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Organic Synthesis Based on Name Reaction: A Practical Guide to Over 700 Transformations (Book Review)

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or potential prey offer. The strategies involved in the necessary relation between predators and prey are one of the most important features of any community of organisms. Waldbauer addresses these issues in a way that will help readers better understand the ruthless forces of coevolution, which are always acting around humanity. This book is a good source of information for laypeople, young students, and those who have no knowledge of the insect world. **Summing Up:** Recommended. ★★ General readers, lower-division undergraduates, and two-year technical program students.—*J. M. Gonzalez, Texas A&M University*

49-6296 OL751 MARC
Yahner, Richard H. **Wildlife behavior and conservation.** Springer, 2012. 173p bibl index afp ISBN 9781461415152, \$189.00

Yahner (Penn State) covers the field of wildlife behavior and conservation in 18 short chapters. He begins with a chapter that defines his topic and compares ethology and comparative psychology approaches. The following chapter examines an array of aspects that affect an organism's behavior. The next 16 chapters deal with specific kinds of behaviors such as mating, competition, and food-getting. Each chapter is fully cited and has simple black-and-white drawings of a variety of animals that apparently were done just for the book. The chapter citations appear in an alphabetized reference section. The index is complete and includes people, behaviors, and structures. Yahner uses a wide range of sources, but much of the material comes from *Perspectives on Animal Behavior*, by J. Goodenough, B. McGuire, and R. Wallace (2nd ed., 2001), and from many research papers authored by Yahner and occasionally his graduate students. Unfortunately, there are numerous errors scattered throughout the book. This might be an ideal resource for an upper-level or graduate seminar. It would also be a quick read for anyone interested in animal behavior. **Summing Up:** Recommended. ★★ Upper-division undergraduates, graduate students, and general readers.—*L. T. Spencer, emeritus, Plymouth State University*

Chemistry

49-6297 QD262 MARC
Hassner, A. **Organic syntheses based on name reactions: a practical guide to over 700 transformations,** by A. Hassner and I. Namboothiri. 3rd ed. Elsevier, 2012. 577p indexes ISBN 0080966306, \$79.95; ISBN 9780080966304, \$79.95

This new edition and its predecessors (2nd ed., 2002; 1st ed., 1994) join a long line of books on named reactions in organic chemistry (see books by J. Li, L. Kurti, G. Brachmachani, and B. Mundy). What sets this volume apart is the sheer number of reactions considered—750. In order to review that many reactions, Hassner (Bar-Ilan Univ., Israel) and Namboothiri (Indian Institute of Technology) can only provide a cursory examination of each reaction. Many of the similarly titled books concentrate on mechanisms, but this work is designed for practicing synthetic organic chemists. To that end, each reaction includes a brief description; two to four examples; one or two brief experimental procedures; and a short list of references, usually to the original report (from the “name” in the named reaction), and several more modern references including the examples shown. The book is designed as a reference source, not a textbook. It seems like the type of resource that might be best moved online to take advantage of electronic search functions and ease in updating as more “name” reactions are developed. The volume's three separate

indexes (by name, reagent, and reaction) facilitate finding information in the text. **Summing Up:** Recommended. ★★ Practicing synthetic organic chemists, including graduate students, researchers/faculty, and professionals.—*J. H. Glans, Sacred Heart University*

49-6298 QD6 2011-22118 CIP
Hoffmann, Roald. **Roald Hoffmann on the philosophy, art, and science of chemistry,** ed. by Jeffrey Kovac and Michael Weisberg. Oxford, 2012. 390p index afp ISBN 9780199755905, \$35.00

To cite chemistry as the central science is more than just the arrogance of chemists—carried forward from the 19th century when it might have been true—before physicists, then biologists, laid claim. Now the sweep of Nobel chemist Roald Hoffmann's interests and intellect embedded between the endpapers of this collection of his writings on philosophy, art, and science restores and validates the centrality of chemistry's place. Readers can taste the flavor of the claim in the provenance of the publications: *Angewandte Chemie* and *American Scientist*; *Journal of Chemical Education* and *Journal of College Science Teaching*; *Canadian Review of Comparative Literature* and *Journal of Aesthetics and Art Criticism*; and *Journal of Molecular Structure*. But the essence is the author and his crosscutting perspective on critical thinking and accomplishments in literature and philosophy, and in art and history—all in the name of communicating science. One can follow the editors' well-crafted exploration of chemistry's core curriculum in the book's five sections—“Chemical Reasoning and Explanation,” “Writing and Communicating in Chemistry,” “Art and Science,” “Chemical Education,” and “Ethics in Science”—or drop into any of the 28 titles to enjoy the craftsmanship of a master of understanding. **Summing Up:** Highly recommended. ★★ Upper-division undergraduates through professionals.—*L. W. Fine, Columbia University*

49-6299 QD79 2010-27725 CIP
Sparkman, O. David. **Gas chromatography and mass spectrometry: a practical guide,** by O. David Sparkman, Zeldia E. Penton, and Fulton G. Kitson. 2nd ed. Elsevier/Academic Press, 2011. 611p index ISBN 0123736285 pbk, \$99.95; ISBN 9780123736284 pbk, \$99.95

Even though the technique of gas chromatography/mass spectrometry (GC/MS) has reached a mature state, Sparkman (Univ. of the Pacific), Penton, and Kitson have generated a second edition of this book designed as a handy resource for those working in this field (1st ed., 1996, authored by Kitson, B. Larsen, and C. McEwen). The authors have kept this book relevant and timely and have achieved their goal of providing useful information for practitioners. They understand what those who actually use GC/MS need, and continue to add appendixes of numerical information (increased from 12 to 17 in this revision). The book includes some historical context as well so that users can appreciate how scientists achieved this level of instrumental sophistication and who the players were in this technology. The preface provides a helpful brief discussion on companies and their products, since experienced users know not only how the instruments work, but who owns the technology to manufacture them. The entire book has been updated and improved where needed; for example, chapter 6, covering the challenging topic of quantitation, has been “completely reworked.” Sparkman and his collaborators continue to write high-quality books that are extremely useful, precise, and interesting to both novices and experienced scientists. **Summing Up:** Highly recommended. ★★ Upper-division undergraduates through professionals/practitioners.—*J. Allison, The College of New Jersey*