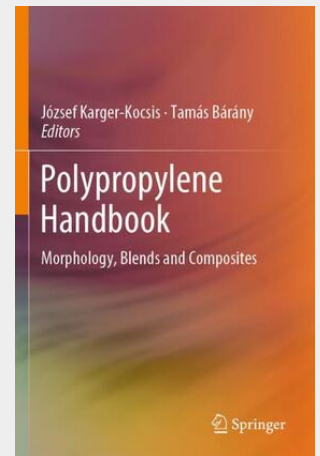


## Polypropylene Handbook

Morphology, Blends and Composites

This book extensively reviews Polypropylene (PP), the second most widely produced thermoplastic material, having been produced for over 60 years. Its synthesis, processing and application are still accompanied by vigorous R&D developments because the properties of PP are at the borderline between those of commodity and engineering thermoplastics. Readers are introduced to various tacticities and polymorphs of PP, and their effects on structural properties. Further, the book addresses the control of optical properties using nucleants, provides strategies for overcoming the limited cold/impact resistance of PP, examines in detail the effects of recycling, and presents guidelines for the property modification of PPs through foaming, filling and reinforcing with respect to target applications. Special attention is paid to descriptions and models of properties as a function of morphological variables. Last but not least, the book suggests potential practical applications of PP-based systems, especially in the packaging, appliances, building/construction, textile and automotive sectors. Each chapter, written by internationally respected scientists, reflects the current state-of-art in the respective field and offers a vital source of information for students, researchers and engineers interested in the morphology, properties, testing and modeling of PP and PP-based systems. The content is indispensable to the appropriate application of PPs and related composites.

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