able correspondence with the reviewed observations of structure, function, and chemical properties, but would leave difficulties in deriving "completely pleasing explanations for mechanisms involved in replication, condensation, aberration, genetic expression (transcription), crossing over, etc." Cole ends with the observation that a satisfactory description of the chromosome still is not at hand.

The book is well produced. The writing, being of average quality, would have benefited much from editorial correction. The adverbial suffix continues to cause problems (from England comes "random-connected," referring to a possible type of genetic code), and other grammatical errors are not rare. Humorous aspects are not lacking. For example, on page 345 we learn of studies of sectioned chromosomes of the "rat kangaroo," this beast perhaps being the creation of a well-meaning copy editor. Aside from the few criticisms mentioned in the foregoing, I recommend this first work of the series to interested readers.

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Toxicology

Biochemistry of Some Foodborne Microbial Toxins. Papers presented at a symposium on microbial toxins held during the meeting of the American Chemical Society, New York, Sept. 1966. RICHARD I. MATELES and GERALD N. WOGAN, Eds. M.I.T. Press, Cambridge, Mass., 1967. 183 pp., illus. $7.50.

The ten papers assembled in this book cover the chemistry and toxicology of the toxic metabolites of bacteria, algae, and higher fungi that are of significance as possible contaminants of animal or human food. Some new and unpublished data are contained in the papers on staphylococcal enterotoxin and botulinum toxin, but these toxins have been the subject of several recent reviews. Bongkrek poisonings are less well known outside of Indonesia, so the paper relating the possible role of a bacterium (*Pseudomonas cocovenenans*) and its metabolic products (toxoflavin, bongkrek acid) in the disease should be of widespread interest. The toxic algal products from six species of dinoflagellates, two blue-green algae, and one yellow-brown alga are discussed. Although the algae are toxic mainly for fish, shellfish, and other forms of marine life, some are poisonous to all higher animals. Fungal toxins are also treated. These toxins have gained prominence in recent years, since some (aflatoxin, ochratoxin) are known to be potent carcinogenic agents for experimental animals. Possible derivatives of other mycotoxins (gliotoxin, chetomin, sporidesmin) may become useful antibiotics. And still others, such as a metabolite from *Fusarium graminearum,* produce an estrogenic effect in animals. This book will be useful to workers in nutrition, toxicology, biochemistry, and microbiology, and to persons involved in the protection of foods.

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Polymer Chemistry

Polymerization by Organometallic Compounds. LEO REICH and A. SCHINDLER. Interscience (Wiley), New York, 1966. 750 pp., illus. $25.

This book is the latest volume in a series of specialized reviews in macromolecular chemistry published by Interscience. The authors are to be commended for a worthwhile contribution. They have attempted to give an up-to-date summary of the literature in an area of research where the volume of publication has increased asymptotically. The most useful parts of the book are the chapters Some General Considerations on Catalyst Activity, Mechanism and Kinetics of Polymerizations with Ziegler-Natta Type Catalyst Systems, Metal Organic Catalyst Systems Involving Free Radical Mechanisms, Some Aspects of Cationic Polymerization, and Copolymerization. These chapters present up-to-date reviews such as are not available elsewhere. I do not mean to imply that the other chapters are not useful ones, though a major part of the material in them is covered in other reviews. The authors' attempt to report on most of the serious literature in the field has resulted in a book with rather complete coverage, but, as always when such an attempt is made, one must sometimes make his own choice of point of view. In this field, it is difficult as yet to write a text in which answers are simple and in which attempts to generalize on the mechanisms of these catalyst systems are successful.

Chapter 2, which is entitled General Theoretical Concepts of Polymerization, in my opinion is not particularly well written. It is a condensed survey of theory, primarily polymerization kinetics, copolymerization, and stereochemical considerations of polymers, and it suffers by being loosely organized.

The authors write in their preface that this book should be useful for research workers and graduate students who have been introduced to polymer chemistry and who wish to broaden their knowledge in the field of organometallic-catalyzed polymerization. This may be so in part, but the next statement in the preface, that the book is not a reference work or directed toward the specialist, can be questioned. The book, particularly the chapters mentioned, has helped me review the literature, and I urge that all research chemists or senior graduate students working in the field of macromolecular chemistry have a copy available for ready reference.

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Books Received

Advances in Computers. vol. 8. Franz L. Alt and Morris Rubinoff, Eds. Academic Press, New York, 1967. 357 pp. Illus. $14.50. Six papers.

Advances in Electrochemistry and Electrochemical Engineering. vol. 6, *Electrochemistry.* Paul Delahay, Ed. Interscience (Wiley), New York, 1967. 494 pp. Illus. $19. Five papers.

Advances in Gerontological Research. vol. 2. Bernard L. Strehler, Ed. Academic Press, New York, 1967. 445 pp. Illus. $18.50. Eight papers.

Anorexia Nervosa. Helmut Thomä. Translated from the German by Gillian Brydone. International Universities Press, New York, 1967. 350 pp. Illus. $8.50.

Arms Control and the Atlantic Alliance: Europe Faces Coming Policy Decisions. Karl W. Deutsch. Wiley, New York, 1967. 181 pp. Illus. $5.95.

The Baboon in Medical Research. vol. 2. Proceedings of the Second International Symposium on the Baboon and Its Use as an Experimental Animal (San Antonio, Texas), Fall 1965. Harold Vagtborg, Ed. Published for the Southwest Foundation for Research and Education, San Antonio. Univ. of Texas Press, Austin, 1967. 922 pp. Illus. $15. Sixty-seven papers.

Behavioral Science Frontiers in Education. Eli M. Bower and William G. Hollister. Wiley, New York, 1967. 553 pp. Illus. $8.95.

Calculus. vol. 1, *One-Variable Calculus, with an Introduction to Linear Al-*

(Continued on page 169)