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## *Introductory Chemistry Essentials* Edition 6

Tro

**Binding** Paperback | **Page Count** 736

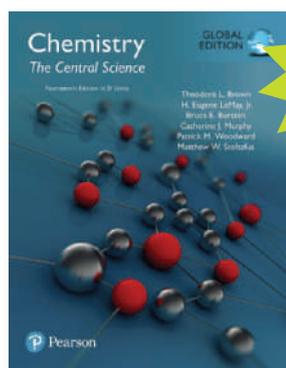
**ISBN** 9781292232195 | **PUB Date** 7/24/2018

For courses in preparatory chemistry.

Now in its 6th Edition, *Introductory Chemistry Essentials* continues to foster deep engagement in the course by showing how chemistry manifests in students' daily lives. Author Nivaldo J. Tro draws upon his classroom experience as an award-winning instructor to extend chemistry from the laboratory to the student's world, capturing student attention with relevant applications and a captivating writing style. Several new Conceptual Checkpoints and Self-Assessment quizzes enable a deep conceptual understanding and better grasp of key concepts; step-by-step framework encourages students to think logically rather than memorize formulas; and additional worked examples enhanced with audio and video reinforce challenging problems. Concrete examples of key ideas throughout the program keep students engaged in the material.

### Table of Contents

- 1 The Chemical World
- 2 Measurement and Problem Solving
- 3 Matter and Energy
- 4 Atoms and Elements
- 5 Molecules and Compounds
- 6 Chemical Composition
- 7 Chemical Reactions
- 8 Quantities in Chemical Reactions
- 9 Electrons in Atoms and the Periodic Table
- 10 Chemical Bonding
- 11 Gases
- 12 Liquids, Solids, and Intermolecular Forces
- 13 Solutions
- 14 Acids and Bases
- 15 Chemical Equilibrium
- 16 Oxidation and Reduction
- 17 Radioactivity and Nuclear Chemistry



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## *Chemistry: The Central Science* Edition 14

Brown / Lemay / Bursten / Murphy / Woodward / Stoltzfus

Binding Paperback | Page Count 1248

ISBN 9781292221229 | PUB Date 8/13/2017

For courses in two-semester general chemistry.

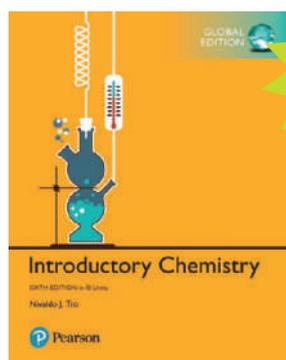
Accurate, data-driven authorship with expanded interactivity leads to greater student engagement

Unrivaled problem sets, notable scientific accuracy and currency, and remarkable clarity have made *Chemistry: The Central Science* the leading general chemistry text for more than a decade. Trusted, innovative, and calibrated, the text increases conceptual understanding and leads to greater student success in general chemistry by building on the expertise of the dynamic author team of leading researchers and award-winning teachers.

### Table of Contents

1. Introduction: Matter, Energy, and Measurement
  2. Atoms, Molecules, and Ions
  3. Chemical Reactions and Reaction Stoichiometry
  4. Reactions in Aqueous Solution
  5. Thermochemistry
  6. Electronic Structure of Atoms
  7. Periodic Properties of the Elements
  8. Basic Concepts of Chemical Bonding
  9. Molecular Geometry and Bonding Theories
  10. Gases
  11. Liquids and Intermolecular Forces
  12. Solids and Modern Materials
  13. Properties of Solutions
  14. Chemical Kinetics
  15. Chemical Equilibrium
  16. Acid—Base Equilibria
  17. Additional Aspects of Aqueous Equilibria
  18. Chemistry of the Environment
  19. Chemical Thermodynamics
  20. Electrochemistry
  21. Nuclear Chemistry
  22. Chemistry of the Nonmetals
  23. Transition Metals and Coordination Chemistry
  24. The Chemistry of Life: Organic and Biological Chemistry
- Appendices
- Mathematical Operations
- Properties of Water
- Thermodynamic Quantities for Selected Substances at 298.15 K (25° C)
- Aqueous Equilibrium Constants
- Standard Reduction Potentials at 25° C

- Answers to Selected Exercises
- Answers to Give It Some Thought
- Answers to Go Figure
- Answer to Selected Practice Exercises



## Introductory Chemistry Edition 6

Tro

**Binding** Paperback | **Page Count** 840

For one-semester courses in Preparatory Chemistry.

