

Table of contents

- Traditional
- Table of Contents for the Complete Text (Scroll down for contents of Split Volumes)
- Part 1 Equilibrium
- 1 The properties of gases
- 2 The first law
- 3 The second law
- 4 Physical transformations of pure substances
- 5 Simple mixtures
- 6 Phase diagrams
- 7 Chemical equilibrium
- Part 2 Structure
- 8 Quantum theory: introduction and principles
- 9 Quantum theory: techniques and applications
- 10 Atomic structure and atomic spectra
- 11 Molecular orbitals for polyatomic systems
- 12 Molecular symmetry
- 13 Spectroscopy 1: rotational and vibrational spectra
- 14 Spectroscopy 2: electronic transitions
- 15 Spectroscopy 3: magnetic resonance
- 16 Statistical thermodynamics: the concepts
- 17 Statistical thermodynamics: the machinery
- 18 Molecular interactions
- 19 Materials 1: Macromolecules and aggregates
- 20 Materials 2: The solid state
- Part 3 Change
- 21 Molecules in motion
- 22 The rates of chemical reactions
- 23 The kinetics of complex reactions
- 24 Molecular reaction dynamics
- 25 Processes at solid surfaces Data section
- Answers to exercises
- Answers to problems
- Index
- Table of Contents for the Volumes
- Volume 1 Thermodynamics and Kinetics (ISBN 0-7167-8567-6)
- 1 The properties of gases
- 2 The first law
- 3 The second law
- 4 Physical transformations of pure substances
- 5 Simple mixtures
- 6 Phase diagrams
- 7 Chemical equilibrium
- 8 Molecules in motion

- **21 The rates of chemical reactions**
- **22 The kinetics of complex reactions**
- **23 Molecular reaction dynamics**
- **24 Processes at solid surfaces**
- **Data section**
- **Answers to exercises**
- **Answers to problems**
- **Index**
- **Volume 2 Quantum Chemistry, Spectroscopy, and Statistical Thermodynamics (ISBN 0-7167-8569-2)**
- **8 Quantum theory: introduction and principles**
- **9 Quantum theory: techniques and applications**
- **10 Atomic structure and atomic spectra**
- **11 Molecular orbitals for polyatomic systems**
- **12 Molecular symmetry**
- **13 Spectroscopy 1: rotational and vibrational spectra**
- **14 Spectroscopy 2: electronic transitions**
- **15 Spectroscopy 3: magnetic resonance**
- **16 Statistical thermodynamics: the concepts**
- **17 Statistical thermodynamics: the machinery**
- **Data section**
- **Answers to exercises**
- **Answers to problems**
- **Index**