

Handbook Of Fiber Finish Technology

Fibrous Filter Media comprehensively covers the types, manufacture, applications, performance, and modeling of fibrous filter media. Part I introduces the principles of gas and liquid filtration, while Part II presents an overview of the types of fibrous filters, including details of fiber types, fabric construction, and applications. Part III covers a variety of filtration applications in which fibrous assemblies are used, with examples ranging from filtration for improving air quality, to medical filters, to industrial waste-water filtration. Finally, Part III covers the properties and performance of fibrous filters, including chapters on filter performance and simulation. With its expert editors and international team of contributors, this important book provides information on fibrous filters relevant to fiber and textile scientists, and is also ideal for academics and industry professionals working in the field of filtration. Dr. Philip Brown is Sweetenburg Professor of polymer and textile engineering at Clemson University, USA. Dr. Christopher Cox is Professor of mathematical sciences at Clemson University, USA. Systematic and comprehensive coverage of the trends and new technologies being developed in the field of fibrous filter media Focused on the needs of the textiles and filtration industries, with a clear emphasis on applied technology Contains contributions from an international team of authors edited by an expert in the field Vols. 8-10 of the 1965-1984 master cumulation constitute a title index.

Dr. Yeh supplies a firm theoretical foundation in such topics as propagation of light through fibers, fiber fabrication, loss mechanisms, and dispersion properties. He then expands from this into such practical areas as fiber splicing, measuring loss in fibers, fiber-based communications networks, remote fiber sensors, and integrated optics. Whether involved in fiber optics research, design, or practical implementation of systems, this handbook will be extremely useful. Key Features * Here is a comprehensive, "one-stop" reference with state-of-the-art information on fiber optics included is data on: * Optical fibers and fiber materials * Light sources and detectors * Coupler, LEDs, and other individual components * Coherent optics * Lasers * The development of fiber optics-based telecommunications systems

Textile Chemist and Colorist

Handbook of Nonwoven Filter Media

Siloxanes—Advances in Research and Application: 2013 Edition

Riding the Crest Into the 21st Century

Theory and Applications

Handbook of Fiber Science and Technology

This book should be of interest to students and practitioners of materials science, production engineering, and engineering and design.

The first edition of Handbook of Technical Textiles has been an essential purchase for professionals and researchers in this area since its publication in 2000. With revised and updated coverage, including several new chapters, this revised two volume second edition reviews recent developments and new technologies across the field of technical textiles. Volume 2 – Technical Textile Applications offers an indispensable guide to established and developing areas in the use of technical textiles. The areas covered include textiles for personal protection and welfare, such as those designed for ballistic protection, personal thermal and fire protection, and medical applications; textiles for industrial, transport and engineering applications, including composite reinforcement and filtration; and the growing area of smart textiles. Comprehensive handbook for all aspects of technical textiles Provides updated, detailed coverage of processes, fabric structure, and applications Ideal resource for those interested in high-performance textiles, textile processes, textile processing, and textile applications Many of the original, recognized experts from the first edition update their respective chapters

Waterproof and Water Repellent Textiles and Clothing provides systematic coverage of the key types of finishes and high performance materials, from conventional wax and silicone, through controversial, but widely used fluoropolymers and advanced techniques, such as atmospheric plasma deposition and sol-gel technology. The book is an essential resource for all those engaged in garment development, production and finishing, and for academics engaged in research into apparel technology and textile science. Rapid innovation in this field is driving new performance demands in many areas, including the sporting and military sectors. However, another innovation driver is the regulatory framework in the USA, Europe and globally, addressing both health concerns (e.g. with PFOS / PFOA) and environmental impacts (e.g. C8 fluorocarbon finishes). Both of these aspects are fully covered, along with the replacement materials / technologies currently available and under development. In addition, oleophobic and multifunctional coatings are discussed, as are aspects of performance, testing and applications in sportswear, protective clothing, and footwear. Introduces innovative materials and technologies, exploring their current and potential use across different sectors Provides expert guidance on the health and environmental aspects of key waterproof materials and coatings and their associated regulations Demystifies testing processes and design principles

