upon or are treated in most cursory fashion—for example, the complex problem of social stratification.

Any attempt to cover so wide a scope must yield uneven results. In this particular case the impact of a fresh and original conceptual approach appears weakened by the explicit aim to produce a book that can serve as a textbook for basic social science courses in business and engineering colleges. This has led to the inclusion of conventional descriptive materials that add little to the analysis. It also accounts for the very detailed explanation of each conceptual model, which has its didactic values but unduly lengthens the volume. However, these shortcomings detract little from the great merits of this pioneering effort. This book certainly contains proof that it is now possible to encompass a very wide range of social behavior within a rather sparse but tight conceptual scheme. And, while this does require a partly new terminology, the language employed is not unduly cumbersome. The author's major claim that a meaningful analysis of society can be carried out with a limited number of concepts which cut across conventional disciplinary boundaries seems successfully established. As Kuhn himself points out, his analysis represents merely a first approximation. His conceptual framework needs to be tested, modified, and improved by specialists in the various social science disciplines. But even as it now stands, Kuhn's approach opens up new vistas in social science.

Polymer Chemistry

The Chemistry of Cationic Polymerization. P. H. Plesch, Ed. Pergamon, London, 1963; Macmillan, New York, 1964. xvi + 728 pp. Illus. $30.

The Chemistry of Cationic Polymerization is a competent, up-to-date (to about 1962), critical review of the status of cationic polymerizations and of a number of related subjects. Plesch, one of the pioneers in the field and still one of its most prolific authors, organized, edited, and extensively contributed to this volume.

The book is a compilation of 18 individual chapters, on various selected subjects, written by distinguished authors. The first two chapters are well documented treatises that introduce some of the fundamentals of carbonium ions and cationic reactions in general. The third chapter compares free radical, anionic, and cationic polymerization mechanisms and includes a useful subsection entitled "Diagnosis of reaction mechanisms." The next five chapters deal with the cationic polymerization of hydrocarbons and cover isobutene, other aliphatic mono-olefins, styrene, other aryl olefins, and polyenes. Plesch's almost 70-page chapter on isobutene is a valiant effort to discuss comprehensively this difficult field to which he has made extensive contributions. In view of the experimental and theoretical complexities and the large amount of published but partly uninterpreted information available, the inexperienced reader must be careful to sort out fact from opinion in this complex chapter. The chapters on styrene and aryl olefins are outstanding contributions. The next six chapters cover oxygen, sulfur, and nitrogen containing monomers, subdivided into vinyl ethers, epoxides, other cyclic oxygen compounds, miscellaneous oxygen compounds, sulfur compounds, and nitrogen compounds. All of these contributions represent carefully written and well documented work, but this is particularly true of those that deal with epoxides and other cyclic oxygenated compounds.

The next chapter, on cationic copolymerization, is one of the highlights of the volume. It is undoubtedly the best treatise on cationic copolymerization that I have seen. A short chapter on cationic reactions of polymers and graft polymerization follows. The next to the last chapter is an excellent summary and discussion on cationic polymerizations induced by high energy radiation. The last contribution is a useful chapter on experimental techniques peculiar to this field of chemistry. I was disappointed by the omission of cationic polymerizations with catalysts of the Ziegler-Natta type and isomerization polymerizations (other than those mentioned by the editor in the introduction, particularly condensation polymerizations). There are most useful and comprehensive indices to compounds, subjects, and names.

In toto, this volume is a valuable and timely addition to the literature of polymer chemistry.

J. P. KENNEDY

Chemicals Research Division, Esso Research and Engineering Company, Linden, New Jersey

Nematology

The Biology of Plant Parasitic Nematodes. H. R. Wallace. Arnold, London, 1963; St. Martin's Press, New York, 1964. viii + 280 pp. Illus. $9.50.

The thin layer of soil beneath us has been one of the least known parts of man's environment. Although we depend on practical management of the soil for food, we have just begun to understand the complex interplay of organisms and physical factors which takes place in the upper foot or two of the earth's surface. Nematodes form an important part of this complex, and in the last two decades, an increased amount of attention has been focused on their role in crop production. This has brought to light our ignorance concerning most aspects of their biology as well as of the environmental features that influence their effects on plants.

H. R. Wallace, almost singlehandedly, has begun to shed light on the physical factors of the soil in relation to nematodes. By using model systems in which particle size and suction are controlled, he has investigated the action of various physical factors of the soil on nematodes. Although this is admittedly a gross simplification of field conditions, it proves to be a useful tool in describing the world in which nematodes and other soil organisms operate.

Wallace's book reflects his own strong interest in ecology, and more particularly in the physical factors of the environment. He might well have titled it "The Ecology of Plant-Parasitic Nematodes, with Special Reference to Soil Environment." It is a thorough review of certain parts of plant nematology and a useful compilation of others. His treatment of morphology, taxonomy, reproduction, growth, and development constitutes 10 percent of the text. More than one-quarter of the text is devoted to the soil environment in relation to nematodes. Much of this section, which is a mature summation of the subject, represents Wallace's own work. Host-parasite relations, population dynamics, control, and behavior are treated in the remaining text. The extensive bibliography of recent literature fills about one-fifth of the book.

Nematology stands at the threshold of a new period. The recent successful axenic cultivation of parasites of ani-