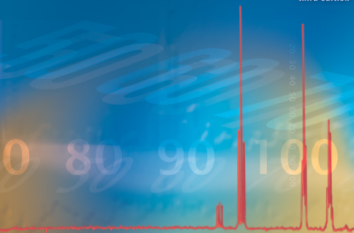


Introduction to  
**SPECTROSCOPY**

third edition



**Pavia · Lampman · Kriz**

THIRD EDITION

# INTRODUC TO SPECTR

A GUIDE FOR STUDENTS OF ORG

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## PREFACE

This is the third edition of our text chemistry. This textbook can serve as a textbook, and it can also be used as a course in spectroscopic methods of structural analysis for students engaged in research. Our aim is not to present basic theoretical concepts. As with the previous editions, we have emphasized the important aspects of each spectroscopic technique and the complex mathematical analyses.

This book is a continuing evolution of the previous editions. It is a complement to our organic chemistry lecture course.

spectroscopy. We hope that these summary boxes will provide the information that the spectra contain. In addition, the spectral data *by functional group*, a new feature of the

We have also added many new problems to each chapter. Problems, with a wide range of difficulty, ranging from simple to complex. For students, answers are provided to some of the problems. For instructors using the book, we have included some problems with answers. To make assignments easier for instructors, we have included answers with an asterisk (\*). Answers to problems with an asterisk are available to qualified instructors *via* the World Wide Web. Chapter 12 contains many new and challenging examples, most of them involving NMR. Problems making use of two-dimensional NMR data

## Acknowledgments

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We wish to acknowledge the cooperation of Varian Associates for their permission to use infrared and nuclear magnetic resonance spectra.

Many of our colleagues reviewed our manuscript. Jonathan Touster (Stanford University), Charles Garnett (California State University), and Stephen Branz (San Jose State University) handled production of this textbook. TSI Graphics handled production of this textbook. TSI Graphics worked very hard keeping us up to the production of this



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