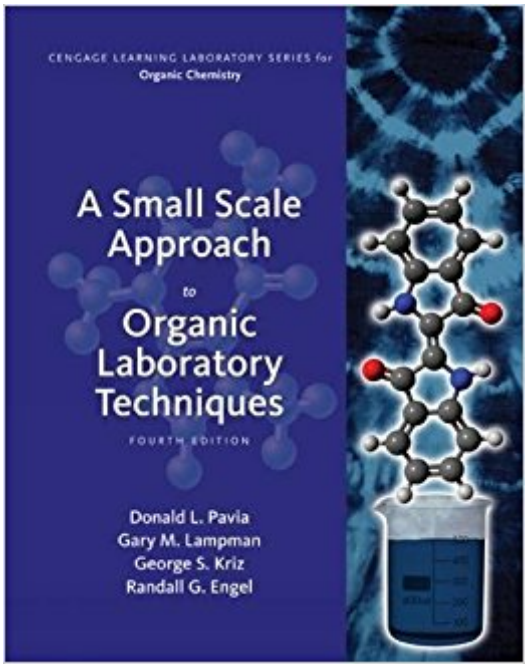
A Small Scale Approach To Organic Laboratory Techniques



Synopsis

Featuring new experiments, a new essay, and new coverage of nanotechnology, this organic chemistry laboratory textbook offers a comprehensive treatment of laboratory techniques including small scale and some microscale methods that use standard-scale ("macroscale") glassware and equipment. The book is organized based on essays and topics of current interest and covers a large number of traditional organic reactions and syntheses, as well as experiments with a biological or health science focus. Seven introductory technique-based experiments, thirteen project-based experiments, and sections on green chemistry and biofuels spark students' interest and engage them in the learning process. Instructors may choose to offer Cengage Learning's optional Premium Website, which contains videos on basic organic laboratory techniques.

Book Information

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Average Customer Review: 3.9 out of 5 stars 19 customer reviews

Best Sellers Rank: #9,712 in Books (See Top 100 in Books) #12 inÂ Books > Science & Math > Reference #29 inÂ Books > Science & Math > Chemistry > Organic #86 inÂ Books > Textbooks > Science & Mathematics > Chemistry

Customer Reviews

Donald L. Pavia earned his BS degree in chemistry from Reed College and his PhD in organic chemistry from Yale University. In 1970, he joined the faculty at Western Washington University as Assistant Professor and now holds the rank of Professor Emeritus. He is the coauthor of two organic laboratory books that include techniques and experiments: INTRODUCTION TO ORGANIC LABORATORY TECHNIQUES: A MICROSCALE APPROACH (Cengage Learning), and A SMALL SCALE APPROACH TO ORGANIC LABORATORY TECHNIQUES (Cengage Learning), as well as MICROSCALE AND MACROSCALE TECHNIQUES IN THE ORGANIC LABORATORY (Cengage Learning), which highlights techniques to be used with a faculty member's own experiments. He is a co-author, with Gary M. Lampman, George S. Kriz and James R. Vyvyan of an organic