Technology, Science and Economics

Oceans '99 MTS/IEEE

Sci-Tech News

Forthcoming Books

Handbook of Fiber Optics

Surface Modification of Textiles

This book combines Von Moody's original work and research in the carpet industry with the well respected 1986 textile source book, Textile Fibers, Dyes, Finishes, and Processes: A Concise Guide, by Howard L. Needs to produce a unique practical guide on all aspects of the preparation, manufacture, and performance of carpet. It addresses the structure and properties of fiber, carpet construction, coatings, dyes, finishes, performance, and recycling, among other topics. This volume is an indispensable reference for all practitioners in the carpet industry.

Preface; Introduction; Processes for Forming Nonwoven Filter Media; Raw Materials for Nonwoven Filter Media; Types of Filters Using Nonwovens; Applications for Nonwoven Filters; Test Methods for Nonwoven Filter Media; Standards for Nonwoven Media; Glossary; Index; Appendix.

A world list of books in the English language.

Cumulative Book Index

Encyclopedia of Polymer Science and Technology, Part 1

Handbook of Technical Textiles

Modified Fibers with Medical and Specialty Applications

Encyclopedia of Clothing and Fashion

Handbook of Renewable Materials for Coloration and Finishing

The surface of textiles offers an important platform for functional modifications in order to meet special requirements for a variety of applications. The surface modification of textiles may be achieved by various techniques ranging from traditional solution treatment to biological approaches. This book reviews fundamental issues relating to textile surfaces and their characterisation and explores the exciting opportunities for surface modification of a range of different textiles. Introductory chapters review some important surface modification techniques employed for improved functional behaviour of textiles and the various surface characterisation methods available. Further chapters examine the different types of surface modification suitable for textiles, ranging from the use of plasma treatments and physical vapour deposition to the use of nanoparticles. Concluding chapters discuss surface modification strategies for various applications of textiles. Surface modification of textiles is a valuable resource for chemists, surface scientists, textile technologists, fibre scientists, textile engineers and textile students. Reviews fundamental issues relating to textiles surfaces and their characterisation Examines various types of surface modification suitable for textiles, including plasma treatments and nanoparticles Discusses surface modification strategies for textile applications such as expansion into technical textile applications

Principles of Textile Finishing presents the latest information on textile finishing for industry professionals and researchers who are new to the field. As these processes are versatile and varied in their applications, the book provides information on how decisions on finishes and techniques may be made subjectively or based on experience. In addition, the book presents the desired final properties of textile materials and how they differ widely from product to product, helping finishers who face significant challenges in delivering fabrics that meet the requirements of end-users be successful. Written by an author who is an expert in the field, and who has with many years of experience in industry and academia, this book provides an accessible introduction to the principles, types, and applications of textile finishes. Provides an accessible introduction to the principles, types, and applications of textile finishes Assists industry professionals and researchers in selecting finishes that will result in fabric properties that meet the requirements of end-users Written by an author with years of experience in industry and academia and who is an expert in the field

Siloxanes—Advances in Research and Application: 2013 Edition is a ScholarlyBrief™ that delivers timely, authoritative, and specialized information about ZZZAdditional Research in a concise format. The editors have built Siloxanes—Advances in Research and Application: 2013 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about ZZZAdditional Research in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Siloxanes—Advances in Research and Application: 2013 Edition has been produced by the world ' s leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

Fibrous Filter Media

Tufted Carpet

Coatings Technology Handbook, Second Edition

Deburring and Edge Finishing Handbook

Conference Proceedings

Canadian Textile Journal

This unique handbook provides a vivid multidisciplinary dimension through technological perspectives to present cutting-edge research in the field of natural coloration and finishing. The 20 chapters are divided in to four parts: Substrates for coloration and finishing; renewable colorants and their applications; advanced materials and technologies for coloration and finishing; sustainability. Among the topics included in the Handbook of Renewable Materials for Coloration and Finishing are: The systematic discussion on the suitability, physical, chemical and processing aspects of substrates for coloration and finishing Bio-colorant's application as photosensitizers for dye sensitized solar cells Animal based natural dyes Natural dyes extraction and dyeing methodology Application of natural dyes to cotton and jute textiles Sol-gel flame retardant and/or antimicrobial finishings for cellulosic textiles Rot resistance and antimicrobial finish of cotton khadi fabrics Advanced materials and technologies for antimicrobial finishing of cellulosic textiles

