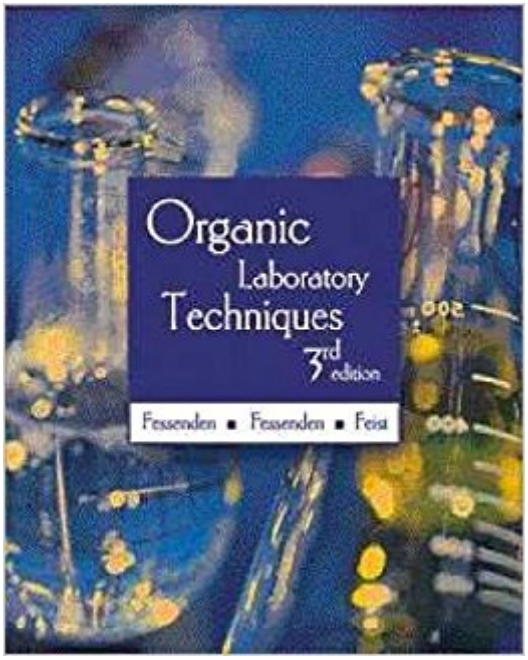
Ebook Directory
the best source of ebook

The book was found

Organic Laboratory Techniques



PDF
Adobe
DOWNLOAD EBOOK

Synopsis

This highly effective and practical manual is designed to be used as a supplementary text for the organic chemistry laboratory course - and with virtually any main text - in which experiments are supplied by the instructor or in which the students work independently. Each technique contains a brief theoretical discussion. Steps used in each technique, along with common problems that might arise. These respected and renowned authors include supplemental or related procedures, suggested experiments, and suggested readings for many of the techniques. Additionally, each chapter ends with a set of study problems that primarily stress the practical aspects of each technique, and microscale techniques are included throughout the text, as appropriate. Additional exercises, reference material, and quizzes are available online.

Book Information

Paperback: 240 pages

Publisher: Cengage Learning; 3 edition (July 12, 2001)

Language: English

ISBN-10: 0534379818

ISBN-13: 978-0534379810

Product Dimensions: 7.4 x 0.6 x 9.2 inches

Shipping Weight: 15.2 ounces (View shipping rates and policies)

Average Customer Review: 4.4 out of 5 stars 19 customer reviews

Best Sellers Rank: #26,304 in Books (See Top 100 in Books) #73 inÃ Â Books > Science & Math > Chemistry > Organic #159 inÃ Â Books > Science & Math > Chemistry > General & Reference #195 inÃ Â Books > Textbooks > Science & Mathematics > Chemistry

Customer Reviews

INTRODUCTION TO THE ORGANIC LABORATORY Safety in the Laboratory / The Laboratory Notebook / Laboratory Equipment 1. CRYSTALLIZATION Solvents for Crystallization / Steps in Crystallization / Supplemental Procedures 2. MELTING POINTS Characteristics of Melting Points / Melting-Point Apparatus / Steps in Determining a Melting Point / Supplemental Procedures 3. EXTRACTION Immiscible Liquids / Distribution Coefficients / Extraction Solvents / Chemically Active Extraction / Steps in Extractions / Additional Techniques Used in Extractions / Other Extraction Techniques 4. DRYING ORGANIC SOLUTIONS Extraction with Aqueous Sodium Chloride / Solid Inorganic Drying Agents / Procedure for Using Solid Inorganic Drying Agents / Azeotropic Drying 5. SIMPLE DISTILLATION Characteristics of Distillation / Steps in a Simple

Distillation / Microscale and Semi-Microscale Distillation 6. FRACTIONAL DISTILLATION Efficiency of the Fractionation Column / Steps in Fractional Distillation / Microscale Fractional Distillation 7. VACUUM DISTILLATION Boiling Point and Pressure / Apparatus for Simple Vacuum Distillation / Steps in Vacuum Distillation 8. STEAM DISTILLATION Characteristics of Steam Distillation / Calculation of the Amount of Water Needed in a Steam Distillation / Apparatus for Steam Distillation 9. SUBLIMATION Atmospheric Sublimation / Vacuum Sublimation 10. REFRACTIVE INDEX Correcting for Temperature Differences / Steps in Using a Refractometer 11. COLUMN CHROMATOGRAPHY Gravity Column Chromatography. Flash Chromatography (Macroscale) / Flash Chromatography (Microscale) / High-Performance Liquid Chromatography (HPLC) 12. THIN LAYER CHROMATOGRAPHY The RF Value / Equipment for TLC / Steps in a TLC Analysis / A Related Technique: Paper Chromatography 13. GAS CHROMATOGRAPHY Gas Chromatography / The Gas Chromatograph / Steps in a GC Analysis / Problems Encountered in GC / Uses of Gas Chromatograms 14. CARRYING OUT TYPICAL REACTIONS Stirring / Heating Reaction Mixtures / Controlling Exothermic Reactions / Adding Reagents to a Reaction Mixture. Excluding Moisture from a Reaction Mixture / Setting Up a Three-Neck Reaction Flask / Hydrogen Halide Gas Traps 15. INFRARED SPECTROSCOPY The Infrared Spectrum / Absorption of Infrared Radiation / Interpreting Infrared Spectra / Identifying Types of Compounds / Preparing a Sample for an Infrared Spectrum / Instrumentation 16. PROTON NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY The NMR Spectrum / Interpreting NMR Spectra / Use of Deuterium in Proton NMR Spectroscopy / NMR Spectra of Unknowns / The NMR Spectrometer / Preparing Samples for NMR Spectra 17. THE CHEMICAL LITERATURE Introduction to the Chemical Literature / Secondary Literature / Primary Literature / APPENDIX I. COMMONLY USED CALCULATIONS / Molarity / Normality / Dilutions / Percent Concentrations / Percent Yields and Theoretical Yields / APPENDIX II / ELEMENTAL ANALYSES / Determining the Empirical Formula / Determining the Molecular Formula / Interpreting the Results of Elemental Analysis / Degree of Unsaturation / APPENDIX III. HEALTH HAZARDS OF COMPOUNDS USED IN ORGANIC CHEMISTRY / Where to Find Chemical Hazard Information / Understanding Health Hazard Warnings

