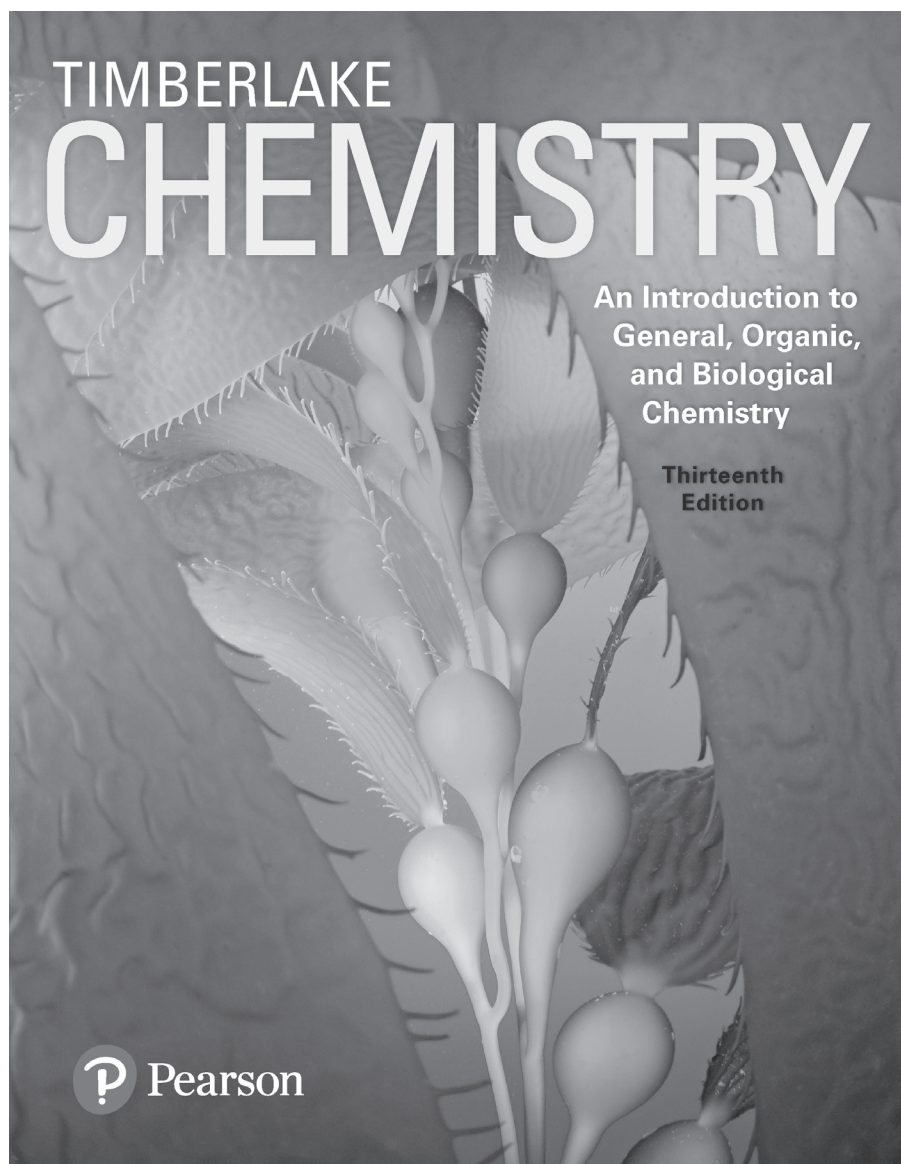


INSTRUCTOR SOLUTIONS MANUAL

Mark Quirie



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Mark Quirie
Algonquin College

CHEMISTRY

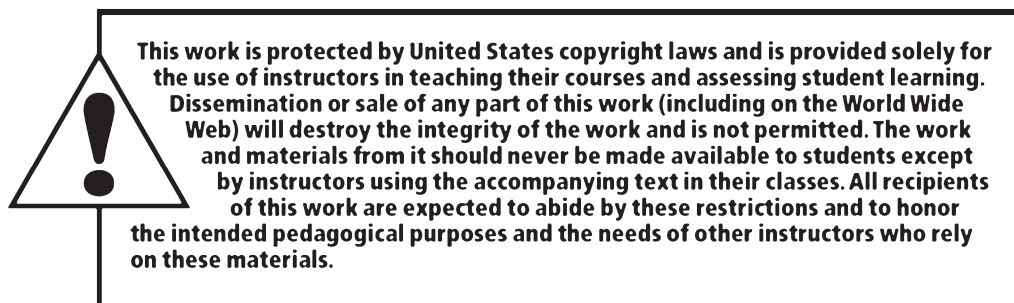
An Introduction to General, Organic,
and Biological Chemistry