spectroscopy book, INTRODUCTION TO SPECTROSCOPY (Cengage Learning). Professor Pavia's research interests center on the synthesis and reactions of valence tautomeric and photochromic compounds, especially pyrylium-3-oxide tautomers. Autoxidations are a special interest. His other interests include the use of computers in teaching organic chemistry, both for lecture presentation and for the simulation of laboratories. He is the author of several computer programs. One such program is SQUALOR (Simulated Qualitative Organic Analysis) for which he won the 1986 EDUCOM/NCRIPTAL award. The program is designed for teaching the methods for solving organic unknowns.George S. Kriz is Professor of Chemistry at Western Washington University. He earned his B.S. degree in chemistry from the University of California, and his Ph.D. from Indiana University, Bloomington, IN. In 1967 he joined the faculty at Western Washington University and recently served as department chair. He served as the General Chair of the 17th Biennial Conference on Chemical Education for 2001-2002. Professor Kriz was honored with the Peter J. Elich Excellence in Teaching Award (College of Arts and Sciences), Western Washington University, in 2000 and the Distinguised Service Award from the Division of Chemical Education, American Chemical Society (2010). He is the co-author with Donald Pavia, Gary Lampman, and Randall Engel of two organic laboratory books that include both techniques and experiments: INTRODUCTION TO ORGANIC LABORATORY TECHNIQUES: A MICROSCALE APPROACH (Cengage Learning), and A SMALL SCALE APPROACH TO ORGANIC LABORATORY TECHNIQUES (Cengage Learning). Their book, MICROSCALE AND MACROSCALE TECHNIQUES IN THE ORGANIC LABORATORY (Cengage Learning), includes techniques only, and can be used with a faculty member's own experiments. He is a co-author, with Donald Pavia, Gary Lampman, and James Vyvyan, of an organic spectroscopy book, INTRODUCTION TO SPECTROSCOPY (Cengage Learning). Professor Kriz's research interests include: developing new experiments for the organic chemistry laboratory; chemical education and the teaching of chemistry courses for general-understanding audiences; and determination of the structures of natural products using spectroscopic methods.Gary M. Lampman earned his BS degree in chemistry from the University of California, Los Angeles, and his PhD in organic chemistry from the University of Washington. In 1964, he joined the faculty at Western Washington University as Assistant Professor, rising to Professor in 1973. He received the Outstanding Teaching Award for the College of Arts and Sciences in 1976. He now holds the title of Professor Emeritus. Teaching has always been an important part of his life. Contact with students invigorates him. He is the coauthor of two organic laboratory books that include techniques and experiments: INTRODUCTION TO ORGANIC LABORATORY TECHNIQUES: A MICROSCALE APPROACH (Cengage Learning), and A SMALL

SCALE ARPPROACH TO ORGANIC LABORATORY TECHNIQUES (Cengage Learning), as well as MICROSCALE AND MACROSCALE TECHNIQUES IN THE ORGANIC LABORATORY (Cengage Learning), which highlights techniques to be used with a faculty member's own experiments. He is a co-author, with Donald L. Pavia, George S. Kriz, and James R. Vyvyan of an organic spectroscopy book, INTRODUCTION TO SPECTROSCOPY, Fourth Edition (Cengage Learning). Professor Lampman also is the author of the computer program for teaching organic nomenclature: ORGANIC NOMENCLATURE: AN INTRODUCTION TO THE IUPAC SYSTEM. His research interests center on synthetic methods involving the reaction of free radicals on unsaturated cobaloximes (vitamin B12 model compounds), synthesis of strained small ring compounds, and chemical education. He is the author of 18 papers in these areas. He is a member of the American Chemical Society (Organic and Chemical Education divisions), and the Washington College Chemistry Teachers Association.Randall G. Engel has taught chemistry for almost 35 years. He has co-authored with Donald Pavia, Gary Lampman, and George Kriz INTRODUCTION TO ORGANIC LABORATORY TECHNIQUES: A MICROSCALE APPROACH (Cengage Learning), and A SMALL SCALE INTRODUCTION TO ORGANIC LABORATORY TECHNIQUES (Cengage Learning). Their book, MICROSCALE AND MACROSCALE TECHNIQUES IN THE ORGANIC LABORATORY (Cengage Learning), includes techniques only, and can be used with a faculty member's own experiments. Engel received his B.A. degree in chemistry from Cornell College and his M.S. degree in chemistry from Western Washington University. He began his teaching career at Wenatchee Valley College in 1975 and continued at Green River Community College and Edmonds Community College. Presently he teaches organic chemistry on a part-time basis at North Seattle Community College.

good deal

It is a good book for understanding how stuff works in lab, but it is not a leisurely reading, so often times you will find yourself bored to death reading 50-60 pages at a time in preparation for your next class/lab. It is pretty heavy though, and you cannot really lug it with you everywhere, especially if this is not the only thing you need to carry around. I think there may be another better alternative that you may want to make use of, unless this one is specifically required by your instructor.

Amazing lab book that thoroughly explained each experiment in great condition.

The steps given are clear and relatively simple to follow. I liked the added safety instructions included along with the experimental procedures.

Came in great condition!!

It helps me understand the lab procedures with the pictures.Quite useful. But still, Cant deny its heavy.And too much wordings.

The information was easy to read and comprehend. The content and pages could be more visibly appealing for the cost.

excellent and useful book.

Scale and Arpeggio Bible for Clarinet: (probably the only scale book you'll ever need) Scale Model Life: Building Scale Model Kits Magazine (Volume 2) Detailing Scale Model Aircraft (Scale Modeling Handbook)