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Molecular Spectroscopy of the Triplet State by S. P. McGlynn, T. Azumi, and M. Kinoshita. Englewood Cliffs, New-Jersey: Prentice-Hall 1969.

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This book is the first extensive treatise of our present knowledge of the triplet states of organic molecules. It provides nearly complete coverage of both the experimental facts and theoretical aspects concerning triplet states resulting from the excitation of π and n electrons in unsaturated molecules. The first chapters are written in an easy-to-read lecture style which the younger spectroscopist will find very useful and often enlightening. These chapters cover "the disposition of energy in isolated molecules", "the triplet nature of the phosphorescent state", "energy of the lowest triplet state" and "spinorbit coupling". These are followed by three chapters treating spinorbit coupling on a higher level, internal and external coupling effects and three chapters devoted to electron paramagnetic resonance spectroscopy.

One of the virtues of this book is its matter-of-fact simplicity and immediate criticism following the statement of experimental facts and description of theories. It certainly is a modern book which is meant to be understood by the reader and which does not hide incertainties behind impressive mathematical formulas.

The wave mechanical background is provided to a fair extent or, at least, good references are given for where it may be found. Many of the chapters are self-contained and can be read independently without the reader being obliged to read the book from the beginning. In cases where this is not possible because of the necessity of building up a subject at increasingly complicated levels, appropriate cross references are given.

This book can be highly recommended to students and researchers of spectroscopy and photochemistry and all other chemists and biologists whose work requires a familiarity with molecular spectra.

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