Written a leading expert, this book is an authoritative and comprehensive guide to textile yarn manufacturing. The first three chapters provide an overview of yarn production, products and key principles. Chapters then review in detail the production processes for short-staple, long-staple and filament yarns and discuss quality control and the economics of staple-yarn production. The final section consists of a series of appendices with more detailed technical data and worked examples, providing in-depth analysis of key topics.

This completely new Third Edition of the Mark Encyclopedia of Polymer Science and Technology brings the state-of-the-art to the 21st century, with coverage of nanotechnology, new imaging and analytical techniques, new methods of controlled polymer architecture, biomimetics, and more. Whereas earlier editions published one volume at a time, the third edition is being published in 3 Parts of 4 volumes each. Each of these 4-volume Parts is an A-Z selection of the latest in polymer science and technology as published in the updated online edition of the Mark Encyclopedia of Polymer Science and Technology (available at www.mrw.interscience.wiley.com/epst). Order the 12 volume set (ISBN 0471275077) now for the best value and receive each of the 4 volume Parts as they publish. The complete list of titles to appear in Part 1 of this new third print edition can be viewed at www.mrw.interscience.wiley.com/epst and clicking on "What's New". Check this website often as new articles are added periodically.

Coir Fiber and its Composites

Waterproof and Water Repellent Textiles and Clothing

Recycling in Textiles

Makromoleküle

A Master Cumulation

Textile Processing with Enzymes

"Steele, director of the Fashion Institute of Technology Museum, has crafted, with the help of 325 contributors, an authoritative introduction to fashion, the industry, and the issues that hve defined the field. Some 640 articles describe the colorful facets of couture and textiles, from fabrics of chintz, corduroy, and feathers to such garb as aprons, bikinis, and prison dress. There are color plates and nearly 600 black-and-white illustrations. Back matter includes a comprehensive index, a timeline, and a topical outline."—"Reference that rocks," American Libraries, May 2005.

Im Laufe seiner Geschichte hat sich "Der Elias" zum Markenzeichen entwickelt. Die wissenschaftliche Genauigkeit und die Vollständigkeit sind nur zwei von vielen Merkmalen, mit denen sich die "Makromoleküle" ihren Platz in der Fachwelt erobert haben. Der vorliegende vierte Band schließt dieses einmalige Werk über Makromoleküle und Makromolekulare Chemie ab. Er ist den Anwendungen gewidmet, die so vielfältig sind, wie die Werkstoffe, die aus Makromolekülen bestehen: Kunststoffe, Fasern, Elastomere, Packmittel, Überzüge, Klebstoffe, gelöste Polymere, um nur eine kleine Auswahl zu nennen. Wie die Bände 1 bis 3 kann auch der vorliegende Band 4 alleine eingesetzt werden: Wichtige Grundlagen werden verständlich abgeleitet, zu große Überschneidungen mit früheren Bänden aber vermieden. Polymerchemiker und Kunststofftechnologien können es sich nicht leisten, ohne "den Elias" zu arbeiten!

An exploration of the surface characteristics of fibres and textiles. It emphasizes how fibre surface affects permeability, stiffness, strength, dyeing, wrinkling, and other performance characteristics to optimize production. It also illustrates methods for developing wrinkle-resistant finishes on fibre surfaces using environmentally friendly techniques.