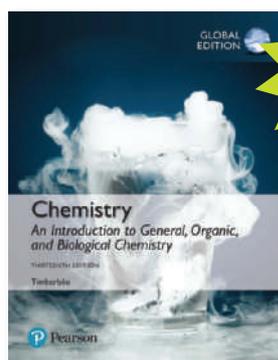
Now in its 6th Edition, the best-selling Introductory Chemistry continues to encourage student interest by showing how chemistry manifests in students' daily lives. Author Nivaldo Tro draws upon his classroom experience as an award-winning instructor to extend chemistry from the laboratory to the student's world, capturing student attention with relevant applications and an engaging writing style. The text provides a superior teaching and learning experience, enabling deep conceptual understanding, fostering the development of problem-solving skills, and encouraging interest in chemistry with concrete examples. Extending chemistry from the lab to the student's world, the text reveals that anyone can master chemistry.

Refined to meet its purpose of teaching relevant skills, the 6th Edition includes new questions, data, and sections to help students build the 21st century skills necessary to succeed in introductory chemistry and beyond.

### Table of Contents

- 1 The Chemical World
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- 9 Electrons in Atoms and the Periodic Table
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- 13 Solutions
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- 15 Chemical Equilibrium
- 16 Oxidation and Reduction
- 17 Radioactivity and Nuclear Chemistry
- 18 Organic Chemistry
- 19 Biochemistry

**ISBN** 9781292229683 | **PUB Date** 6/18/2018



## Chemistry: An Introduction to General, Organic, and Biological Chemistry Edition 13

Timberlake

**Binding** Paperback | **Page Count** 720

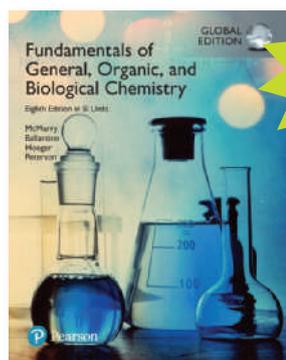
For one-semester courses in General, Organic, and Biological Chemistry.

Chemistry: An Introduction to General, Organic, and Biological Chemistry, 13th Edition is the ideal resource for today's allied health students. Assuming no prior knowledge of chemistry, author Karen Timberlake engages students with her friendly presentation style, revealing connections between the structure and behavior of matter and its role in health and the environment. Aiming to provide a better teaching and learning experience for instructors and students, the text highlights the relevance of chemistry through real-world examples. Activities and applications throughout the program couple chemistry concepts with health and environmental career applications to help students understand why course content matters. The text also fosters development of problem-solving skills, while helping students visualize and understand concepts through its engaging figures, sample problems, and concept maps.

### Table of Contents

1. Chemistry in Our Lives
2. Chemistry and Measurements
3. Matter and Energy
4. Atoms and Elements
5. Nuclear Chemistry
6. Ionic and Molecular Compounds
7. Chemical Quantities and Reactions
8. Gases
9. Solutions
10. Acids and Bases and Equilibrium
11. Introduction to Organic Chemistry: Hydrocarbons
12. Alcohols, Thiols, Ethers, Aldehydes, and Ketones
13. Carbohydrates
14. Carboxylic Acids, Esters, Amines, and Amides
15. Lipids
16. Amino Acids, Proteins, and Enzymes
17. Nucleic Acids and Protein Synthesis
18. Metabolic Pathways and Energy Production

**ISBN** 9781292228860 | **PUB Date** 6/5/2018



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## *Fundamentals of General, Organic, and Biological Chemistry* Edition 8

McMurry / Ballantine / Hoeger / Peterson

Binding Paperback | Page Count 976

ISBN 9781292123462 | PUB Date 4/1/2018

For courses in General, Organic, and Biological Chemistry (2 - Semester)

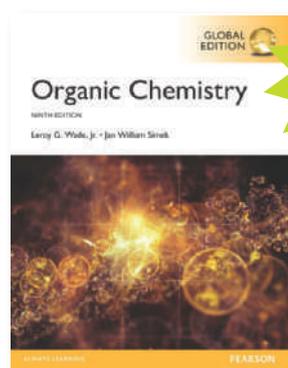
A Clear, Flexible Approach to Chemistry for the Modern Classroom

Active learning, an increased focus on clinical examples, updates based on current teaching and research findings, and digital innovations designed to engage and personalize students' experience make Fundamentals of General, Organic, and Biological Chemistry simply the best choice for students with a future in allied health. With the Eighth Edition, the authors make learning chemistry a more active experience through features designed to get students doing chemistry. Every chapter features Hands on Chemistry sections that deepen students' understanding of chemistry by having them perform elementary experiments with everyday household items. Group Problems at the end of every chapter are designed for in-class use and motivate students toward higher level thinking, such as how concepts fit together and how to apply these concepts in a clinical application. All of the chapter openers, including many of the Chemistry in Action boxes and end-of-chapter problems, have been rewritten for a stronger clinical focus that provides more relevance to allied health majors.