Thirteenth Edition



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To the Chemistry Instructor

This *Instructor Solutions Manual* is intended to accompany *Chemistry: An Introduction to General, Organic, and Biological Chemistry*, thirteenth edition by Karen Timberlake. Included in this *Instructor Solutions Manual* is a complete set of answers and solutions for every Practice Problem in the text. The solutions for the odd-numbered problems also appear in the *Study Guide* and *Selected Solutions Manual* for students. I hope that this Instructor Solutions Manual will help you and your students in your chemistry course.

While every effort has been made to try ensure that all answers and solutions are complete and accurate, occasionally errors/omissions do occur. If you wish to make comments or corrections, you can email me at mark.quirie@sympatico.ca.

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Instructor and Student Supplements

Chemistry: An Introduction to General, Organic, and Biological Chemistry, thirteenth edition, provides an integrated teaching and learning package of support material for both students and professors.

Name of Supplement	Available in Print	Available Online	Instructor or Student Supplement	Description
Study Guide and Selected Solutions Manual (9780134553986)	✓		Supplement for Students	The <i>Study Guide and Selected Solutions Manual</i> , by Karen Timberlake and Mark Quirie, promotes active learning through a variety of exercises with answers as well as practice tests that are connected directly to the learning goals of the textbook. Complete solutions to odd-numbered problems are included.
MasteringChemistry™ (www.masteringchemistry.com) (9780134551272)		✓	Supplement for Students and Instructors	This product includes all of the resources of MasteringChemistry™ plus the now fully mobile eText 2.0. eText 2.0 mobile app offers offline access and can be downloaded for most iOS and Android phones/tablets from the Apple App Store or Google Play. Added integration brings videos and other rich media to the student's reading experience. MasteringChemistry™ from Pearson is the leading online homework, tutorial, and assessment system, designed to improve results by engaging students with powerful content. Instructors ensure students arrive ready to learn by assigning educationally effective content and encourage critical thinking and retention with in-class resources such as Learning Catalytics™. Students can further master concepts through traditional and adaptive homework assignments that provide hints and answer specific feedback. The Mastering™ gradebook records scores for all automatically-graded assignments in one place, while diagnostic tools give instructors access to rich data to assess student understanding and misconceptions. http://www.masteringchemistry.com .
Pearson eText enhanced with media (stand-alone: ISBN 9780134545684; within MasteringChemistry™: 9780134552170)		✓	Supplement for Students	The thirteenth edition of <i>Chemistry: An Introduction to General, Organic, and Biological Chemistry</i> features a Pearson eText enhanced with media within Mastering. In conjunction with Mastering assessment capabilities, new Interactive Videos and 3D animations will improve student engagement and knowledge retention. Each chapter contains a balance of interactive animations, videos, sample calculations, and self-assessments / quizzes embedded directly in the eText. Additionally, the Pearson eText offers students the power to create notes, highlight text in different colors, create bookmarks, zoom, and view single or multiple pages. Icons in the margins throughout the text signify that there is a new Interactive Video or animation located within MasteringChemistry™ for <i>Chemistry: An Introduction to General, Organic, and Biological Chemistry</i> , thirteenth edition.
Laboratory Manual by Karen Timberlake (9780321811851)	✓		Supplement for Students	This best-selling lab manual coordinates 35 experiments with the topics in <i>Chemistry: An Introduction to General, Organic, and Biological Chemistry</i> , thirteenth edition, uses laboratory investigations to explore chemical concepts, develop skills of manipulating equipment, reporting data, solving problems, making calculations, and drawing conclusions.
Instructor's Solutions Manual (9780134564661)		✓	Supplement for Instructors	Prepared by Mark Quirie, the Instructor's solutions manual highlights chapter topics, and includes answers and solutions for all Practice Problems in the text.

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Online Instructor Manual for Laboratory Manual (9780321812858)		✓	Supplement for Instructors	This manual contains answers to report sheet pages for the <i>Laboratory Manual</i> and a list of the materials needed for each experiment with amounts given for 20 students working in pairs, available for download at www.pearsonhighered.com .