and students in the area of Environmental Engineering and Nanotechnology. Authors: Dr. Arup Roy Department of Mining Engineering, Geo-Environmental Lab., Indian Institute of Technology, Kharagpur, India; and Professor Jayanta Bhattacharya, Department of Mining Engineering, Geo-Environmental Lab., Indian Institute of Technology, Kharagpur, India.

High Voltage Engineering

Functional Finishes for Textiles

Improving Comfort, Performance and Protection

Total Knee Arthroplasty

Natural Dyes for Textiles

This comprehensive reference on total knee arthroplasty describes all surgical techniques and prosthetic designs for primary and revision arthroplasty, discusses every aspect of patient selection, preoperative planning, and intraoperative and postoperative care.

It is particularly appropriate that a volume concerned with dye chemistry should be included in the series Topics in Applied Chemistry. The development of the dye industry has been inexorably linked not only with the development of the chemical industry but also with organic chemistry itself since the middle of the last

century. The position of dye chemistry at the forefront of chemical 1945 and more markedly so during the last advance has declined somewhat since 15 years, with pharmaceutical and medicinal chemistry assuming an increasingly prominent position. Nevertheless, dye production still accounts for a significant portion of the business of most major chemical companies. The field of dye chemistry has stimulated the publication of many books over the years but surprisingly few have concentrated on or even included the practical aspects of dye synthesis and application. Thus, the present volume is designed to fulfill that need and provide the reader

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with an account of advances in dye chemistry, concentrating on more recent work and giving, in a single volume, synthetic detail and methods of application of the most important classes, information which will be invaluable to both student and research chemist alike.

Electrospun Nanofibers covers advances in the electrospinning process including characterization, testing and modeling of electrospun nanofibers, and electrospinning for particular fiber types and applications. Electrospun Nanofibers offers systematic and comprehensive coverage for academic researchers,

industry professionals, and postgraduate students working in the field of fiber science. Electrospinning is the most commercially successful process for the production of nanofibers and rising demand is driving research and development in this field. Rapid progress is being made both in terms of the electrospinning process and in the production of nanofibers with superior chemical and physical properties. Electrospinning is becoming more efficient and more specialized in order to produce particular fiber types such as bicomponent and composite fibers, patterned and 3D nanofibers, carbon nanofibers and nanotubes, and nanofibers derived from

chitosan. Provides systematic and comprehensive coverage of the manufacture, properties, and applications of nanofibers Covers recent developments in nanofibers materials including electrospinning of bicomponent, chitosan, carbon, and conductive fibers Brings together expertise from academia and industry to provide comprehensive, up-to-date information on nanofiber research and development Offers systematic and comprehensive coverage for academic researchers, industry professionals, and postgraduate students working in the field of fiber science

Manufactured Fibre Technology Springer Science &

Business Media

Sustainability in the Textile Industry

Molecular Biology of the Cell

Microbiology

Sources, Chemistry and Applications

Real-time PCR

Manufactured Fibre Technology provides an accessible and comprehensive treatment of the chemical, physical and mechanical processes involved in the production of all important commodity manufactured fibres and most of the industrial fibres. The emphasis is on the fundamental principles and industrial aspects of production. Latest

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developments in manufactured fibres in terms of manufacturing processes, characteristics and their applications are also covered. Manufactured Fibre Technology is designed around twenty chapters with a balance of basic principles and production of specific fibre types. Newer and industrially relevant areas such as high speed spinning, production of speciality fibres (including microfibres), computer simulation of spinning, high performance fibres, spun-bonding and melt-blowing, and re-use of fibre waste are included. The structure, property and application areas of each fibre type are also discussed, thus providing a broad understanding of the

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subject. In addition, various aspects related to the testing and characterisation of fibres and polymers are reviewed. This book is an invaluable resource to students, lecturers, industrial technologists and researchers in this subject area.

With a variety of detection chemistries, an increasing number of platforms, multiple choices for analytical methods and the jargon emerging along with these developments, real-time PCR is facing the risk of becoming an intimidating method, especially for beginners. Real-time PCR provides the basics, explains how they are exploited to run a real-time PCR assay, how

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the assays are run and where these assays are informative in real life. It addresses the most practical aspects of the techniques with the emphasis on 'how to do it in the laboratory'. Keeping with the spirit of the Advanced Methods Series, most chapters provide an experimental protocol as an example of a specific assay.

