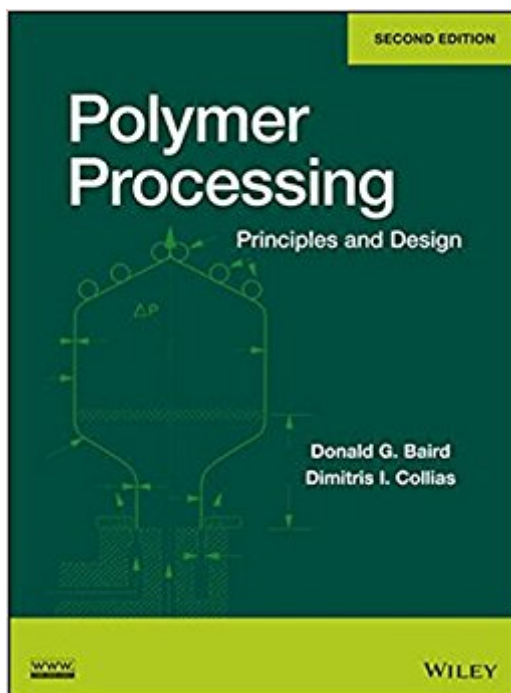


The book was found

Polymer Processing: Principles And Design



Synopsis

Fundamental concepts coupled with practical, step-by-step guidance With its emphasis on core principles, this text equips readers with the skills and knowledge to design the many processes needed to safely and successfully manufacture thermoplastic parts. The first half of the text sets forth the general theory and concepts underlying polymer processing, such as the viscoelastic response of polymeric fluids and diffusion and mass transfer. Next, the text explores specific practical aspects of polymer processing, including mixing, extrusion dies, and post-die processing. By addressing a broad range of design issues and methods, the authors demonstrate how to solve most common processing problems. This Second Edition of the highly acclaimed Polymer Processing has been thoroughly updated to reflect current polymer processing issues and practices. New areas of coverage include: Micro-injection molding to produce objects weighing a fraction of a gram, such as miniature gears and biomedical devices New chapter dedicated to the recycling of thermoplastics and the processing of renewable polymers Life-cycle assessment, a systematic method for determining whether recycling is appropriate and which form of recycling is optimal Rheology of polymers containing fibers Chapters feature problem sets, enabling readers to assess and reinforce their knowledge as they progress through the text. There are also special design problems throughout the text that reflect real-world polymer processing issues. A companion website features numerical subroutines as well as guidance for using MATLAB®, IMSL®, and Excel to solve the sample problems from the text. By providing both underlying theory and practical step-by-step guidance, Polymer Processing is recommended for students in chemical, mechanical, materials, and polymer engineering.

Book Information

Hardcover: 416 pages

Publisher: Wiley; 2 edition (March 24, 2014)

Language: English

ISBN-10: 0470930586

ISBN-13: 978-0470930588

Product Dimensions: 8.7 x 1.1 x 11 inches

Shipping Weight: 2.6 pounds (View shipping rates and policies)

Average Customer Review: 4.5 out of 5 stars 2 customer reviews

Best Sellers Rank: #989,472 in Books (See Top 100 in Books) #64 in Books > Engineering & Transportation > Engineering > Chemical > Plastics #76 in Books > Engineering & Transportation

Customer Reviews

Fundamental concepts coupled with practical, step-by-step guidance With its emphasis on core principles, this text equips readers with the skills and knowledge to design the many processes needed to safely and successfully manufacture thermoplastic parts. The first half of the text sets forth the general theory and concepts underlying polymer processing, such as the viscoelastic response of polymeric fluids and diffusion and mass transfer. Next, the text explores specific practical aspects of polymer processing, including mixing, extrusion dies, and post-die processing. By addressing a broad range of design issues and methods, the authors demonstrate how to solve most common processing problems. This Second Edition of the highly acclaimed Polymer Processing has been thoroughly updated to reflect current polymer processing issues and practices. New areas of coverage include: Micro-injection molding to produce objects weighing a fraction of a gram, such as miniature gears and biomedical devices New chapter dedicated to the recycling of thermoplastics and the processing of renewable polymers Life-cycle assessment, a systematic method for determining whether recycling is appropriate and which form of recycling is optimal Rheology of polymers containing fibers Chapters feature problem sets, enabling readers to assess and reinforce their knowledge as they progress through the text. There are also special design problems throughout the text that reflect real-world polymer processing issues. A companion website features numerical subroutines as well as guidance for using MATLAB®[®], IMSL®[®], and Excel to solve the sample problems from the text. By providing both underlying theory and practical step-by-step guidance, Polymer Processing is recommended for students in chemical, mechanical, materials, and polymer engineering.

