experiments performed with compounds of the same degree of purity as is found in commercial preparations can be of value for health authorities in the assessment of the risks in the use of the compounds.

The second part of the book includes the biochemistry of the organophosphorus compounds. It describes their effect *in vitro* and *in vivo* on cholinesterases and other enzymes together with the important features concerning the metabolism *in vitro* and in plants, soil, insects and mammals, whereby activation, detoxification, etc. can take place. The whole account is both authoritative and objective.

The third part includes the pharmacology in mammals where the author is not on his own ground. A good deal of work with the literature seems to have been done to get the account complete. For the reader not trained in pharmacology a good and helpful introduction is given. The description of the effect on isolated organs and in the mammalian organism is well balanced. A pharmacologist would possibly have been less schematical, but pharmacologists can also gain from reading these chapters. The necessary section on Therapeutic Methods, and Symptoms, Diagnosis, and Therapy in Man will seem to many concerned with practical therapy to be rather theoretical. Most clinicians are little influenced by results from animal experiments in deciding on correct therapy; they are guided by clinical effects in man.

The chapter on Abnormal Effects, especially the unexplained paralytic effects, is necessary for completion, but one must agree with the author that it was difficult to write because of the controversy that still bedevils the subject. Pharmacology in insects is adequately given in a special chapter.

The glossary and subject and formula index are good and render the use of the book easy. The necessity to distinguish between Common Names Used in the Book and Other Common Names is not easy to see, but all four sections of the glossary add to the value of the book because so many different names are used in the literature. The compound Butonate (butyrylated Dipterox) is mentioned in the subject index and on pages 221 and 222 in the book but is not to be found in the glossary.

Apart from a few minor criticisms the book is found to give a readable, valuable, and well balanced account of the chemistry, biochemistry, and pharmacology of the organophosphorus compounds with a special interest to those who want to study the background of the effect of these compounds in plants and animals.

E. POULSEN

Chronic Bronchitis—Prevention and Management. A symposium held at Manson House, London, Nov. 7, 1962. (Pp. 71; 8 figs; 10s. 6d.) London: Chest and Heart Association. 1963.

This is a 70-page report of a symposium in which eight authors summarize their opinions—sometimes conflicting—about the prevention and management of chronic bronchitis. A limited number of references to more detailed articles are given.

In the first chapter, The Pathological Background, Dr. Lynne Reid describes the role of mucus hyper-

secretion as a precursor to infection in the aetiology of the disease. This is accepted by Dr. Toussaint in his chapter on Environmental Factors—a Preventive Approach, in which he states that in the early stages the patient's main need is education—about smoking, air pollution, breathing, bronchial spasm, etc. Dr. Edwards in his chapter on Early Bronchitis, after discussing its epidemiology, suggests that the essential predisposing process is infection. In the management of early cases he therefore says that the basis of all treatment must be the use of antibiotics.

Dr. Citron, after giving a definition of chronic bronchitis and of asthma, describes their relation to each other and the role of allergy in both. In The Psychological Approach, Dr. Hambling discusses both a person's emotional reaction to his disablement and whether emotional stress plays any part in initiating and maintaining chronic bronchitis. In Management of the Advanced Case, Dr. Hurford describes treatment between exacerbations and of acute episodes. He also suggests that physicians should ask themselves how far they should go before using zealous or heroic methods of treatment for respiratory failure.

Not surprisingly, one of the most interesting and provocative chapters is by Dr. Meiklejohn on Industrial Rehabilitation. Under this misleadingly simple title, he warns us that it has taken nearly 300 years for empirical observation of chronic bronchitis to give way to scientific investigation. He gives in the text a bibliography dating from 1661 to 1861. He describes the critical importance of a chesty child's first job and criticizes the lack of integration of advisory and health services for young people. He questions the standards of pre-employment examinations and categories to be referred to the Pneumoconiosis Medical Boards. He makes suggestions for improving the working environment, while accepting the prime importance of atmospheric pollution and smoking in the aetiology of chronic bronchitis. He concludes with a short section on what would be expected in the narrow sense of his title. Calculated, but not too finely calculated, risks must be taken in keeping a bronchitic at some work. He suggests that chronic bronchitics can be best accommodated in sheltered employment in open industry, which would only be possible if industrial health services were expanded.

This is a useful quick review of chronic bronchitis. It lacks a description of a comprehensive plan for the more active prevention of bronchitis, which is not surprising as we still have not got one.

C. H. WOOD

Chemical Carcinogenesis. By David B. Clayson. (Pp. viii + 467; 23 charts + chemical formulae; 72s.) London: Churchill. 1962.

This book contains such a large amount of lucidly presented material that it will be of interest to almost everyone engaged in any branch of experimental cancer research and there is also much that will interest the clinician. In particular, workers in environmental and industrial medicine will find that the author has been constantly alive to the importance of this field and the