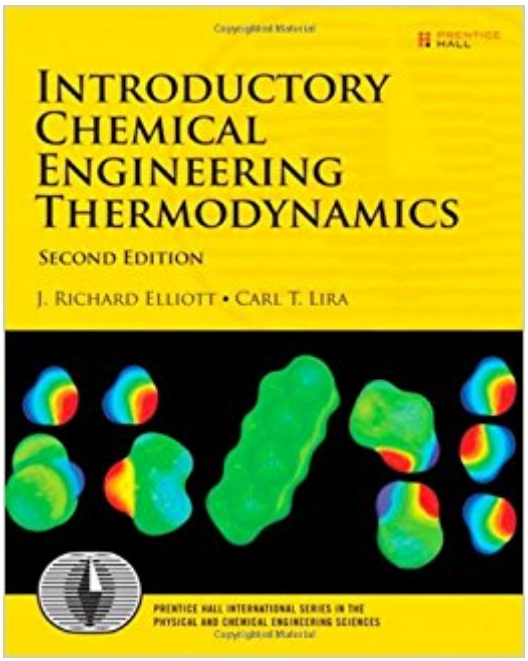
Introductory Chemical Engineering Thermodynamics (2nd Edition) (Prentice Hall International Series In The Physical And Chemi)



Synopsis

A Practical, Up-to-Date Introduction to Applied Thermodynamics, Including Coverage of Process Simulation Models and an Introduction to Biological Systems Ã Â Introductory Chemical Engineering Thermodynamics, Second Edition, helps readers master the fundamentals of applied thermodynamics as practiced today: with extensive development of molecular perspectives that enables adaptation to fields including biological systems, environmental applications, and nanotechnology. This text is distinctive in making molecular perspectives accessible at the introductory level and connecting properties with practical implications. Ã Â Features of the second edition include Ã Â Hierarchical instruction with increasing levels of detail: Content requiring deeper levels of theory is clearly delineated in separate sections and chapters Early introduction to the overall perspective of composite systems like distillation columns, reactive processes, and biological systems Learning objectives, problem-solving strategies for energy balances and phase equilibria, chapter summaries, and Ã¢â ¬Å“important equationsÃ¢â ¬Â• for every chapter Extensive practical examples, especially coverage of non-ideal mixtures, which include water contamination via hydrocarbons, polymer blending/recycling, oxygenated fuels, hydrogen bonding, osmotic pressure, electrolyte solutions, zwitterions and biological molecules, and other contemporary issues Supporting software in formats for both MATLABÃ Â® and spreadsheets Online supplemental sections and resources including instructor slides, ConcepTests, coursecast videos, and other useful resources

Book Information

Series: Prentice Hall International Series in the Physical and Chemi
Hardcover: 912 pages
Publisher: Prentice Hall; 2 edition (February 16, 2012)
Language: English
ISBN-10: 0136068545
ISBN-13: 978-0136068549
Product Dimensions: 8.1 x 1.4 x 10.1 inches
Shipping Weight: 4.2 pounds (View shipping rates and policies)
Average Customer Review: 3.6 out of 5 stars 23 customer reviews
Best Sellers Rank: #110,325 in Books (See Top 100 in Books) #55 inÃ Â Books > Science & Math > Physics > Dynamics > Thermodynamics #65 inÃ Â Books > Textbooks > Engineering > Chemical Engineering #104 inÃ Â Books > Engineering & Transportation > Engineering >

Chemical

Customer Reviews

J. Richard Elliott is Professor of Chemical Engineering at the University of Akron in Ohio. He has taught courses ranging from freshman tools to senior process design as well as thermodynamics at every level. He has worked with the NIST lab in Boulder and ChemStations in Houston. He holds a Ph.D. from Pennsylvania State University. Ã Â Carl T. Lira is Associate Professor in the Department of Chemical Engineering and Materials Science at Michigan State University. He teaches thermodynamics at all levels, chemical kinetics, and material and energy balances. He has been recognized with the Amoco Excellence in Teaching Award and multiple presentations of the MSU Withrow Teaching Excellence Award. He holds a Ph.D. from the University of Illinois.