All content has been updated for the modern classroom with special attention to the biochemistry chapters, making the Eighth Edition of Fundamentals of General, Organic and Biological Chemistry the best choice for future allied health students.

### Table of Contents

1. Matter and Measurements
2. Atoms and the Periodic Table
3. Ionic Compounds
4. Molecular Compounds
5. Classification and Balancing of Chemical Reactions
6. Chemical Reactions: Mole and Mass Relationships
7. Chemical Reactions: Energy, Rates, and Equilibrium
8. Gases, Liquids, and Solids
9. Solutions
10. Acids and Bases
11. Nuclear Chemistry
12. Introduction to Organic Chemistry: Alkanes
13. Alkenes, Alkynes, and Aromatic Compounds
14. Some Compounds with Oxygen, Sulfur, or a Halogen
15. Amines
16. Aldehydes and Ketones
17. Carboxylic Acids and their Derivatives
18. Amino Acids and Proteins
19. Enzymes and Vitamins
20. Carbohydrates
21. The Generation of Biochemical Energy
22. Carbohydrate Metabolism
23. Lipids
24. Lipid Metabolism
25. Protein and Amino Acid Metabolism
26. Nucleic Acids and Protein Synthesis
27. Genomics
28. Chemical Messengers: Hormones, Neurotransmitters, and Drugs
29. Body Fluids



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## Organic Chemistry Edition 9

Wade / Simek

Binding Paperback | Page Count 1400

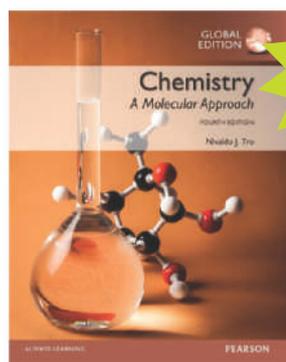
ISBN 9781292151106 | PUB Date 2/25/2018

For courses in organic chemistry (two-semester).

Wade & Simek's Organic Chemistry 9th Edition presents key principles of organic chemistry in the context of fundamental reasoning and problem solving. Strategies, Partially Solved Problems, Visual Reaction Guides and Reaction Starbursts encourage students to use the text before class as a primary introduction to organic chemistry as well as a comprehensive study tool for working problems and/or preparing for exams. With unparalleled and highly refined pedagogy, this 9th Edition gives students a contemporary overview of organic principles and the tools for organizing and understanding reaction mechanisms and synthetic organic chemistry.

### Table of Contents

1. Structure and Bonding
2. Acids and Bases: Functional Groups
3. Structure and Stereochemistry of Alkanes
4. The Study of Chemical Reactions
5. Stereochemistry
6. Alkyl Halides. Nucleophilic Substitution
7. Structure and Synthesis of Alkenes; Elimination
8. Reactions of Alkenes
9. Alkynes
10. Structure and Synthesis of Alcohols
11. Reactions of Alcohols
12. Infrared Spectroscopy and Mass Spectrometry
13. Nuclear Magnetic Resonance Spectroscopy
14. Ethers, Epoxides and Thioethers
15. Conjugated Systems, Orbital Symmetry, and Ultraviolet Spectroscopy
16. Aromatic Compounds
17. Reactions of Aromatic Compounds
18. Ketones and Aldehydes
19. Amines
20. Carboxylic Acids
21. Carboxylic Acid Derivatives
22. Condensations and Alpha Substitutions of Carbonyl Compounds
23. Carbohydrates and Nucleic Acids
24. Amino Acids, Peptides, and Proteins
25. Lipids
26. Polymers



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## *Chemistry: A Molecular Approach* Edition 4

Tro

Binding Paperback | Page Count 1320

ISBN 9781292152387 | PUB Date 9/3/2017

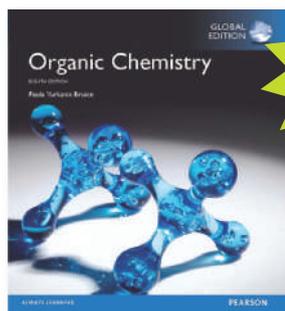
For courses in chemistry.

Chemistry: A Molecular Approach 4th Edition reinforces students' development of 21st century skills including data interpretation and analysis, problem solving and quantitative reasoning, applying conceptual understanding to new situations and peer-to-peer collaboration.

