phoresis. The first volume was small but has grown in size each year, so that now a book of some 300 pages is needed to cover the proceedings. Scientists from all over Europe pool their knowledge, and the meeting in 1958, the report of which is covered in this book, reveals how far the subject has grown. All chemical pathologists should certainly read it and will profit considerably.

The papers are recorded in one of three languages—French, German, and English—but there is a summary in English at the end of each communication. These reports are divided into those on general topics, on techniques, on macroglobulins, on various protein fractions associated with reproduction and on the digestive system and on proteins in disease. There are also reports on two round-table conferences held during the meeting. The standard of presentation is high, and it would be invidious to select a few as being of special merit, for so many are worthy of consideration. The detailed study of the papers will be of invaluable help to all those working on proteins and on electrophoresis.

J. N. CUMINGS.

Chemical Quantitation of Epinephrine and Norepinephrine in Plasma. By William Muir Manger, Khalil G. Kakim, and Jesse L. Bollman. (Pp. xiv + 398; 41 tables, 70 figures, 3 appendices. 87s. 6d.) Oxford: Blackwell Scientific Publications; Illinois: Charles C. Thomas. 1959.

The amount of adrenaline and noradrenaline circulating in plasma is minute—of the order of a few micrograms per litre. As might be expected, chemical methods of assay are difficult, exacting, and tedious. Most pharmacologists tend to view them with some suspicion, for when it comes to the final criterion, the biological activity of the substance estimated, there are often marked discrepancies between results obtained by chemical and pharmacological assay.

The authors, who, to give them credit, are well aware of these limitations, have used one of the best of the chemical methods available, the fluorimetric technique of Weil-Malherbe and Bone, to carry out an exhaustive and painstaking study of plasma levels in a variety of clinical and experimental conditions.

Despite the unfortunate delay in publication, which has precluded mention of much of the latter-day break-through in the field of caeol amine metabolism, this is a useful book for the specialist.

M. SANDLER.

Experimental Allergic Encephalomyelitis and the "Auto-Allergic" Diseases. By Byron H. Waksman. (Pp. 87; 30 figures; Sw. Fr. 15.) Basel and New York: S. Karger. 1959.

This monograph, published as a supplement to Volume 14 of the *International Archives of Allergy and Applied Immunology*, surveys in its first part the pathology of experimental allergic diseases. Experimental allergic encephalomyelitis, neuritis, auto-allergic diseases of the lens, uveitis, orchitis, thyroiditis, and iso-immune adrenalitis are described;

and clinical conditions with features resembling these experimental lesions, such as demyelinating diseases and post-vaccinal encephalomyelitis, mumps orchitis, Hashimoto's disease, and non-tuberculous granuloma of the suprarenal glands, are discussed.

The second part of the monograph is devoted to a discussion of the nature and pathogenesis of "auto-allergic" disease, that is, disease arising as a result of an immunological response to an individual's or species' own tissue. Immunologically speaking, the experimental conditions are all regarded as examples of delayed hypersensitivity, with the same fundamental lesion. Though the antigens are structurally very different (thyroglobulin, lens protein, proteolipid of myelin, and carbohydrate of sperm), Dr. Waksman considers that they have one major point of similarity, separation from the vascular bed and the connective tissue by more or less impermeable cellular barriers, such as the pial-glial membrane and the follicular thyroid epithelium, or by poor lymphatic drainage. This physiological remoteness, together with perhaps the special nature of their metabolism, prevents the antigens from reaching the blood stream in more than negligible concentrations, so that the immune apparatus treats them as foreign substances. If delayed reactivity results from this an "auto-allergic" disease process develops, in which a perivascular inflammatory reaction of mononuclear cells is the primary event, with a secondary parenchymal destruction. As the antigen persists, the disease tends to be prolonged or remittent.

Immunological evidence for the clinical parallels of most of the conditions discussed, with the possible exceptions of phako-anaphylactic endophthalmitis and Hashimoto's disease, is, as Dr. Waksman points out, far from conclusive. The still obscure mechanism of action of adjuvants deserves more discussion. The literature of the subject is surveyed fairly extensively, though remarks such as "but see 213a" and "the recent status of this disease is described in (196, 204, 208)" are not helpful. Otherwise this is a useful introduction to the literature of a difficult subject of increasing interest.

C. TREIP.

Coronary Heart Disease. By J. W. Gofman. (Pp. xx+353. 60s.) Oxford: Blackwell Scientific Publications; Springfield, Illinois: Charles C. Thomas. 1959.

There are many books concerned with the coronary circulation. This is unlike any of the others, for it is exclusively about the aetiological theories of coronary artery disease. Not only from the clinical but also from the epidemiological outlook these theories are notoriously difficult to understand and correlate. Dr. Gofman very fairly quotes a large number of papers and tries to produce a reasoned approach to the prevention of coronary heart disease. He considers blood lipid factors, hypertension, the production of future clinical coronary disease, familial aspects, age, sex, obesity, diet, smoking, "hormones," stress, and possibilities of prevention.