**DESCRIPTION**

This text is an unbound, binder-ready edition.

This is a laboratory text for the mainstream organic chemistry course taught at both two and four year schools, featuring both microscale experiments and options for scaling up appropriate experiments for use in the macroscale lab. It provides complete coverage of organic laboratory experiments and techniques with a strong emphasis on modern laboratory instrumentation, a sharp focus on safety in the lab, thorough Discussion sections which provide chemical context for each experiment, and multi-step experiments. Notable enhancements to the 6th edition include a greater focus on the implementation of greener processes (including microwave use) to perform traditional experimentation, and movement of material to the text web site, to further streamline the text.

**ABOUT THE AUTHOR**

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### NEW TO EDITION

- This streamlined edition is available as a Binder Ready Version and Custom product only.

- New online chapter 7W, “ADVANCED LABORATORY EXPERIMENTATION: SEQUENCES D, E. AND F” contains content from chapter 7 of the previous edition.

- Green chemistry: more discussion around green initiatives has been highlighted and added. A new icon points to green initiatives throughout the text.

- A new 36th experiment in chapter 6: a new Suzuki experiment highlights a well-established and green coupling process.

- All text content has been edited, clarified and updated to make the narrative more user-friendly and concise, where possible.

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### FEATURES

- Experiments have been thoroughly tested on several generations of students and are cost effective. Working within a microscale framework, the cost of equipment and reagents is kept low, and experiments do not require the use of or disposal of toxic chemicals.
• Background information given with the reactions brings a rich historical perspective to the student, which adds to the excitement of discovery and provides added motivation to master the fundamental techniques employed in the laboratory.

• Experiments offer strong instrumental focus -- the student is responsible for generating most of his or her own data, therefore students learn to become self-reliant.

• Provides instruction on microscale techniques for the professional research lab as well as the college classroom setting. These techniques are especially compatible in settings in which homegrown lab experiments are utilized.

• A rich collection of end of chapter exercises and pre and post lab questions provide students with the valuable opportunity to test and practice their own understanding of each laboratory experiment.

• A selection of experiments containing instructions for using microwave heating as a tool in synthetic organic chemistry: placing an emphasis on greener processes to perform traditional experimentation.

• Procedural sections allow for inquiry-based experimentation that results in a more interactive experience between groups of students.

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