Textile

Technical Textile Applications

Surface Characteristics of Fibers and Textiles

Textile Technology Digest

ScholarlyBrief

Principles of Textile Finishing

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

With the increasing need to reduce pollution in textile production, the use of enzymes in the chemical processing of fibers and textiles is rapidly gaining recognition for its eco-friendly and non-toxic characteristics. Enzymes are a safe alternative in a wide range of textile processes that otherwise requires harsh chemicals, the disposal of which poses environmental problems. This book covers all of the relevant issues from basic biochemistry and enzymology to the industrial application of these biocatalysts. It begins with the fundamental aspects of enzymes determining catalytic properties, followed by a summary of fibrous and non-fibrous materials as substrates for enzymes. Chapters discuss catalysis and processing, with an overview of the function and application of enzymes used in textile processing, and addresses process engineering and industrial enzyme applications. The final part presents the practical aspects of handling enzymes, provide a detailed look at operational and storage stabilities, and consider the use of enzymes in effluent treatment.

Written by industry expert, LaRoux Gillespie, this handbook is the most comprehensive book on burr removal and the treatment of edges ever published. Armed with this in-depth guide to deburring technologies, any engineer involved with part manufacturing will quickly discover how to accurately identify and evaluate the most efficient and cost effective deburring option(s) for a specific application. This groundbreaking work details 100 internationally recognized deburring and edge finishing processes you can employ. It also offers you an extensive base of technical information on a vast array of tools, applications and procedures available. From burr prevention in the design phase to actual burr removal on the line, you will be better prepared to deal with burrs and edge defects and also determine what tolerance level is acceptable for quality production standards - before it becomes a shopfloor problem. Learn how to weigh aesthetic and functional justifications across a wide array of mechanical, thermal, chemical, electrical and manual techniques.

Handbook of Polyester Molding Compounds and Molding Technology

Handbook of Fiber Finish Technology

Textile Fibers, Dyes, Finishes and Processes

Functional Finishes for Textiles

Functional Textiles for Improved Performance, Protection and Health

Handbook of Yarn Production

An increasing amount of waste is generated each year from textiles and their production. For economic and environmental reasons it is necessary that as much of this waste as possible is recycled instead of being disposed of in landfill sites. In reality the rate of textile recycling is still relatively low. On average, approximately ten million tonnes of textile waste is currently dumped in Europe and America each year. Considering the diversity of fibrous waste and structures, many technologies must work in concert in an integrated industry in order to increase the rate of recycling. Recycling in textiles shows how this can be achieved. The first part of the book introduces the subject by looking at the general issues involved and the technologies concerned. Part Two explores the chemical aspects of textile recycling. Part Three focuses on recycled textile products, including nonwovens and alternative fibres. Finally, the last part of the book discusses possible applications of recycled textiles, including using recycled products in the operating theatre, for soil stabilisation and in concrete reinforcement. Recycling in textiles presents several promising technologies and ideas for recycling systems. This is the first book of its kind to bring together textile recycling issues, technology, products, processes and applications. It will prove an invaluable guide to all those in the industry who are now looking for ways to recycle their textile waste. Provides extensive coverage of this hot topic An invaluable guide for all in the textile industry Learn how to increase the rate of recycling

Coir Fiber and its Composites: Processing, Properties and Applications presents unified knowledge on eco-friendly coir fiber composites, covering their characterization, design, manufacture and applications. The properties of coir fiber and its extraction and processing are explored in-depth, thus helping researchers, scientists and those working in various industries understand the need of coir fiber composites in the development of green, biodegradable and sustainable composites that have potential in real-world applications. The book elaborates on the basic characterization of coir fibers and its composite properties such, including its physical, mechanical, morphological, thermal, structural and chemical properties. Users will find sound knowledge on coir fiber and its composites, including modern design and manufacture engineering with numerous example illustrations, methods and results that will be valuable for graduate students, researchers and industrialists working in the development of plant-based composite materials. Covers all aspects of coir fibers and their composites, such as cultivation, extraction, processing, modification, composite design, properties and applications Provides an overview of all types of natural fibers and their composites to give an insight on which fiber is suitable for a specific application Presents a comparison in terms of properties, costs, production processes and availability of different fibers Covers lifecycle assessment, case studies on industrial product development, manufacturing and design as well as numerical problems and solutions

Discusses the components of textile finishes, and the chemical and physical properties of, as well as their effects on, various fibres. The book covers fundamentals of fibre finish science, such as theories of friction; laboratory testing of formulations, from preliminary component evaluation to analyses for material characterization; and the influence of wetting, emulsification and finish distribution on coatings.

