

Table of Contents

- Preface
- 1 Introduction
- 2 The First Law and Other Basic Concepts
- 3 Volumetric Properties of Pure Fluids
- 4 Heat Effects
- 5 The Second Law of Thermodynamics
- 6 Thermodynamic Properties of Fluids
- 7 Applications of Thermodynamics to Flow Processes
- 8 Production of Power from Heat
- 9 Refrigeration and Liquefaction
- 10 Vapor/Liquid Equilibrium: Introduction
- 11 Solution Thermodynamics: Theory
- 12 Solution Thermodynamics: Applications
- 13 Chemical-Reaction Equilibria
- 14 Topics in Phase Equilibria
- 15 Thermodynamic Analysis of Processes
- 16 Introduction to Molecular Thermodynamics
- Appendixes
- A Conversion Factors and Values of the Gas Constant
- B Properties of Pure Species
- C Heat Capacities and Property Changes of Formation
- D Representative Computer Programs
- E The Lee/Kesler Generalized-Correlation Tables
- F Steam Tables
- G Thermodynamic Diagrams
- H UNIFAC Method
- I Newton's Method
- Author Index
- Subject Index