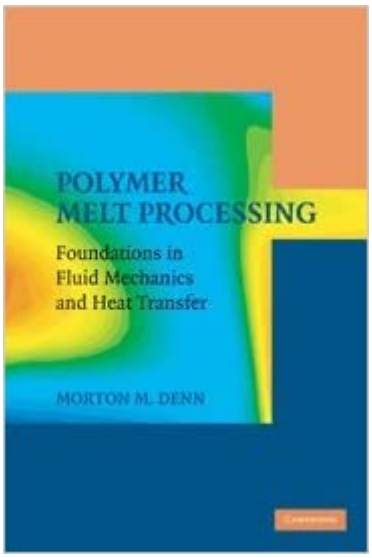
Polymer Melt Processing: Foundations In Fluid Mechanics And Heat Transfer (Cambridge Series In Chemical Engineering)



Synopsis

Most of the shaping in the manufacture of polymeric objects is carried out in the melt state, as it is a substantial part of the physical property development. Melt processing involves an interplay between fluid mechanics and heat transfer in rheologically complex liquids, and taken as a whole it is a nice example of the importance of coupled transport processes. This book is on the underlying foundations of polymer melt processing, which can be derived from relatively straightforward ideas in fluid mechanics and heat transfer; the level is that of an advanced undergraduate or beginning graduate course, and the material can serve as the text for a course in polymer processing or for a second course in transport processes.

Book Information

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Customer Reviews

"There are many aspects of this book to commend. The first is that it does not minimize the difficulties of the subject, yet manages to chart a course that builds on what a chemical engineering senior or graduate student can reasonably expect to find familiar up to the point where the difficulties of the subject can be properly grasped... The last three chapters are the densest; for me they were the most instructive and thought-provoking. They convinced me that progress is being made in modeling and tackling the unacceptable unsteadiness and non-uniformity observed in many current processes... I can justly end by urging every research worker in polymer processing to have a copy to hand on their shelves."J.R.A. Pearson, Journal of Non-Newtonian Fluid

Mechanics'... a pedagogical masterpiece ... It is highly recommended to all graduate students and researchers in polymer processing. It would also be useful to be read by process engineers working in industry, who are frequently confused and bewildered by the avalanche of equations found in the literature, which is mostly written by academics.' International Polymer Processing'I highly recommend this book. It can be used as a textbook for a course in polymer processing for advanced undergraduate or beginning graduate students as well as a reference book for engineers and scientists who are interested in polymer processing. All readers will find it easy to read, interesting, authoritative, thoughtful and instructive.' AIChE Journal

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great . Received as described. i love the product, it is very well balanced, has lot of weight to it, and it is very sharp. it cuts through bread so easily and makes perfect slices. quality. I'll be buying again. my husband think it is amazing , good product with high quality.

This book is a sound introduction to those who want to get fundamental understanding of the polymer processing principles and rheological/fluid mechanics analysis of the flow fields. I find this book has a right rigor for a graduate course on polymer processing. Even otherwise it is a must have book for all those who work in related fields.

Clay Animals - Polymer Clay Jewelry - Sculpture) Fluid Mechanics for Chemical Engineers (McGraw-Hill Chemical Engineering) Numerical Methods with Chemical Engineering Applications (Cambridge Series in Chemical Engineering) Introduction to Thermal Sciences: Thermodynamics, Fluid Dynamics, Heat Transfer Process Fluid Mechanics, (Prentice-Hall International Series in the Physical and Chemical Engineering Sciences) Chemical Engineering Fluid Mechanics, Third Edition Biofluid Mechanics, Second Edition: An Introduction to Fluid Mechanics, Macrocirculation, and Microcirculation (Biomedical Engineering) Elements of Polymer Science & Engineering, Second Edition: An Introductory Text and Reference for Engineers and Chemists (The Elements of Polymer Science and Engineering) How to Make Melt & Pour Soap Base from Scratch: A Beginner's Guide to Melt & Pour Soap Base Manufacturing The Elements of Polymer Science and Engineering, Third Edition (Elements of Polymer Science & Engineering) The Elements of Polymer Science and Engineering (Elements of Polymer Science & Engineering) Cute Polymer Clay Popsicles & Ice Cream: Polymer Clay Kawaii Food Charms (Polymer Clay Kawaii Charms Book 1)