centrations. The section is extremely well done, clear and concise but sufficiently comprehensive to prepare the reader for the main part of the book.

The two remaining sections discuss respectively the mechanism of action of the trophic hormones and the mechanism of action of the steroid hormones themselves. Here it is obvious that the authors have been, and continue to be, active researchers in the field. The information provided is up-to-date — the high proportion of late references is evidence of this — and the discussion reveals first hand experience of the problems of evaluating different types of data. It is a tribute to their skill that unlike so many expert treatises, they avoid the snare of excessive detail and the general ideas remain clear and easily assimilated.

Descriptions of the control of protein synthesis and the adenyl cyclase system help to make the book self-containing. Such subjects as the events following steroid binding to cytoplasmic receptors may need further reading (e.g., King and Mainwaring 'Steroid Cell Interactions' 1974).

The authors claim to aim at senior students of chemistry and medicine. This is fully justified but the reviewer feels that the book also contains much of value to more senior scientists, to those embarking on postgraduate studies and even to physicians in endocrine medicine interested in an easy updating of the scientific background to their subject.

R. Fraser

Enzymhistochemische Methoden

by Z. Lojda, R. Gossrau and T. H. Schiebler Springer; Berlin, Heidelberg, New York, 1976 vii + 300 pages. DM 58.00, \$ 23.80

The increasing importance of histochemistry in cell biology, biochemistry, pathology and related fields demands suitable and critical collections on histochemical methods. The recent publication of 'Enzymhistochemische Methoden' by Z. Lojda, R. Gossrau and T. H. Schiebler makes a timely appearance. This book is confined to techniques in qualitative enzyme histochemistry. As stated by the authors, it is limited to selected enzymes and procedures but nevertheless it offers a great number of assays and a variety of test procedures. The conception of this book is derived primarily from applied histochemistry and practical application. The book begins with a short but informative chapter on the main principles and reaction types used for qualitative enzyme activity demonstration. Unfortunately one misses an introductory chapter on some basic properties of enzymes which would enable readers from more distant fields to gain some necessary fundamentals. The main part of the book is repre-

sented by a voluminous collection of techniques which have been successfully applied, modified or developed in the authors' laboratories. As a consequence, much practical advice is given and also special methods (e.g., gelfilm and membrane techniques) are described in detail. The methodology of the individual reactions is concisely presented. It includes a short general information on the enzyme and its occurrence, pretreatment of the tissue, composition of assay mixture and conditions of incubation, further treatment of the stained tissue samples. as well as a critical summary on the value of the method, difficulties encountered or to be avoided. It would have been advantageous, however, if composition of reaction media in this section were also given in terms of final concentrations of reactants. It is of special value that the authors have compared different procedures in many cases and present critical comments on the various methods.

D. Pette