

## *Book Reviews*

**Membrane Electrodes in Drug-Substance Analysis**, by V. V. Cosofret (Translation Editor J. D. R. Thomas). Pergamon Press, Oxford, 1982, pp. xvi + 362, ISBN 0-08-026264-3, £29.50.

This book is aimed at anyone involved in the analysis of pharmaceutical preparations (or other materials containing drug substances at suitable concentrations) and not at those concerned with the analysis of clinical samples. The book is divided into three unequal sections. The first deals with the theory of membrane electrodes, basic response parameters and construction and calibration methods, all in about 70 pages. This is rather brief and the newcomer to the field will need the supplementation of further reading. However, all the chapters are extensively referenced and selection of suitable source material should not prove difficult. The first section is also, of necessity, rather non-critical and topics such as long-term response characteristics which would show the devices in a less favourable light are not included. The second section deals with general methods of analysis using membrane electrodes, and in two chapters (halogens/sulphur/phosphorus and inorganic cations) covers in full details the exact laboratory procedure to be followed for the determination of about 16 different species. Brief consideration is given to alkaline mineralization and oxygen flask combustion methods. The third, and by far the largest, section (216 pages) deals with the analysis of the drug substances themselves, in twelve chapters, each devoted to a different drug category; namely (1) inhibitors and stimulants of the central nervous system (18 compounds), (2) various action (13 compounds), (3) local action (9 compounds), (4) antiseptics and disinfectants (15 compounds), (5) chemotherapeutic (15 compounds), (6) diuretic (4 compounds), (7) hypoglycaemic (3 compounds), (8) hematinic (3 compounds), (9) complexing agents (5 compounds), (10) hormones, steroids and vitamins (8 compounds), (11) nutrients (5 compounds) and (12) miscellaneous (6 compounds). Each compound is dealt with in exactly the same format. Following the formula, chemical name, etc. there is a short discussion and comments section, and a detailed procedure; attention is drawn to any unusual features in a final note. There are two appendices covering topics such as manufacturers' addresses and preparation of useful standard solutions. The index is comprehensive.

The book has been produced from camera-ready typescript via a reducing device which has had the effect of compressing the print in the vertical direction and not in the horizontal. The right hand margin is rather variable, Greek letters are hand-drawn, and the diagrams have the appearance of being drawn using a pin with the aid of a powerful magnifying glass! This all gives the book a rather tatty appearance. There are, however, very few typographical errors and Dr Thomas has done an excellent job on the translation. The book is strongly recommended to all those with a practical interest in using membrane electrodes.

J. F. Tyson