Materie Plastiche

Un libro semplice, senza formule chimiche e matematiche, per conoscere i polimeri dal punto di vista microscopico (molecolare) per meglio comprenderne il comportamento macroscopico (caratteristiche del pezzo finito e del processo produttivo). Tutti i tecnici dell'industria delle materie plastiche apprenderanno: le proprietà dei polimeri, le tecniche di lavorazione, i polimeri più utilizzati.

A handbook on polyolefins. This second edition includes new material on the structure, morphology and properties of polyolefin (PO) synthesis. It focuses on synthetic advances, the use of additives, special coverage of PO blends, composites and fibres, and surface treatments. It also addresses the problem of interfacial and superficial phenomena.

This book, based on the Fourth International Conference on Advanced Manufacturing Systems and Technology - AMST '96 aims at presenting trend and up-to-date information on the latest developments - research results and industrial experience in the field of machining processes, optimization and process planning, forming, flexible machining systems, non conventional machining, robotics and control, measuring and quality, thus providing an international forum for a beneficial exchange of ideas, and furthering a favourable cooperation between research and industry.

Manuale delle materie plasticheTecniche NuoveProprietà e lavorazione delle materie

plastiche. Guida pratica per i tecnici dell'industriaEuroPass EditoreHandbook of PolyolefinsCRC Press

The overall aim of this book is to aid the process of sourcing and selecting appropriate thermoplastic polymers. There are now a wide diversity of thermoplastics offered for commercial uses. At one end of the range are the high-volume commodity materials for short life consumer applications. Whereas at the other end are the high value engineering materials; with significant levels of mechanical, physical and electrical performance. Within this publication, the generic groups of thermoplastics can be identified, along with their respective attributes and limitations. All thermoplastics are available in different grades. The constituents selected to form a grade are chosen to modify aspects of material behaviour, both during processing and in the final moulded form. The directory addresses materials which can be obtained in granular, powder or paste form for subsequent processing. Information is not provided directly on semi-finished product forms, such as films, fibres, sheet or profiles, other than when inferred from the processing descriptions of specified grades. The directory covers virgin or compounded material. It does not specifically address reclaimed or recycled grades. Data is provided for the mechanical and physical properties of moulded grades as processed by the route intended by the primary manufacturer (M) or compounder (C). Material grades can be obtained from a number of sources; either the original polymer manufacturer or a recognised compounder who produces a range of grades.

The dictionary contains an alphabetical listing of approximately 30,000 (thirty thousand) acronyms, initialisms, abbreviations and symbols covering approximately 2,000 fields and subfields ranging from Pelagic Ecology to Anthrax Disease, Artificial Organs to Alternative

Cancer Therapies, Age-related Disorders to Auditory Brainstem Implants, Educational Web Sites to Biodefense, Biomedical Gerontology to Brain Development, Cochlear Implants to Cellular Phones, Constructed Viruses to Copper Metabolism, Drug Discovery Programs to Drug-resistant Strains, Eugenics to Epigenetics, Epilepsy Drugs to Fertility Research, Genetically Modified Foods/Crops to Futuristic Cars, Genetic Therapies to Glycobiology, Herbicide-tolerant Crops to Heritable Disorders, Human Chronobiology to Human gene Therapies, Immunization Programs to Lunar Research, Liver Transplantation to Microchip Technology, Mitochondrial Aging to Molecular Gerontology, Neurodegenerative Diseases to Neuropsychology of Aging, Neurosurgery to Next Generation Programs, Obesity Research to Prion Diseases, Quantum Cryptography to Reemerging Diseases, Retinal Degeneration to Rice Genome Research, Social Anthropology to Software Development, Synchrotron Research to Vaccine Developments, Remote Ultrasound Diagnostics to Water Protection, Entomology to Chemical Terrorism and hundreds of others, as well as abbreviations/acronyms/initialisms relating to European Community and U.S., Japanese and International Programs/Projects/Initiatives from year 2000 up to 2010 as well as World Bank Programs.

This volume contains reviews on state-of-the-art Japanese research presented in the annual Spring and Autumn meetings of the Japanese Polymer Science Society. The aim of this section is to make information on the progress of Japanese Polymer Science, and on topics of current interest to polymer scientists in Japan, more easily available worldwide.

This volume is a technical and operative contribution to the United Nations "Decade on Education for Sustainable Development" (2005-2014), aiding the development of a new generation of designers, responsible and able in the task of designing environmentally sustainable products. The book provides a comprehensive framework and a practical tool to support the design process. This is an important text for those interested in the product development processes.

