formation relative to the problems, investigators, and institutions involved. Indeed, all information concerning the amount of support is supplied by those agencies making the awards; neither investigators nor research institutions are burdened by inquiries of this nature.

Obviously the usefulness of the exchange will increase through the active cooperation of greater numbers of investigators and of granting agencies, and it is hoped that all granting agencies, including industry and the more restricted foundations, will join in the endeavor. Organizations and individuals interested in cooperating are invited to address inquiries to the Medical Sciences Information Exchange, NRC Division of Medical Sciences, Room 1113, Dupont Circle Bldg., Washington 6, D. C.

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Book Reviews

Pharmacological Basis of Penicillin Therapy. Karl H. Beyer. Springfield, Ill.: Thomas, 1950. 214 pp. $4.50.

This book is concise, well documented, and describes in some detail the pharmacological basis of penicillin therapy. It is sufficiently broad to appeal to the investigator in the field of antibiotics, yet simple enough to be of interest to the casual reader of scientific literature or to the busy practitioner who is interested in the "why" of the pharmacological action of penicillin.

Seven chapters treat the pharmacology of penicillin in a logical order, beginning with the factors influencing absorption and distribution in the tissues, outlining the problems presented because of the rapid urinary excretion of penicillin, and concluding with a description of the attempts to alter this excretion through use of combinations of penicillin and carinamide. The latter studies are thoroughly discussed. Numerous descriptive figures and charts break the monotony of the printed page and contribute extensively to the value of the work. Well-chosen references following each chapter give available source material for those interested in a more extensive perusal of the subject.

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Ion Exchange Resins. Robert Kunin and Robert J. Myers. New York: Wiley; London: Chapman & Hall, 1950. 212 pp. $4.75.

This relatively brief book by two highly qualified men represents an attempt to summarize the rapidly expanding field of ion exchange with synthetic resins. With its more than 600 references it can serve as a good guide to the literature (through 1948), and the authors appear to have succeeded in their purpose to "assemble, digest and classify a sizable portion" of ion exchange information. The book will probably find many friends among people interested in the application of ion exchange to industrial processes, while those interested in research in this field may find the longer treatise edited by Nachod somewhat more satisfactory.

This reviewer feels that the chapter on ion exchange theory suffers the most from the brevity of the style. One could have wished that the authors had included in this chapter a more critical evaluation of the various theories. More information regarding their relative merits would have helped greatly to orient the thinking of those unfamiliar with the field.

As is common with first editions, the book contains a number of misprints and errors, and some special terms (e.g., "symmetry ratio," "exchange potential") are inadequately defined. However, these are not sufficient to impair the usefulness of the book to those interested in rapidly acquiring a general background on ion exchange.

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Pituitary-Adrenal Function. A symposium organized by the Section on Medical Sciences of the AAAS and presented at the New York meeting on December 28–29, 1949. Washington 5, D. C.: American Association for the Advancement of Science, 1950. 211 pp. $4.00; prepaid orders from members, $3.50.

The present intense interest in the interrelated functions of the anterior pituitary and the adrenal cortex determined the topic of this symposium of the Section on Medical Sciences of the AAAS. This book contains brief reports of nearly all the topics discussed in the meeting.

In a brief introductory chapter, G. A. Perera emphasizes that adrenal cortical secretions, like drugs, initiate no new cellular functions but act as regulating agents. Up to the present there is only a modest accumulation of fragmentary knowledge concerning the cellular functions which are regulated. C. H. Li discusses in some detail the chemistry of active peptides derived from the presumed protein hormone, ACTH, by peptic digestion. Evidence is offered for the conclusion that the peptides have an average molecular weight of 1,200 or less and an average length of 7–9 amino acids. One fraction, isolated by partition chromatography on paper, was about twice as active as