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## Book review

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*Nuclear Magnetic Resonance Spectroscopy of Nuclei Other than Protons*; edited by T. Axenrod and G.A. Webb, John Wiley and Sons, Inc., New York 1974, xiii + 407 pages, \$18.95.

This book consists mostly of papers delivered at the Advanced Study Institute on "Nuclear Magnetic Resonance Spectroscopy of Nuclei Other than Protons" held in Tirrenia (Pisa), Italy, during September 1972, and for this reason none of the 25 chapters are related to each other. With the exception of the first two chapters dealing with the general principles of nuclear properties, relaxation, and Fourier transform methods, each chapter represents the interests of the individual researcher and stands by itself.

The nuclei covered in the book most thoroughly are carbon, nitrogen, and fluorine, and of the 16 chapters dealing with these nuclei, only 3 are concerned with organometallic compounds: one with the  $^{14}\text{N}$  spectra of a variety of organometallic azides (3 pages), one with the  $^{13}\text{C}$  spectra of organo-transition metal complexes (4 pages), and one with the  $^{14}\text{N}$  and  $^{13}\text{C}$  spectra of paramagnetic systems containing Co and Ni (14 pages). Other chapters concerned with organometallic compounds are: one with the INDOR spectra of some organo-rhodium, -tin, and -thallium compounds (3 pages), one with organosilicon compounds (22 pages), and one with organo-lead and -mercury compounds (26 pages).

In general, the pertinent chapters described above provide some basic NMR chemical shifts and coupling constants for a few selected organometallic compounds. However, little of this information is used to solve structures estimate reactivities, or deal with other chemical problems. This is probably a result of the great lack of NMR data presently available on organometallic compounds. Many more data need to be accumulated before they can be appropriately applied to the solution of these problems. This book is just the beginning. Thus, while the experimental results reported in this book are of value to the NMR spectroscopist, practicing organometallic chemists will find it of very limited value in terms of the chemistry of these important systems.

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