Nivaldo Tro presents chemistry visually through multilevel images—macroscopic, molecular, and symbolic representations—helping students see the connections between the world they see around them (macroscopic), the atoms and molecules that compose the world (molecular), and the formulas they write down on paper (symbolic). The benefits of Dr. Tro's problem-solving approach are reinforced through digital, Interactive Worked Example, new Key Concept Videos explain difficult concepts while new end-of-chapter problems engage students in applying their understanding of chemistry.

### Table of Contents

1. Matter, Measurement, and Problem Solving
2. Atoms and Elements
3. Molecules, Compounds, and Chemical Equations
4. Chemical Quantities and Aqueous Reactions
5. Gases
6. Thermochemistry
7. The Quantum-Mechanical Model of the Atom
8. Periodic Properties of the Elements
9. Chemical Bonding I: Lewis Theory
10. Chemical Bonding II: Molecular Shapes, Valence Bond Theory, and Molecular Orbital Theory
11. Liquids, Solids, and Intermolecular Forces
12. Solids and Modern Material
13. Solutions
14. Chemical Kinetics
15. Chemical Equilibrium
16. Acids and Bases
17. Aqueous Ionic Equilibrium
18. Free Energy and Thermodynamics
19. Electrochemistry
20. Radioactivity and Nuclear Chemistry
21. Organic Chemistry
22. Biochemistry
23. Chemistry of the Nonmetals
24. Metals and Metallurgy
25. Transition Metals and Coordination Compounds



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## Organic Chemistry Edition 8

Bruice

Binding Paperback | Page Count 1344

ISBN 9781292160344 | PUB Date 2/19/2018

For courses in organic chemistry (two-semester).

Organic Chemistry 8th Edition provides mixed-science majors with the conceptual foundations, chemical logic, and problem-solving skills they need to reason their way to solutions for diverse problems in synthetic organic chemistry, biochemistry, and medicine. The 8th Edition builds a strong framework for thinking about organic chemistry by unifying principles of reactivity, discouraging memorization. This book consistently relates structure and reactivity to what occurs in our own cells and reinforces the fundamental reason for all chemical reactions—electrophiles react with nucleophiles. New streamlined coverage of substitution and elimination, updated problem-solving strategies, synthesis skill-building applications and tutorials guide students throughout fundamental and complex content.

### Table of Contents

#### PART ONE: An Introduction to the Study of Organic Chemistry

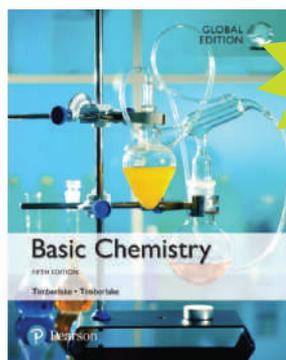
1. Remembering General Chemistry: Electronic Structure and Bonding
  2. Acids and Bases: Central to Understanding Organic Chemistry  
TUTORIAL: Acids and Bases
  3. An Introduction to Organic Compounds: Nomenclature, Physical Properties, and Structure
- PART TWO: Electrophilic Addition Reactions, Stereochemistry, and Electron Delocalization
- TUTORIAL: Using Molecular Models
4. Isomers: The Arrangement of Atoms in Space  
TUTORIAL: Interconverting Structural Representations
  5. Alkenes: Structure, Nomenclature, and an Introduction to Reactivity • Thermodynamics and Kinetics  
TUTORIAL: Drawing Curved Arrows
  6. The Reactions of Alkenes • The Stereochemistry of Addition Reactions
  7. The Reactions of Alkynes • An Introduction to Multistep Synthesis
  8. Delocalized Electrons: Their Effect on Stability, pKa, and the Products of a Reaction • Aromaticity and Electronic Effects: An Introduction to the Reactions of Benzene  
TUTORIAL: Drawing Resonance Contributors

#### PART THREE: Substitution and Elimination Reactions

9. Substitution and Elimination Reactions of Alkyl Halides
  10. Reactions of Alcohols, Ethers, Epoxides, Amines, and Sulfur-Containing Compounds
  11. Organometallic Compounds
  12. Radicals  
TUTORIAL: Drawing Curved Arrows in Radical Systems
- PART FOUR: Identification of Organic Compounds
13. Mass Spectrometry; Infrared Spectroscopy; and UV/Vis Spectroscopy
  14. NMR Spectroscopy

