group of experiments. The first section, for example, discusses the NMR spectrometer and superconducting magnet and leads the reader through the "art" of shimming. Each experiment is clearly described and includes a description of the test solution needed and references to necessary calibration experiments. The experiments are described in terms of product operators, and the elementary product operator formalism rules are given in the appendix. In some cases, the authors gave their own evaluation of the value of the specific experiment.

The book is specifically written in Bruker terms and is, therefore, particularly useful for readers who operate Bruker instruments. To help the non-Bruker users, a very handy "dialect" table is given in the appendix, which gives the equivalent notation for each of the parameters used on three Bruker, two Varian, and two JEOL instruments. Bruker users would find it useful if the pulses sequences were identified in "Brukerease", the specific way that Bruker describes its sequences. The authors kindly offer to supply any pulse programs used in the experiments that are not in the readers' AM-, AC-, AMX-, or ARX-instrument library.

The space devoted in each experiment to "own observations" does not appear to be very useful, because spectra would have to be plotted to the proper size or reduced to fit in the spaces, and it seems unlikely that anyone would actually do this. The sections perhaps do help to fill out pages, and perhaps also encourage the reader to try it him/herself. The index should list "calibration" and cross reference it to "determination of". The INEPT sequence used for INAPT (Experiment 7.9) should have the hard carbon-13 pulses centered in the very long selective proton pulses. This removes the phasing problem seen in the spectra. It is more common to use the same spectral windows in both dimensions in the 2-D INADEQUATE experiment (Experiment 10.19) and accept the aliasing in the evolution dimension.

This is a very good book for anyone who operates an NMR spectrometer. It is clearly and honestly written, with inclusion of less than optimal results wherever they occurred (see the WATERGATE Experiment 11.13). It should be particularly useful as a laboratory text. It has much to offer both the beginner and the advanced NMR user.

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Aspects of Organic Chemistry: Structure. By Gerhard Quinkert, Ernst Egert, and Christian Griesinger (Johann-Wolfgang-Goethe University). VCH Publishers, Inc., New York, NY. 1996. xvii + 489 pp. 21 × 28 cm. $98.00. ISBN 3-906390-15-2.

This book provides a thorough if unorthodox treatment of the structure of organic molecules. The first seven chapters cover the structural model of classic organic chemistry, and the eighth chapter introduces quantum mechanical ideas. The next eight chapters cover specialized topics such as NMR, hydrogen bonding, and base pairing. Readers of this journal will be pleased with the frequent use of natural products as illustrative examples. For example, configurational analysis (Chapter five) is based on carbohydrate chemistry, and conformational analysis (Chapter six) is based on steroids. The main strengths of the book are its inclusiveness and logical rigor. The authors take a comprehensive view of organic chemistry, and Chapter seven, on macromolecular and supramolecular chemistry, contains a readily accessible but thorough introduction to the stereostructures of both biological and synthetic polymers. The authors use a consistent set of principles and nomenclature to illustrate how familiar conformational principles can be applied to polymeric systems. The book's logical rigor results in a thorough examination of the (often unstated) assumptions of organic chemistry. One particularly enlightening section is entitled "Is the entire set of causes of stereoisomerism known?" and argues that the answer is no. The book's unconventional charm is conspicuous in Chapter ten on the "description of molecules". This concise and complete discussion of the naming and drawing of organic molecules not only illustrates the strengths and weaknesses of our current system, it also serves as a subliminal introduction to semiotics complete with the famous Magritte painting *Ceci n'est pas une pipe* (*This is not a pipe*). Other highlights of the book are the clear black, white, and gray illustrations, the use of logical flow diagrams, the formal introduction of symmetry and group theory, and the vocabulary-enhancing language. The book contains no problems but does have an excellent selection of further readings. The authors' quest for rigor and completeness has a downside, and some material—space groups, irreducible representations, and some of the MO material—seems inappropriate. While the book will have a valued place in my library, it's intended to be an undergraduate text. Adopting this unconventional text would require a substantial revision of the typical curriculum, and given the sclerotic nature of most curricula, this doesn't seem likely. Too bad.

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The Alkaloids: Chemistry and Pharmacology, Vol. 46. Edited by G. A. Cordell (University of Illinois at Chicago). Academic Press, Inc., San Diego, CA. 1996. ix + 364 pp. 15 × 22.5 cm. $110.00. ISBN 0-12-469546-9.

This book, the 46th volume in an important and prestigious series, offers two chapters on biosynthesis and three chapters on the occurrence, structures, and pharmacology of three unique classes of alkaloids.

Robins provides a thorough overview of the biosynthetic pathways in the pyrrolizidine and quinolizidine families. Significant advances in identifying and un-