Advances in Functional Finishing of Textiles

Band 3: Industrielle Polymere und Synthesen

Book Review Index

American Book Publishing Record

Advances in Yarn Spinning Technology

Improving Comfort, Performance and Protection

Serving as an all-in-one guide to the entire field of coatings technology, this encyclopedic reference covers a diverse range of topics-including basic concepts, coating types, materials, processes, testing, and applications- and summarizes the latest developments and standard coating methods. Helping readers apply the best coatings for their product needs, the book provides the insights and experience of over 100 recognized experts in over 100 chapters to select. Emphasizing an interdisciplinary exchange of ideas and approaches, the book is illustrated with more than 350 drawings and photographs, plus early 1400 literature references, equations, and tables.

Covers cutting edge areas of fiber design and function in an introductory format Addresses a wide range of applications and modifications of natural and synthetic fibers for various applications Focuses on medical applications, but not exclusively Military and homeland security related applications Wound dressing design and future improvements are also covered Contains several different subjects such as magnetic fibers and electrospun fibers

This book provides an invaluable single source of information on the advances in yarn spinning technologies. Advanced spinning systems are described and comparisons are made of the properties of the yarns produced, and resultant finished products, with those from conventional systems. Part one provides an introduction to yarn fibre spinning and structure. Chapters discuss the principles of ring spinning and open-end spinning of yarns. Yarn structure and properties from different spinning techniques and yarn structural requirements for knitted and woven fabrics are also examined. Part two covers advances in particular yarn spinning technologies. Topics range from siro spinning to compact spinning technology and air-jet spinning. Final chapters explore how to minimise fibre damage which occur during spinning and the use of spin finishes for textiles. With its distinguished editor and array of international contributors, Advances in yarn spinning technology is an important text for spinners, yarn manufacturers and fabric producers, as well as researchers, technicians, engineers and technologists in this sector of the textile industry. Documents advances in spinning technologies and presents comparisons between systems Assesses particular textile spinning technologies with specific chapters focusing on siro, compact, rotor, friction and air-jet spinning Reviews measures to minimise fibre damage caused by spinning are investigated with specific relevance to rotor and friction spinning

Processing, Properties and Applications

Handbook of Polymer Science and Technology

Handbook of Fiberglass and Advanced Plastics Composites

Functional Finishes. Chemical processing of fibers and fabrics

The textile industry is increasingly based on ongoing innovation and development of higher performance products, and the field of functional textiles is no exception. This book explores the development of textiles with a wide range of functions, with the aim of improving the performance of the product in terms of the protection and health benefits that it can offer. The book is split into two parts. Part one focuses on functional textiles for improved performance and protection, with chapters reviewing antistatic, flame retardant and infrared functional textiles, among many others. Chapters in part two examine the uses of functional textiles in a medical context, including superhydrophobic materials, antibacterial textiles and insect-repellent materials. With its distinguished editors and contributions from some of the world's leading authorities, Functional textiles for improved performance, protection and health is invaluable for textile scientists, technologists and engineers as well as those designing and manufacturing textiles. It is also a suitable reference for the academic sector. Examines the use of functional textiles in a medical context, including superhydrophobic materials, antibacterial textiles and insect-repellent materials Topics range from textile chemicals and their interaction with skin to novel pesticide protective clothing Considers anti-ultraviolet protection of clothing and flame retardant textiles

This book provides a comprehensive overview of the field of functional finishing of textiles, describing the state-of-the-art research and well-established techniques applied in the textile industry, and covering all areas of textile dyeing and finishing. It is intended for academic researchers and professionals in related scientific and engineering fields, including textile engineering, chemistry, nanotechnology, material science, biotechnology and environmental science. The book also provides reference material for stakeholders looking for innovative technologies and insights into the environmental and sustainability issues in the development of functional textiles and related products.