Ph.D., University of California, BerkeleyM.S., University of California, BerkeleyPatty Feist received his Ph.D. in counseling from the University of Kansas. Dr. Feist and co-author Linda Brannon are both professors in the department of Psychology at McNeese State University in Lake Charles, Louisiana, where they have been teaching since receiving their doctorates. After becoming interested in the emerging field of health psychology, Feist and Brannon co-authored the first edition

of this text in the 1980s, and they have enjoyed expanding and developing their text along with the field for more than two decades. In addition to his work in health psychology, Dr. Feist has co-authored a text on personality with his son Greg.

So far so good. It really breaks down the labs well. I have been out of a chem lab for many years and now jumping back into Orgo (I'm not crazy I swear), this really helps me understand what's going on. It gives pointers and trouble shooting tips. It really is a must have for the techniques in lab. I haven't had to Google/YouTube anything after reading this book for techniques. That in itself is why the star rating.One con-- there are end of section questions but no answers... they certainly know how to leave a girl hangin'...

It helped me in O chem lab. explains the details of why you extract and why do this and not that.Real helpful. Recommend this to those taking chem classes (O chem specifically)

This is a great book if you are starting off organic chemistry. It really describes all the techniques very carefully. My class used it as a supplement to our lab book. I usually relied on it because our lab book didn't completely explain the steps of many techniques. Great supplemental book!!

This is a wonderful book for a chemistry student. I got this book for organic chemistry, but I wish I had it back in general chemistry. The book is organized by different techniques and works wonderfully that way. I usually sell my books back, but this one has tables and other special information that I really like. Explanations of techniques are very in depth and very well organized. A must buy for any college chemistry student.

A good informative lab textbook that informs you about the different techniques such as distillation, chromatography, but it is not worth the money that it costs. I had to buy this product as a requisite for an organic chemistry course, but would not have done so otherwise. Many of the things covered in the manual was better and more concisely explained by the lab instructor. This purchase might be worth the trouble if the lab instructor is lackluster or just plain out doesn't know his stuff. However, they are few and far in between.

Despite my outright hate for the subject, i have to admit that this book made bearing the class a little easier, and help lab pull my lecture grade grade up a bit!The lab procedures are laid out clearly and

the diagrams make it easy to figure out what you are supposed to do and what goes where.As a bonus, you'll be making everclear in no time!Kidding aside, If its on your required book list, get it, its very helpful and will make lab painless.

My prof recommended buying this but I only used it once or twice. You might want to try the internet as a resource first before spending the money.

This book really help when writhing the lab report and fulling understanding the lab.

Download to continue reading...

A Microscale Approach to Organic Laboratory Techniques (Brooks/Cole Laboratory Series for Organic Chemistry) Study Guide: Ace Organic Chemistry I - The EASY Guide to Ace Organic Chemistry I: (Organic Chemistry Study Guide, Organic Chemistry Review, Concepts, Reaction Mechanisms and Summaries) Safety-Scale Laboratory Experiments for Chemistry for Today (Brooks/Cole Laboratory Series for General, Organic, and Biochemistry) Safety-Scale Laboratory Experiments for Chemistry for Today (Cengage Laboratory Series for General, Organic, and Biochemistry) Experimental Organic Chemistry: A Miniscale & Microscale Approach (Cengage Learning Laboratory Series for Organic Chemistry) Organic Homemade Lotion Recipes - For All Skin Types (The Best Lotion DIY Recipes): Lotion Making For Beginners (organic lawn care manual, organic skin care, beauty and the beast) Laboratory Techniques in Organic Chemistry Laboratory Techniques in Organic Chemistry, Fourth Edition Introduction to Organic Laboratory Techniques: Microscale Approach A Small Scale Approach to Organic Laboratory Techniques Organic Laboratory Techniques Manual of Microsurgery on the Laboratory Rat. Part 1: General Information and Experimental Techniques (Techniques in the Behavioral and Neural Science, 4) (Pt.1) Homemade Cheese: Step-by-Step Techniques for Making Best Organic Cheese: (Homemade Cheese, Cheese Making Techniques, Cheese Recipes) (Cheese Making, Homemade Cheese) Davis's Comprehensive Handbook of Laboratory and Diagnostic Tests With Nursing Implications (Davis's Comprehensive Handbook of Laboratory & Diagnostic Tests With Nursing Implications) Davis's Comprehensive Handbook of Laboratory and Diagnostic Tests With Nursing Implications (Davis's Comprehensive Handbook of Laboratory & Diagnostic Tests W/ Nursing Implications) Immunology & Serology in Laboratory Medicine, 5e (IMMUNOLOGY & SEROLOGY IN LABORATORY MEDICINE (TURGEON)) Clinical Laboratory Blood Banking and Transfusion Medicine Practices (Pearson Clinical Laboratory Science) Fundamental Laboratory Mathematics: Required Calculations for the Medical Laboratory Professional Immunology & Serology in

Laboratory Medicine - E-Book (IMMUNOLOGY & SEROLOGY IN LABORATORY MEDICINE (TURGEON)) Laboratory Applications in Microbiology: A Case Study Approach: Laboratory Applications in Microbiology: A Case Study Approach

Contact Us

DMCA

Privacy

FAQ & Help