DESCRIPTION

The authoritative resource on polymer blends for the twenty-first century.

The most definitive and up-date reference available on the subject, the two-volume set Polymer Blends: Formulation and Performance explores and summarizes the recent progress made in polymer blend technology through the use of carefully selected contributions from today’s foremost authorities from around the world.

Stemming from over two decades of growth within the field, each chapter offers a unique combination of expertise and point of view designed to guide professionals working in the field into the twenty-first century. Editors Donald R. Paul and Clive B. Bucknall have devoted considerable attention to coordinating the contents and style of each chapter to assure coherent transition from topic to topic, and chapter to chapter.

Far more than a compendium of recent literature or a review on dramatic new advances, this highly practical handbook is essential reading for anyone concerned with development or use of polymer blends. The two-volume set provides the scientist with useful guidelines for designing polymers with desired properties.

Volume 1 is devoted to the formulation of polymer blends. Coverage includes:

* The basic thermodynamics of polymer-polymer mixtures
* Characterization of blends by a variety of techniques

* Structure formation, particularly of multiphase blends

Volume 2 is devoted to the performance of polymer blends. Coverage includes:

* Mechanical properties and fracture resistance

* The performance of rubber-toughened polymers, including fatigue bahavior

* Blending for specific performance characteristics

* Reinforced polymer blends.

Features:

* Contributions from the world's leading experts provide the most authoritative and objective examination of the past twenty years of progress in the field

* Careful editing ensures a smooth and logical transition from topic to topic

* Comprehensive coverage provide enough background to enable even a beginner to begin work in the field

* In-depth coverage presents the most important issues in the field culled from critical sifting through current literature

* Clear, concise entries and carefully selected graphics emphasize important basic principles and conceptual points to aid in understanding

* Bibliographies at the end of each chapter identify the most up-to-date and significant literature on each topic to facilitate further research.

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Donald R. Paul is an American materials scientist and engineer currently the Ernest Cockrell, Sr. Chair in Engineering at University of Texas at Austin. His interests are polymer engineering, biomaterials and membranes. Clive B. Bucknall is the author of Polymer Blends: Formulation and Performance, Two-Volume Set, published by Wiley.

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