sive growth of the virtually new fields of radio and microwave spectroscopy. The great usefulness of some of the newer techniques and the ready availability of excellent commercial instruments has encouraged or induced many organic chemists to become part-time spectroscopists as well. More often than not, however, their background and formal preparation in spectroscopy have been limited. For this reason, a book which provides the nonspecialized worker with a broad yet reasonably detailed survey would meet a distinct need. This *Chemical Applications of Spectroscopy* attempts to do.

The editor, W. West, has contributed an introductory survey of molecular spectra and a chapter on fluorescence and phosphorescence. Microwave and radio-frequency spectroscopy is the subject of a chapter by Walter Gordy. A. B. F. Duncan has contributed a chapter on the theory of infrared and Raman spectra and a section that deals with the theory of electronic spectra. A very comprehensive chapter on the application of infrared and Raman spectrometry to the elucidation of molecular structure has been contributed by R. Norman Jones and Camille Sandorfy.

Although issue may be taken with the balance among the subjects covered and with the approaches adopted by some of the authors, there can be no doubt that this book contains a sufficient range of information to be of some value to practically every organic chemist who uses spectroscopy as a tool. Among the book's limitations, one of the more prominent is the unevenness of the chapters. The background required of the reader varies quite widely. In some instances, the reader is given guidance, perspective, and a critical review of current methods and applications. In other portions of the book, the reader is left adrift in a straightforward but heavily mathematical exposition which would seem better suited to a more specialized text. Despite these and related faults, which tend to diminish the book's usefulness to the readers for whom it was expressly intended, it should prove helpful and informative.

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The Importance of Overweight. Hilde Bruch. Norton, New York, 1957. 438 pp. $5.95.

Hilde Bruch's new book, *The Importance of Overweight,* is an original and vigorous contribution to the understanding of this subject. As can be expected from her training and experience as a psychiatrist, the parts of her book which deal with analysis of the psychological aspects of obesity are immeasurably superior to her chapters on the physiological side. Bruch was one of the first psychiatrists to recognize that obesity is not simply the result of willful abandonment of self-control but that overeating corresponds to some profound physiological or psychological disturbances. She speaks of the psychological and emotional aspects of the obesity problem with the voice of a compassionate physician and a research-minded scientist rather than in the dogmatic and intolerant tone that is too often associated with the subject.

However, the subject of obesity has so many facets—physiological and nutritional as well as psychological—that it is unlikely that one person could ever write on all of it with steady excellence.

The chapter on "The cultural frame," which deals with past attitudes of various civilizations toward obesity, is particularly entertaining and well illustrates how the same condition has been considered, at times, an enviable attraction and, at other times, a hideous disfigurement. On the other hand, the development in the next chapter of "What is overweight?" is rather cursory. Bruch's concept of a "preferred weight," "to which people seem to cling in such a stubborn way," is unconvincing. Under uniform conditions of exposure to food and physical activity, and in the absence of acute disease or psychological trauma, the weight of people does indeed vary slowly, but any sudden change in mode of life can have rapid effects on weight and may never be followed by a return to the previous level.

The chapter on "The case for heredity" places in their respective interrelationship the genetic and environmental factors; that on "Physical growth in obesity" calls attention to some of the many problems involved in gaging the effect of a relative hyperphagia on growth.

The chapter on "Basic facts on basal metabolism," although it represents a recognition on the author's part of the many difficulties that are encountered in interpreting respiratory measurements in obese individuals, is superficial and contributes little to clarification of this problem.

The chapter on "Metabolic and regulatory disturbances" attempts to deal with some of the recent concepts developed, in particular, by T. B. Van Itallie and me. Unfortunately, the distinction between the two terms *metabolic disturbances* and *regulatory disturbances* does not appear to have been clearly understood by the author, and her chapter may not be very helpful to students of the physiological aspects of obesity. By contrast, the series of chapters which deal with the psychological aspects of obesity is excellent and illustrates well the fact that obesity admits of a multiple etiology, with regard to psychological as well as to physiological factors. As a clinical problem obesity can only be dealt with when it is realized that the many causes of this condition may have very little in common except their ultimate effect. It follows that each case of obesity must be dealt with according to the characteristics of the individual patient. Ready-made general solutions are likely to do more harm than good.

One may regret that Bruch, who was among the first to emphasize the importance of physical inactivity in the etiology of obesity in children, has not devoted more space to this aspect in her book. A chapter specifically devoted to a discussion of psychological causes and possible remedies for the lack of willingness to exercise that is evidenced by so many obese children would have been particularly helpful.

The book is well printed and edited. It has a good bibliography and a useful index. It is the first book which seriously attempts to deal with the underlying causes of obesity since that of Rony appeared in 1940. It has its place in the library of any worker who is concerned with this important health problem.

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Synthetic Polypeptides. Preparation, structure, and properties. C. H. Bamford, A. Elliott, and W. E. Hanby. Academic Press, New York, 1956. 445 pp. Illus. $10.

There has been phenomenal progress in the study of large, synthetic polypeptide molecules in recent years, and probably no group of workers has contributed more than those associated with the research laboratory of Courtaulds, Ltd., in England. The authors of this monograph are leading representatives of that group, and this survey of the field presented by them is naturally an important contribution. Their objective, stated in the first chapter, is "to present detailed evidence about synthetic polypeptides which has a bearing on some aspects of the structure and behavior of the protein molecule." After this introduction, they devote two chapters to the methods of synthesis of polypeptides and to the mechanisms involved in syntheses, starting from N-carboxy-α-amino acid anhydrides.

The following chapter IV deals with chain configuration in polypeptides, including the α helix and other helices, the pleated sheets, and other configurations. Chapters V and VI deal in great detail with the infrared spectroscopy of the