Note: I am reviewing the Kindle version of this book, which I would highly recommend not purchasing. The hardcover version is somewhat better. The things I liked about the actual book were that it had plenty of examples, and was generally pretty clear about material. Also, the table of contents is very detailed, making it easy to find specific topics. That said, the book is extremely irritating to use on the Kindle, which is where most of my gripes are.The issues I encountered with the Kindle version of this book are:- There are no page numbers, so if someone references a page number to use, you have to get more information. The only way to locate things in the Kindle version is by "location" which is just something that Kindle appears to just make up. I do not know if it corresponds to word count or line number or something else entirely. The "location" is pretty much useless though, and it does not make any sense not to include page numbers for a textbook.- This is somewhat an extension of the previous gripe: Because you can zoom in at different levels (and zooming in is useful for this book because of varying font sizes and images), it makes it even harder to find what you are looking for later on. There isn’t really a way to intuitively know where you are in a chapter, especially if you need to flip back and forth (which I personally tend to a lot with textbooks).- While you can zoom in on text, you can’t really zoom in on most figures. There are certain thermodynamic charts where it is important to get good resolution, which is not possible with the Kindle version of this book. For example, Appendix E.12 is a Pressure-Enthalpy Diagram for R134a, with multiple overlapping lines, and you cannot zoom in at all. I suggest Googling "Pressure-Enthalpy Diagram for R134a" and looking at the images, and try imagining using one of these charts when the Kindle won’t let you zoom in.As a final note, I had peers who bought the international edition. I recommend not doing this if the teacher is likely to assign problems out of the

book because all of the problems are different or numbered differently.In summary, if you have to buy this book for a class, buy the hardcover.

While comprehensive, the book has little in the way of helping a practicing ChemE apply the knowledge. A couple of chapters that I consulted fall short of explaining how the myriad formulas will have to be chained together to solve a real life problem. I do appreciate its completeness though.

Very exciting read. The author really wants the reader to feel the pain that is perpetuated in the writing, and that exactly what happens.

Cogent explanations engage the reader's imagination of thermodynamics at the molecular level. The author popularized energy bookkeeping to analyze and harness energy for engines. He equips the engineer to confidently know how she/he solves a problem. Fun to read, insightful to study. All of this author's books are similarly lucid.

not sure how it happened but when I searched for this text I put in ISBN 0136068545; and was given your listing. I purchased. I never noticed it's international version or I wouldn't have bought it. Now your listing is not showing this ISBN, ~confused~ I did receive the book quickly, however; I can't help but feel you were deceptive.

This book is good and has a minimal number of errors. The only thing about it is that there is so much material included and is such a dense, dry read. Kept putting me to sleep not even halfway through the various chapters. Would recommend though.

Very helpful textbook

Was in bad condition when received.

(5th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Fundamental Concepts and Computations in Chemical Engineering (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Essentials of Chemical Reaction Engineering (Prentice Hall International Series in Physical and Chemical Engineering) Analysis, Synthesis and Design of Chemical Processes (4th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Chemical Process Safety: Fundamentals with Applications (3rd Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Fundamentals of Network Analysis and Synthesis (Prentice-Hall electrical engineering series. Solid state physical electronics series. Prentice-Hall networks series) Bioprocess Engineering: Basic Concepts (3rd Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Advanced Mechanics of Materials and Applied Elasticity (5th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Advanced Mechanics of Materials and Applied Elasticity (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Process Fluid Mechanics, (Prentice-Hall International Series in the Physical and Chemical Engineering Sciences) Electrochemical Systems (Prentice-Hall International Series in the Physical and Chemical Engineering Sciences) Introduction to Chemical Engineering Thermodynamics (The Mcgraw-Hill Chemical Engineering Series) Introductory Chemical Engineering Thermodynamics, 2Nd Edition PRENTICE HALL MATH ALGEBRA 1 STUDENT WORKBOOK 2007 (Prentice Hall Mathematics) Dynamics of Structures (5th Edition) (Prentice-Hall International Series I Civil Engineering and Engineering Mechanics) Dynamics of Structures (4th Edition) (Prentice-Hall International Series in Civil Engineering and Engineering Mechanics) Systems Engineering and Analysis (5th Edition) (Prentice Hall International Series in Industrial & Systems Engineering)