In the past 25 years, plastic products have gained universal use not only in food, clothing and shelter, but also in the transportation, construction, medical and leisure industries. Whereas previously synthetic plastics were developed as durable substitute products, increasing concern for the global environment and solid waste management has resulted in an urgent demand for biodegradable plastics. The main topics of the Third International Scientific Workshop were as follows: 1. Biodegradation of polymers and plastics 2. Environmental degradation of plastics 3. Synthesis and properties of new biodegradable plastic materials 4. Biodegradation and morphologies of polymer blends 5. Development of biodegradation test methods 6. Governmental policy, regulation and standards.

This book explores the bioclimatic approach to building design. Constant innovations in the field are evident, including the need to face climate changes and increase the local resilience

at different scales (regional, urban, architectural). Differently from other contributions, this book provides a definition of the bioclimatic design approach following a technological and performance-driven vision. It includes one of the largest collection of research voices on the topic, becoming also a critical reference work for bioclimatic theory. It is intended for architects, engineers, researchers, and technicians who have professional and research interests in bioclimatic and in sustainable and technological design issues.

In recent years there has been an increasing demand for fire retardant versions of a range of plastics. Such applications are fire retardancy in vehicles, aircraft, manned space vehicles, marine and industrial applications such as electronics and a wide range of applications in the building industry including roofing and interior walls. Also in domestic applications such as furniture, clothes, bedding, upholstery and electrical goods. Fire retardancy in polymers can be achieved by either of three ways. Firstly there are forms of polymers, such as polytetrafluoroethylene, which are intrinsically fire retardant. The second type are rendered fire retardant by the inclusion of a suitable additive in the formulation. These include additives based on bromine, antimony, nitrogen phosphorus and silicon. An essential requirement for fire retardant polymers used in enclosed spaces is that they do not release any toxic products upon combustion. In this respect antinomy containing additives are going out of favour due to the release of toxic antimony volatiles upon combustion. Thirdly, introduction of intumescence into polymers by the introduction of suitable compounds is being increasingly used as a means of imparting fire retardancy in polymers. There exists a plethora of methods used to assess fire retardancy in polymers. These are discussed and summarised in this book. The book will be of interest not only to working in industry but also to design engineers and producers in the

polymer fabrication industries.
The need for a broad development of the production of polymer ma terials has become evident. All these materials are subject to various types of aging (destruction); hence, stabilizers which permit the stor age, reprocessing, and use of polymer materials without any appreci able change in their properties must be introduced into them. In recent years, this problem of stabilizing polymers has attracted the attention of many scientists and technologists, both in the USSR and abroad. The scientific basis of the foreign studies will be found in a number of theo retical premises, but chiefly the theory of chain reactions with un branched chains. In the Soviet Union, the concepts of Academician N. N. Semenov on chain reactions with degenerate branches have become the starting point of theoretical studies of the stabilization and destruction of polymers. Soviet scientists have developed a theory of critical concentrations of antioxidants and have shown that the processes of stabilization have a very complex chemical character. The nature of the polymers them selves greatly affects these processes and consequently, different stabil izers are required for polymers of different structures. In addition, it has been shown that the antioxidants used thus far can not only cause chain termination, but can also initiate oxidation and give rise to de generate branches.
Il volume è rivolto agli studenti universitari dei corsi di Laurea in Scienze e Tecnologie Alimentari, Scienze e Tecnologie Agrarie e Scienze e Tecnologie della Ristorazione che devono acquisire nei loro studi conoscenze, competenze e abilità relative all’ambito multidisciplinare del confezionamento di alimenti e bevande. Lo scopo dell’opera è però anche quello di rendere disponibile un testo di utilità più ampia e generale, indirizzato ai tecnici e agli operatori che nelle aziende di produzione di alimenti, o di imballaggi per alimenti, sono

interessati ad un approfondimento e ad un aggiornamento scientifico-tecnologico nell'area. Frutto dell'esperienza degli Autori che insegnano questa materia da molti anni nella Facoltà di Agraria dell'Università degli Studi di Milano, l'opera offre la combinazione di esperienze didattiche e scientifiche in questo specialistico campo permettendo di affrontare il complesso ed articolato tema delle Tecnologie di Food Packaging in modo esauriente, aggiornato ed approfondito per garantire agli studenti ed ai docenti di Tecnologie Alimentari, così come a chiunque interessato alla materia, un efficace strumento di studio e di consultazione.