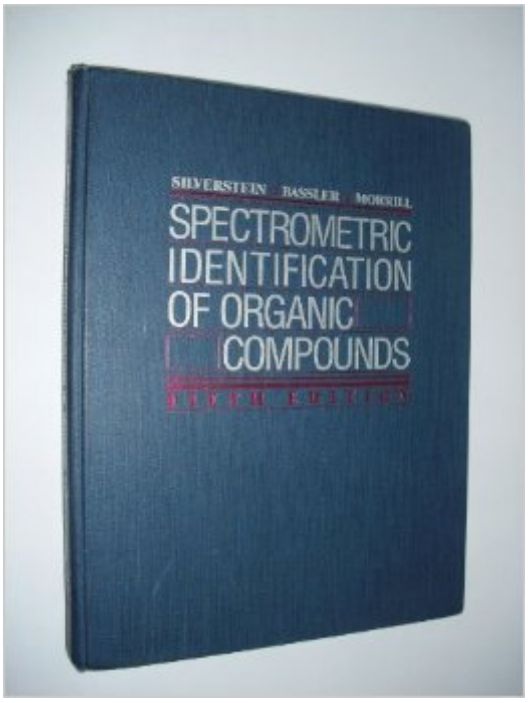
Spectrometric Identification Of Organic Compounds



Synopsis

Teaches the use of the complementary information afforded by four types of spectrometry for identification of organic compounds: mass, infrared, nuclear magnetic resonance, and ultra violet spectrometry. Throughout, the emphasis is on the relationship between chemical structure and spectral response of the molecule. Each chapter includes problems to facilitate student comprehension and demonstrate practical aspects of the material. Also provided are extensive reference material in charts and tables at the end of each chapter, solved problems, and 50 sets of Spectra of Compounds to be identified. In addition to extensive updating, the Fifth Edition includes a new chapter on New Dimensions in NMR Spectrometry.

Book Information

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Customer Reviews

This book has wonderful charts and tables for quick referencing, however it is sorely lacking in demonstrations and worked out examples for students new to the subject. The chapters are painfully slow and complex when explaining the theory behind the spectrometric methods and effects on classes of molecules. In short, don’t use this book to learn the material unless you already know it. It is a comprehensive reference, but not an effective textbook to teach from.

It’s an OK book if you are a novice in the Spectroscopy determination area, but a very nice book if it’s going to be used as a reference book. It’s very handy and explains the principles of the Spectroscopic and Spectrometric determinations in a very understandable way. Moreover, the excercises are challenging, making this book and excellent tool for those students interested in

learning how to determine structures out of some spectra, although the spectra sometimes are so clean that they don’t correspond with the one’s that are taken by routine. The weak points of this book are the IR chapter and the lack of a UV chapter explaining various useful techniques for structural determination such as ORD and CD. The NMR section is just OK, but there are more details to be explained in the 2-D NMR NOESY, TOCSY and ROESY. I think the Mass Chapters are the best that any single book has offered to me so far to understand quite easily how powerful is the GCMS as a tool for the Structural Determination of Organic Compounds.

The book is subdivided into only 3 of the 4 classical methods for spectrometric identification of compounds: IR, MS, and finally NMR (covering 1H, 13C and very little of 19F and 31P). UV is left out in this edition, so maybe getting a hold of the old edition’s UV chapter (which is extremely well-written) might be desired. The MS and the IR chapters are also well-written and explained out. It is in the main technique (NMR) that the author fails to deliver the subject in a straightforward manner and lacks what I think is most important in this field: a large number of exercises and problems.

My book arrived and looks new however the cover and spine have some hilarious misspellings (see images above). I don’t know if this is a forged/imitation book or a genuine publisher error but the body of the book looks fine.

This book lacked information in my opinion. Silverstein started a good project but just didn’t give enough information about IR interpretation, mass spec, C-13 NMR, etc. He focussed on 2-D NMR a great deal, and I believe that there are much better textbooks on this subject.

I used this book for a class and then kept it because it’s such a great reference. I learned a great deal just reading the book, but the practice problems are great. You can’t expect to be a whiz just from reading the book, and the practice problems really help illustrate the points they outline in the text.

This book is truly intended as more of a reference for experienced students in the field and does not adequately explain basic principles for complete beginners. For use as a reference, one has to know exactly what they’re looking for as there are few tables that generalize the spectra by their organic compound class. The beginnings of the chapters should give a simple explanation of the

overall spectrometry technique employed so that beginners can learn why each is so important in the field.

This book is very detailed, which is great for chemical analysis. However, it's use as a quick reference is lacking; is doesn't have any overview charts or generalized analysis. It makes it rather difficult to find what you need unless you know EXACTLY what you are looking for, and have time to read through a few pages to look for it. Sadly, this isn't usually the case in a rough chemical analysis.

Monographs, Vol. 58) The Chemistry of Heterocyclic Compounds, Indoles: The Monoterpenoid Indole Alkaloids (Chemistry of Heterocyclic Compounds: A Series Of Monographs) (Volume 25) The Chemistry of Heterocyclic Compounds, Fused Pyrimidines: Pteridines (Chemistry of Heterocyclic Compounds: A Series Of Monographs) (Volume 24) 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) Photochemistry of Organic Compounds: From Concepts to Practice