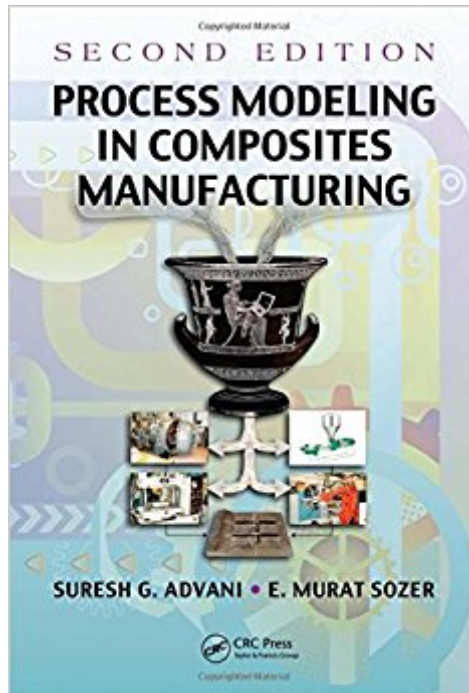


The book was found

Process Modeling In Composites Manufacturing, Second Edition



Synopsis

There is a wealth of literature on modeling and simulation of polymer composite manufacturing processes. However, existing books neglect to provide a systematic explanation of how to formulate and apply science-based models in polymer composite manufacturing processes. *Process Modeling in Composites Manufacturing, Second Edition* provides tangible methods to optimize this process and it remains a proven, powerful introduction to the basic principles of fluid mechanics and heat transfer. Includes tools to develop an experience base to aid in modeling a composite manufacturing process Building on past developments, this new book updates the previous edition's coverage of process physics and the state of modeling in the field. Exploring research derived from experience, intuition, and trial and error, the authors illustrate a state-of-the-art understanding of mass, momentum, and energy transfer during composites processing. They introduce computer-based solutions using MATLAB® code and flow simulation-based analysis, which complement closed-form solutions discussed in the book, to help readers understand the role of different material, geometric, and process parameters. This self-contained primer provides an introduction to modeling of composite manufacturing processes for anyone working in material science and engineering, industrial, mechanical, and chemical engineering. It introduces a scientific basis for manufacturing, using solved example problems which employ calculations provided in the book. End-of-chapter questions and problems and fill in the blanks sections reinforce the content in order to develop the experience base of the manufacturing, materials, and design engineer or scientists, as well as seniors and first-year graduate students.

Book Information

Hardcover: 630 pages

Publisher: CRC Press; 2 edition (July 14, 2010)

Language: English

ISBN-10: 1420090828

ISBN-13: 978-1420090826

Product Dimensions: 7 x 1.4 x 10.5 inches

Shipping Weight: 2.8 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #1,587,310 in Books (See Top 100 in Books) #144 in Books > Engineering & Transportation > Engineering > Materials & Material Science > Extraction & Processing #987 in Books > Engineering & Transportation > Engineering > Industrial, Manufacturing & Operational

Systems > Manufacturing #2331 inÂ Books > Textbooks > Engineering > Mechanical Engineering

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

Process Modeling in Composites Manufacturing, Second Edition Manufacturing Processes for Advanced Composites Additive Manufacturing: 3D Printing for Prototyping and Manufacturing Understanding Additive Manufacturing: Rapid Prototyping, Rapid Tooling, Rapid Manufacturing Electromagnetic Composites Handbook, Second Edition Manufacturing Data Structures: Building Foundations for Excellence with Bills of Materials and Process Information Photoshop Compositing Secrets: Unlocking the Key to Perfect Selections and Amazing Photoshop Effects for Totally Realistic Composites Advanced Composites Self-Healing Composites: Shape Memory Polymer Based Structures Polypropylene Structure, blends and composites: Volume 1 Structure and Morphology Tribology of Ceramics and Composites: Materials Science Perspective Bio-based Plant Oil Polymers and Composites (Plastics Design Library) Microsoft Excel 2013 Data Analysis and Business Modeling: Data Analysis and Business Modeling (Introducing) 3D Modeling For Beginners: Learn everything you need to know about 3D Modeling! Introduction to the Numerical Modeling of Groundwater and Geothermal Systems: Fundamentals of Mass, Energy and Solute Transport in Poroelastic Rocks (Multiphysics Modeling) Geochemical Modeling of Groundwater, Vadose and Geothermal Systems (Multiphysics Modeling) Mathematical Modeling of Collective Behavior in Socio-Economic and Life Sciences (Modeling and Simulation in Science, Engineering and Technology) Student Solutions Manual for Differential Equations: Computing and Modeling and Differential Equations and Boundary Value Problems: Computing and Modeling Agile Modeling: Effective Practices for eXtreme Programming and the Unified Process Groups: Process and Practice, 9th Edition (HSE 112 Group Process I)

[Dmca](#)