The handbook outlines the principles, equipment, materials maintenance, methodology, and interpretation skills necessary for liquid penetration testing. The third edition adds new sections on filtered particle testing of aerospace composites, quality control of down hole oil field tubular assemblies, and probability of detection, and

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considers new regulations on CFC fluids throughout the text. Annotation copyrighted by Book News, Inc., Portland, OR

Helping you keep pace with rapid developments in the field, Textile Sizing documents the rapidly changing scenario in textile processing and research in sizing. The authors analyze new fibers, spinning methods, and weaving techniques affecting textile production and studies the impact of fiber properties, yarn quality, sizing processes and materials, and chemical and mechanical phenomena on efficient textile manufacturing and development. Numerous tables dispersed throughout the

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text provide specific guidance on the wide range of processes involved in textile sizing. Illustrating the necessity and value of sizing techniques in the modern textile industry, this reference helps you Predict the efficiency of their sizing methods Master process controls, warping and sizing operations, and modern instrumentation techniques Analyze developments in draw warping and system sizing for reduction of operating costs Understand the importance of desizing and its effect on size recovery and environmental pollution Study the behavior of the warp during weaving and the structural differences between various yarns Textile Sizing is

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invaluable for physical, surface, colloid, textile, materials, polymer, plastics, and fiber chemists; industrial, manufacturing, textile, fiber, and composite engineers; and upper-level undergraduate and graduate students in these disciplines.

Testing of Textile Materials

Introduction to Fluorescence Microscopy

Mechanics of Pneumatic Tires

Roadmap to Sustainable Textiles and Clothing

The Chemistry and Application of Dyes

This book is part of a five-volume set that explores sustainability in textile industry practices globally. Case

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studies are provided that cover the theoretical and practical implications of sustainable textile issues, including environmental footprints of textile manufacturing, consumer behavior, eco-design in clothing and apparels, supply chain sustainability, the chemistry of textile manufacturing, waste management and textile economics. The set will be of interest to researchers, engineers, industrialists, R&D managers and students working in textile chemistry, economics, materials science, and sustainable consumption and production. This volume addresses the technologies and mechanical processes of textile production, and what sustainable methods can be employed to achieve

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improved safety and environmental health. The book covers sustainable aspects of printing, dyeing, coloration, weaving, knitting, tailoring, surface design and antimicrobial finishing for environmentally friendly textile and apparel products.

In this book, the authors consider not only the design and operation of the loom itself, but also the preparation of yarns and packages, the design and structure of the fabrics produced, and the management aspects of weaving as an industrial process. A comprehensive reference book covering in depth the modern technology of woven fabric production. It will be of value of the practitioner and student alike. The

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information provided will enable the reader to judge how to produce a fabric suited to a particular purpose in the most economical way. The text is generously illustrated and there is a glossary of terms which is cross-referenced to the text and to an extensive list of cited literature. Originally published by Merrow 2nd edition 1982.

Industrial Practices in Weaving Preparatory covers the basic concepts of winding, warping and sizing processes. The book includes critical comparisons between various industrial concepts, practices, and processes of winding, warping, and sizing. Weaving preparatory machine manufacturers have registered

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remarkable developments and innovations in this field, and the book covers all latest developments of above said topics.

For the experienced manufacturing professional, the book offers a review of inspection and measurement concepts, and some new insights into the subject. For those new to inspection and measurement, the text will help them grasp the technology involved and the methods for effectively planning applications.

Advances in Petrochemicals

Fabric Testing

Conversion of Yarn to Fabric

Layer of Protection Analysis

Keys to Process Planning and Improvement

Natural Dyes for Textiles: Sources, Chemistry and Applications is an in-depth guide to natural dyes, offering complete and practical coverage of the whole dyeing process from source selection to post-treatments. The book identifies plants with high dye content that are viable for commercial use, and provides valuable quantitative information regarding extraction and fastness properties, to aid dye selection.

The book presents newer natural dyes in detail, according to their suitability for cotton fabrics, silk fabrics, and wool yarn, before describing the application of each dye. Extraction of plant parts for isolation of colorants, chromatographic techniques for separation, spectroscopic analysis of the isolated colorants, structure elucidation, biomordanting, pretreatments, and post-treatments, are also covered. Prepared by an expert author with many years of experience in

researching and writing on natural textile dyes, this book is an important resource for academic researchers, post-graduate students, textile manufacturers, technicians, dye practitioners, and those involved in textile dye research and development. Written by an expert author with many years of experience in researching and writing on natural textile dyes Provides quantitative information about extraction and fastness properties that

will be valuable to those involved in dye selection Offers complete and practical coverage of the whole dyeing process from source selection to post-treatments Functional finishes for textiles reviews the most important fabric finishes in the textile industry. It discusses finishes designed to improve the comfort and other properties of fabrics, as well as finishes which protect the fabric or the wearer. Each chapter reviews the role of a finish, the mechanisms and chemistry

behind the finish, types of finish and their methods of application, application to particular textiles, testing and future trends. Describes finishes to improve comfort, performance, and protection of fabric or the wearer Examines the mechanisms and chemistry behind different types of finishes and their methods of application, testing and future trends Considers environmental issues concerning functional finishes Sustainable Industrial Design and Waste