DONALD G. BAIRD, PhD, is the Alexander F. Giacco and Harry C. Wyatt Professor of Chemical Engineering at Virginia Tech. His research centers on the use of fundamental non-Newtonian fluid mechanics to develop improved processing operations for polymers and polymer composites. Among his many honors, the Society of Plastics Engineers has awarded him the International Award, the International Award for Research, and the International Award for Education. A holder of seven patents, Dr. Baird has published some 300 refereed publications. DIMITRIS I. COLLIAS, PhD, is with the corporate R&D department of the Procter & Gamble Co. in Cincinnati, Ohio. He earned his PhD degree from Princeton University. With twenty years of industry experience in

polymers, polymer processing, packaging, paper, and activated carbon, his current research focuses on developing renewable materials and processes for key products in the company's portfolio. Dr. Collias holds fifty-four issued U.S. patents and is inventor or co-inventor in more than thirty U.S. patent applications.

Good basic book

arrived before expected, love them Beautiful, affordable, great packaging Good quality. we were very pleased to have them. All is good First of all, great customer service. I had an issue and they took care of it right away. Love this. This is my third purchase. Nice thank you gift!!

[Download to continue reading...](#)

Polymer Clay: The Ultimate Beginners Guide to Creating Animals in 30 Minutes or Less! (Polymer Clay - Polymer Clay for Beginners - Clay - Polymer Clay Animals - Polymer Clay Jewelry - Sculpture) Cute Polymer Clay Popsicles & Ice Cream: Polymer Clay Kawaii Food Charms (Polymer Clay Kawaii Charms Book 1) Polymer Processing: Principles and Design Functional Polymer Coatings: Principles, Methods, and Applications (Wiley Series on Polymer Engineering and Technology) Principles of Polymer Processing Elements of Polymer Science & Engineering, Second Edition: An Introductory Text and Reference for Engineers and Chemists (The Elements of Polymer Science and Engineering) The Elements of Polymer Science and Engineering, Third Edition (Elements of Polymer Science & Engineering) Polymer clay: All the basic and advanced techniques you need to create with polymer clay Polymer clay: All the basic and advanced techniques you need to create with polymer clay. (Volume 1) Methods of X-ray and Neutron Scattering in Polymer Science (Topics in Polymer Science) The Elements of Polymer Science and Engineering (Elements of Polymer Science & Engineering) SCULPTING THE EASY WAY IN POLYMER CLAY FOR BEGINNERS 2: How to sculpt a fairy head in Polymer clay (Sculpting the easy way for beginners) Polymer animal clay : Learning how to create life like animals out of polymer clay The Encyclopedia of Polymer Clay Techniques: A Comprehensive Directory of Polymer Clay Techniques Covering a Panoramic Range of Exciting Applications Polymer Synthesis, Second Edition: Volume 1 (Polymer Syntheses) Graphic Design Success: Over 100 Tips for Beginners in Graphic Design: Graphic Design Basics for Beginners, Save Time and Jump Start Your Success (graphic ... graphic design beginner, design skills) Polymer Nanocomposites: Processing, Characterization, And Applications (McGraw-Hill Nanoscience and Technology) Radiation Processing of Polymer Materials and Its Industrial Applications Understanding Polymer Processing: Processes and Governing Equations Polymer

Processing and Properties

Contact Us

DMCA

Privacy

FAQ & Help