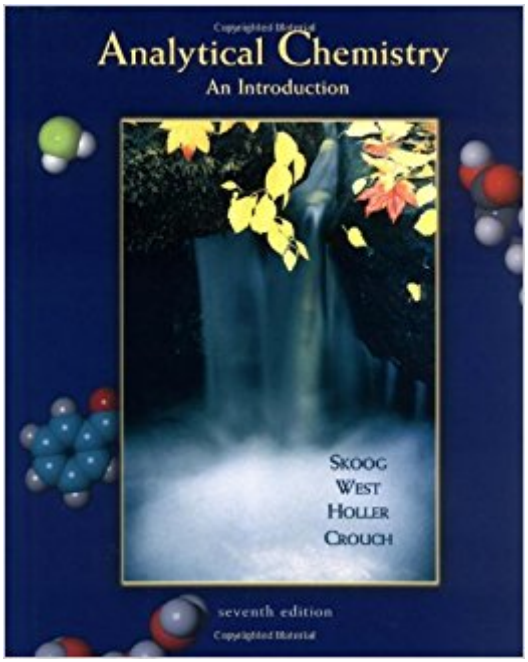
# Analytical Chemistry: An Introduction (Saunders Golden Sunburst Series)



## Synopsis

The new edition highlights some of the latest techniques such as supercritical fluid chromatography and capillary electrophoresis. The addition of spreadsheet exercises and problems throughout the text provides students with a more modern approach to analytical chemistry.

## Book Information

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## Customer Reviews

1. Introduction. Section I. The Tools of Analytical Chemistry. 2. Chemicals and Apparatus: Putting the Tools to Work. 3. Important Chemical Concepts: Expressing Quantities and Concentrations. 4. The Basic Approach to Chemical Equilibrium. 5. Errors in Chemical Analysis: Assessing the Quality of Results. 6. Random Errors: How Certain Can We Be? 7. Statistical Analysis: Evaluating the Data. Section II. Principles and Applications of Chemical Equilibria. 8. Gravimetric Methods of Analysis. 9. Electrolyte Effects: Activity or Concentration? 10. How Equilibrium Calculations Can Be Applied to Complex Systems. 11. Titrations: Taking Advantage of Stoichiometric Reactions. 12. Principles of Neutralization Titrations: Determining Acids, Bases, and the pH of Buffer Solutions. 13. Titrating Polyfunctional Acids and Bases. 14. Applying Neutralization Titrations. 15. Complex-Forming Titrations: Taking Advantage of Complexing Agents and Precipitating Agents. Section III. Electrochemical Methods. 16. Elements of Electrochemistry. 17. Using Electrode potentials. 18. Applying Oxidation/Reduction Titrations. 19. Potentiometry: Measuring Concentrations of Ions and Molecules. 20. A Brief Look at Some Other Electroanalytical Methods. Section IV. Spectrochemical

Analysis. 21. Spectroscopic methods of Analysis: making Measurements with Light. 22. Instruments for Measuring Absorption: Is It a Photometer, a Spectrophotometer, or a Spectrometer? 23. Applying Molecular and Atomic Spectroscopic methods: Shedding More Light on the Subject. Section V. 24. An Introduction to Analytical Separations. 25. Gas-Liquid and High-Performance Liquid Chromatography. 26. Supercritical-Fluid Chromatography, Capillary Electrophoreses, and Capillary Electrochromatography. Section VI. 27. Selected Methods of Analysis. Appendix: Solubility Product Constants at 25 C. Appendix A: Acid Dissociation Constants at 25 C. Appendix B: Formation Constants of Complex Compounds at 25 C. Appendix C: Standard and Formal Electrode Potentials. Appendix D: Use of Exponential Numbers and Logarithms. Appendix E: Volumetric Calculations Using Normality and Equivalent Weight. Appendix F: Acronyms and Abbreviations of Significance in Analytical Chemistry. Appendix G: Answers to Selected Questions and Problems. Glossary. Index.

Douglas A. Skoog was a professor of chemistry at Stanford University and the lead author of several best-selling texts during his career. He earned a B.S. in chemistry from Oregon State University and his Ph.D. in analytical chemistry from the University of Illinois. Dr. Skoog was the 1999 recipient of the American Chemical Society award in analytical chemistry, sponsored by the Fisher Scientific Company. That same year, he was named a fellow of the American Association for the Advancement of Science. In 1993, he received the ACS Division of Analytical Chemistry Award for Excellence in Teaching.Donald M. West (deceased) was a Professor of Chemistry at San Jose State University.F. James Holler is professor emeritus of chemistry and recipient of the Alumni Association Great Teacher Award at the University of Kentucky. He received his Ph.D. from Michigan State University. In addition to his role as co-author of several bestselling texts, he is co-creator of the world-famous Periodic Table of Comic Books.Stanley R. Crouch is professor emeritus at Michigan State University. He received his undergraduate and M.S. degrees from Stanford University and his Ph.D. in analytical chemistry from the University of Illinois. He is the recipient of the 2001 American Chemical Society Division of Analytical Chemistry Award in Chemical Instrumentation and the 1996 ACS Division of Analytical Chemistry Award for Excellence in Teaching.

My professor rates it highly and assures us that htis book is the authority on quantitative analysis, and that this book will be an asset in our future. He said it has trained the last forty years of chemists. It is a blessing to be able to own it.

I paid expedited shipping for this item... and while it arrived on time, the package was completely broken into when I received it, with the edges and cover of the textbook bent and damaged. Definitely frustrated since I spent extra on this textbook -- at least it could have arrived in decent condition.As for the textbook itself, I found it was pretty helpful. The only part of the textbook I did find confusing was its handling of chromatography methods, but overall I found it to be pretty suitable for an analytical chem textbook.

Just as I remembered it from 40 years ago

This book is definetly a keeper! A masterpiece of clarity. Although it is >10 years old, this introductory book is still by far the best book of its kind. It is one of of the few chemistry books that I have read from cover to cover several times, and each time I still pick up insights into problem solving and the reasoning behind analytical techniques. The classical experiments in chapter 27 are so good that purchase of a seperate laboratory book is un-necessary.

Much better than buying new.

I am a CHEM major and I was consistently surprised at how many typos and flat-out errors the SEVENTH edition of this book had - seven editions and still poor editing! The examples that are provided are for simpler problems and when you go to do homework, you're lost. Also, instead of using less than a penny's-worth of ink and printing the equation that they are using in an example, it will just refer you back to another page in the book where it was introduced. Some problems require several equations, and you're flipping back and forth all-over the book just to see what equations they are using.If you're stuck with this book, I recommend you somehow obtain the INSTRUCTORS' solutions manual (or at least the students' solutions manual) so you can actually do the homework.I also bought a used, previous edition of the Harris Quantitative Analysis textbook. You can get it and a solutions manual pretty cheap if you get a previous version and it's a good book that will explain what Skoog tries to explain so poorly.

a plus, very good product,I recommended this vendor,i will looking for more in the futurethis product five starts

I had homework to do, and since my teacher just ASSUMES everyone has had statistics, he breezed through the stat portion in just a lecture.Well, I hadn't had any stats at all, and needed the solutions manual to try to work out the problems.The solution manual is the exact same as what is in the back of the book. Just the answers to SOME of the problems. Not all. Doesn't show steps.Horrible.I wasted my money.

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