with some phases both of these compounds are useless as internal standards. With regard to the above, Chapter 6, 'Developing a Chromatogram', is required reading, an excellent discussion on the approach to establish the best analytical method for a specific separation.

In the final chapter, 'Applications of HPLC', a wide selection of applications are detailed with examples of separations of pharmaceuticals, biochemicals, food chemicals and products from the heavy and fine chemical industries. A number of these applications illustrate ion-pairing methods, which have become most important in recent years.

I can recommend highly this book to chemists, biochemists, pharmacists, clinical and food chemists, and all those using chromatography as an investigative or an analytical technique, whether they are beginners or experienced workers. I hope that the authors, when they come to write a third edition, will expand the section on electrochemical detectors and will include a section on pre- and post-column derivative preparation. I predict that my copy of this second edition will become as well used and spotted with chemicals as my first edition.

G. R. JAMIESON

Neurotransmitters and their Receptors

U. Z. LITTAUER, Y. DUDAI, I. SILMAN, V. I. TEICHBERG and Z. VOUGE (Editors)
John Wiley and Sons, Chichester, 1980, pp. 570, £15.00 (hardback)

This tome is another collection of symposium papers in camera-ready format, and suffers from some of the drawbacks typical of such books. There is only the very briefest of prefaces (three pages) introducing the contents and highlighting recent trends and developments. There is no subject index and no further editorial comment. Apparently five editors were necessary for this effort: a distinct case of overmanning.

The papers were presented at an EMBO Workshop held in Israel in 1980. Nearly half of the 47 papers originate from the host country, and only three papers come from outside Europe. The book is not comprehensive, nor does it pretend to be. Nevertheless, there are papers of interest worth reading. The subject matter is collated sensibly by transmitter type, leaving a miscellaneous section entitled 'Excitable membranes and cytoskeleton' at the end. Of the five papers in the latter part of the book, the inclusion of three can only be justified if a very charitable interpretation of the book title is made. This only serves to highlight the problems of drawing camera-ready symposium material together into a publishable form, an enigma neatly circumvented in this book by editorial inaction.

It would be useful to have access to this book in your library, but a personal copy at £15 would be hard to justify.

DAVID W. G. COX

Receptor Regulation (Receptors and Recognition, Series B, Volume 13)

R. J. LEFKOWITZ (Editor)

One of the most important advances to come from studies of hormone-receptor interactions has been the realization that receptors are not static entities. It is now clear that the binding of several ligands to their receptor does not simply follow the Law of Mass Action. Both the affinity and the concentration of receptors can be regulated by a variety of physiological and pathological factors, especially the ligand itself. Studies first done with the insulin receptor showed that there appears to be an inverse correlation between the circulating concentration of the hormone and the concentration of receptors on cells, the so-called 'down regulation' of receptors.

This book contains nine essays, written by research workers active in this rapidly expanding area of biology, which survey our current understanding of the mechanisms by which cellular receptors for a number of hormones and neurotransmitters are regulated. The introductory essay by the editor, R. J. Lefkowitz, provides an excellent and up-to-date general review of receptor regulation. Studies on the regulation of cellular receptors for polypeptide hormones are represented by chapters on the receptors for insulin, epidermal growth factors and prolactin. Another section contains two reviews dealing with the control of receptors for the neurotransmitters acetylcholine and the catecholamines.

Recent work has indicated that antibodies to cell-surface receptors play a major role in the pathogenesis of some diseases, and the final section of this book contains three reviews dealing with disorders in which anti-receptor antibodies interfere with the normal functioning of the receptor. These chapters deal with Type B insulin resistance, myasthenia gravis, where antibodies to the nicotinic cholinergic receptor are found, and Graves' disease, which is associated with the presence of anti-thyrotropin receptor antibodies.

Review articles on the majority of the topics covered in this book may be found in the standard serial reviews such as Annual Reviews and Recent Progress in Hormone Research. Nevertheless it will be useful both for specialists in the field, and for the general reader attempting to obtain an appreciation of this area of research, to be able to refer to a single volume devoted to this subject.

J. H. THOMAS

The Hamlyn Guide to Edible and Medicinal Plants of Britain and Northern Europe

EDMUND LAUNERT

This book is a work both of art and true scholarship, and cheap enough to hang on the Christmas tree. Those who know the author, Edmund Launert, will recognize the same meticulous attention to detail that he brought to his earlier work on scent bottles and, indeed, there is a natural link with these containers for aromatic plant products.

The book aims to describe every British and North European plant, seaweed and fungus sufficiently for its identification, to give its habitat and its culinary and medicinal uses, and to name the active ingredients involved. Most of the botanical termin-
The diplomatic and religious climate in Protestant Northern Europe during the era of Louis XIV was filled with competing and at times contradictory impulses, and the repercussions of Louis's expansionist and anti-Protestant policies on the relations between the Protestant states were varied and complex. Taken in conjunction with the ascension of Catholic James II in Britain in February 1685 and