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"These authors are leading researchers and have done a great service to the community by capturing the current understanding of carbon nanotube polymer nanocomposites. Active research in industry and academia alike will find this book a timely and valuable resource, particularly as it pertains to the electrical conductivity of these fascinating materials."

Prof. Karen I. Winey
University of Pennsylvania, USA

"This book provides a valuable review on the processing of nanotube dispersions and composites. It will be of great interest to a broad readership in chemistry, physics and materials science in both academia and industry."

Dr. Philippe Poulin
Centre de Recherche Paul Pascal, France

Conductive polymer nanocomposites are showing great promise as antistatic coatings and electromagnetic interference-shielding materials and even in electrical and electronics applications such as field-effect transistors. Because of their intrinsic conductivity and their high aspect (length/diameter) ratio, carbon nanotubes (CNTs) are very interesting nanofillers for easily processable conductive polymer materials. This book starts with an overview of all known techniques for dispersing CNTs in thermoplastic polymers and then concentrates on one of the most versatile techniques known nowadays, the so-called latex technology. Also discussed are the basic principles of this technology, the role of the matrix viscosity on percolation threshold, the importance of the intrinsic CNT quality, the use of "smart" additives facilitating electron transport in the final nanocomposite, and some promising potential applications.



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