Management was inspired by the need to have a text that enveloped awareness and solutions to the ongoing issues and concerns of waste generated from industry. The development of science and technology has increased human capacity to extract resources from nature and it is only recently that industries are being held accountable for the detrimental effects the waste they produce has on the environment. Increased governmental research,

regulation and corporate accountability are digging up issues pertaining to pollution control and waste treatment and environmental protection. The traditional approach for clinical waste, agricultural waste, industrial waste, and municipal waste are depleting our natural resources. The main objective of this book is to conserve the natural resources by approaching 100 % full utilization of all types of wastes by cradle - to - cradle concepts, using

Industrial Ecology methodology documented with case studies. Sustainable development and environmental protection cannot be achieved without establishing the concept of industrial ecology. The main tools necessary for establishing Industrial Ecology and sustainable development will be covered in the book. The concept of “industrial ecology will help the industrial system to be managed and operated more or less like

a natural ecosystem hence causing as less damage as possible to the surrounding environment. Numerous case studies allow the reader to adapt concepts according to personal interest/field Reveals innovative technologies for the conservation of natural resources The only book which provides an integrated approach for sustainable development including tools, methodology, and indicators for sustainable development

This book examines in detail key aspects of sustainability in the textile industry, especially environmental, social and economic sustainability in the textiles and clothing sector. It highlights the various faces and facets of sustainability and their implications for textiles and the clothing sector.

***Simplified Process Risk Assessment
Inspection and Measurement in
Manufacturing
Textile Finishing***

Nanotechnology in Industrial Wastewater Treatment
Sustainable Industrial Design and Waste Management

An Introduction to Fluorescence Correlation Spectroscopy represents a comprehensive introduction to fluorescence correlation spectroscopy (FCS), a biophysical experimental technique increasingly used to study and quantify molecular mobility, concentrations and interactions in

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vitro, as well as in living cells and multicellular organisms. Students and researchers who are new to FCS can use the book as the first introduction to the technique, while those who are already using FCS regularly in their research may find it useful to deepen their understanding of the technique, its possibilities, limitations, and potential pitfalls as well as ways to avoid them. This book introduces the reader to all aspects of FCS needed for

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practical usage of the technique in their research. In the beginning the concept of fluorescence intensity fluctuations and their auto- and cross-correlation functions are explained to give readers an understanding of the underlying principles. This is followed by an overview of instrumental FCS setups and various ways of data collection and processing, the derivations of theoretical models relating the experimentally obtained

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correlation functions to the underlying molecular processes, and the description of the fitting of experimental data with those models. Mathematically more involved portions are separated from the rest of the text and can be easily skipped by readers more interested in the conceptual and practical aspects of FCS. The book contains interactive graphics and is accompanied by an interactive computable document file allowing the

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reader to test the dependence of FCS results on a variety of experimental parameters, and to gain practical insights into FCS data fitting. Key Features Introduces the concepts of FCS in an accessible way, supported by animations and graphics in the ebook. Includes a supplementary interactive computable document file that allows the reader to experiment with various FCS setup and fit parameters, allowing readers to test their understanding and

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simulate experimental outcomes. Provides rigorous mathematical derivations of fundamental FCS equations and models. Pedagogical features include questions, short reviews and critical discussions of literature relevant to the particular chapter that include applications and fundamental developments in the field of FCS.

The petrochemical industry is an important area in our pursuits for

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economic growth, employment generation, and basic needs. It is a huge field that encompasses many commercial petrochemical and polymer-enabled products. The book is designed to help the reader, particularly students and researchers of petroleum science and engineering, to understand synthesis, processing, mechanics, and simulation of the petroleum processes. The selection of topics addressed and the examples, tables, and graphs used to

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illustrate them are governed, to a large extent, by the fact that this book is aimed primarily at petroleum science and engineering technologists. Undoubtedly, this book contains must read materials for students, engineers, and researchers working in the area of petrochemicals and petroleum and provides valuable insights into the related synthesis, processing, mechanisms, and simulation. This book is concise, self-explanatory,

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informative, and cost-effective.

Digital Printing of Textiles

Manufactured Fibre Technology

*Handbook of Value Addition Processes
for Fabrics*

*Sustainability in the Textile and
Apparel Industries*