#### PART FIVE: Carbonyl Compounds

15. Reactions of Carboxylic Acids and Carboxylic Acid Derivatives
  16. Reactions of Aldehydes and Ketones • More Reactions of Carboxylic Acid Derivatives
  17. Reactions at the  $\alpha$ -Carbon  
TUTORIAL: Synthesis and Retrosynthetic Analysis
- PART SIX: Aromatic Compounds
18. Reactions of Benzene and Substituted Benzenes
  19. More About Amines • Reactions of Heterocyclic Compounds
- PART SEVEN: Bioorganic Compounds
20. The Organic Chemistry of Carbohydrates
  21. Amino Acids, Peptides, and Proteins
  22. Catalysis in Organic Reactions and in Enzymatic Reactions
  23. The Organic Chemistry of the Coenzymes, Compounds Derived from Vitamins
  24. The Organic Chemistry of the Metabolic Pathways
  25. The Organic Chemistry of Lipids
  26. The Chemistry of the Nucleic Acids
- PART EIGHT: Special Topics in Organic Chemistry
27. Synthetic Polymers
  28. Pericyclic Reactions
- Appendix I – pKa Values  
Appendix II – Kinetics  
Appendix III – Summary of Methods Used to Synthesize a Particular Functional Group  
Appendix IV – Summary of Methods Employed to Form Carbon-Carbon Bonds  
Appendix V – Spectroscopy Tables  
Appendix VI – Physical Properties of Organic Compounds  
Appendix VII – Answers to Selected Problems



## Basic Chemistry Edition 5

Timberlake

**Binding** Paperback | **Page Count** 720

For courses in introductory, preparatory, and basic chemistry.

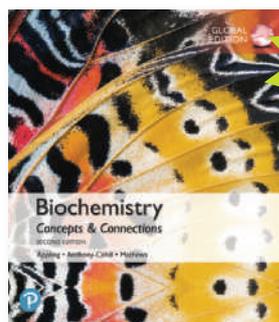
Basic Chemistry introduces students to the essential scientific and mathematical concepts of general chemistry. With accessible language and a moderate pace, the text is easy-to-follow for first-time chemistry students, as well as those hoping to renew their studies of the subject.

The 5th Edition guides students through basic chemistry problem solving with engaging visuals and a focus on developing the math skills necessary to be successful in the course; end-of-chapter questions promote integration of cumulative ideas. This new edition introduces more problem-solving strategies, more problem-solving guides, new features in the Sample Problems.

### Table of Contents

1. Chemistry in Our Lives
2. Chemistry and Measurements
3. Matter and Energy
4. Atoms and Elements
5. Electronic Structure of Atoms and Periodic Trends
6. Ionic and Molecular Compounds
7. Chemical Quantities
8. Chemical Reactions
9. Chemical Quantities in Reactions
10. Bonding and Properties of Solids and Liquids
11. Gases
12. Solutions
13. Reaction Rates and Chemical Equilibrium
14. Acids and Bases
15. Oxidation and Reduction
16. Nuclear Chemistry
17. Organic Chemistry
18. Biochemistry

**ISBN** 9781292170244 | **PUB Date** 4/1/2018



## Biochemistry: Concepts and Connections Edition 2

Appling / Anthony-Cahill / Mathews

**Binding** Paperback | **Page Count** 928

For one or two semester biochemistry courses (science majors).

A highly visual, precise and fresh approach to guide today's mixed-science majors to a deeper understanding of biochemistry

### Table of Contents

1. Biochemistry and the Language of Chemistry
2. The Chemical Foundation of Life: Weak Interactions in an Aqueous Environment
3. The Energetics of Life
4. Nucleic Acids
5. Introduction to Proteins: The Primary Level of Protein Structure
6. The Three-Dimensional Structure of Proteins
7. Protein Function and Evolution
8. Enzymes: Biological Catalysts
9. Carbohydrates: Sugars, Saccharides, Glycans
10. Lipids, Membranes, and Cellular Transport
11. Chemical Logic of Metabolism
12. Carbohydrate Metabolism: Glycolysis, Gluconeogenesis, Glycogen Metabolism, and the Pentose Phosphate Pathway
13. The Citric Acid Cycle
14. Electron Transport, Oxidative Phosphorylation, and Oxygen Metabolism
15. Photosynthesis
16. Lipid Metabolism
17. Interorgan and Intracellular Coordination of Energy Metabolism in Vertebrates
18. Amino Acid and Nitrogen Metabolism
19. Nucleotide Metabolism
20. Mechanisms of Signal Transduction
21. Genes, Genomes, and Chromosomes
22. DNA Replication
23. DNA Repair, Recombination, and Rearrangement
24. Transcription and Post-transcriptional Processing
25. Information Decoding: Translation and Post-translational Protein Processing
26. Regulation of Gene Expression

**ISBN** 9781292267203 | **PUB Date** 1/21/2018