PEARSON CANADA PROUDLY PRESENTS

Chemistry: A Molecular Approach

Canadian Edition

Nivaldo J. Tro, Westmount College Travis D. Fridgen, Memorial University of Newfoundland Lawton E. Shaw, Athabasca University

ISBN: 0133070522

Available February 2013

"From a teaching point of view, the developmental approach used in this book is fantastic, and I refer my students to the examples in the text whenever I am teaching...

...the development of ideas is exactly what I look for in a text at this level, and the main concepts can be read and understood by a general first year audience.

I enjoy the writing style which is free from overly technical language, and is therefore valuable to introductory students, and the connection of the material to everyday problems doesn't seem contrived."

- Matthew Thompson, Trent University

The most successful general chemistry text published in 30 years is now written specifically for Canadian students.

Nivaldo Tro's innovative, pedagogically driven text explains difficult concepts in a student-friendly manner bringing relevance through real world examples and making it accessible through stunning multi-level images.

The Canadian edition offers expanded coverage of organic chemistry, employs SI units, and brings the text in line with IUPAC conventions.

Chemistry: A Molecular Approach, Canadian edition is accompanied by MasteringChemistry, the most advanced, most widely used online chemistry tutorial and homework program in the world.

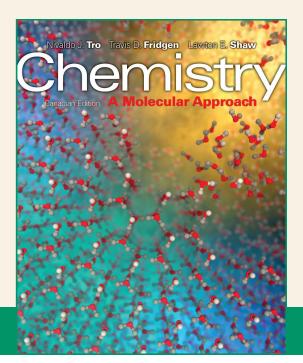


Table of Contents

Chapter I	Units of Measurement for Physical and Chemical Change
Chapter 2	Atoms, and Elements
Chapter 3	Molecules, Compounds and Chemical Equations
Chapter 4	Chemical Reactions and Stoichiometry
Chapter 5	Gases
Chapter 6	Thermochemistry
Chapter 7	The Quantum-Mechanical Model of the Atom
Chapter 8	Periodic Properties of the Elements
Chapter 9	Chemical Bonding I: Lewis Theory
Chapter I 0	Chemical Bonding II: Molecular Shapes, Valence Bond Theory, and Molecular Orbital Theory
Chapter I I	Liquids, Solids, and Intermolecular Forces
Chapter 12	Solutions
Chapter 13	Chemical Kinetics
Chapter 14	Chemical Equilibrium
Chapter 15	Acids and Bases
Chapter 16	Aqueous Ionic Equilibrium
Chapter 17	Gibbs Energy and Thermodynamics
Chapter 18	Electrochemistry

PEARSON

ALWAYS LEARNING

Key Changes to the Canadian Edition

- NEW! Canadian authors Travis Fridgen (Memorial University) and Lawton Shaw (Athabasca University) worked with the best-selling edition of Nivaldo Tro's *Chemistry: A Molecular Approach* and made it specifically relevant for Canadian students.
- The introductory chapter has been streamlined, omitting basic discussions about the scientific approach that have been well covered in many high school science courses. Including new and expanded coverage of conversions between metric units (ie. cm³ to L etc).
- NEW! Expanded coverage of organic chemistry: the one existing chapter (ch. 20) is now split into two separate chapters dedicated to the structure of organic compounds and key reactions and mechanisms (ch. 20 and 21).
- NEW! Following the most up-to-date chemical notations, many chemical terms, notations, and conventions in the text now follow the recommendations of the IUPAC.
- SI units are implemented throughout the text.
- NEW! Numerous Canadian examples have been introduced in the opening vignettes, in the Chemistry and Environment boxes, and in the discussions of Canadian studies, data, and legislation.
- NEW! increased rigour of the End of Chapter problems. The authors added numerous new questions throughout the Cumulative, Challenge, and Conceptual categories.
- NEW! Other updates include new or updated discussions on recent work at the University of Waterloo on nanocasting, creation of medical isotopes at the Chalk River facility in Ontario, and natural gas plants in Western Canada.

- Chapter 19 Radioactivity and Nuclear Chemistry
- Chapter 20 Organic Chemistry I: Structures
- Chapter 21 Organic Chemistry II: Reactions
- Chapter 22 Biochemistry
- Chapter 23 Chemistry of the Nonmetals
- Chapter 24 Metals and Metallurgy
- Chapter 25 Transition Metals and Coordination Compounds

Appendices

Appendix I:	Common Mathematical Operations in Chemistry
Appendix II:	Useful Data
Appendix III:	Answers to Selected Exercises
Appendix IV:	Answers to In-Chapter Practice Problems
Glossary	

Credits Index

For an examination copy or additional information

Visit us at: www.pearsoncanada.ca Email us at: facultyservice@pearsoned.com Call us at: 1-800-850-5813

www.pearsoncanada.ca

PEARSON

ALWAYS LEARNING