

Nevertheless, a book to be recommended for the eclecticism of its papers and also, incidentally, for the way it points out the difference in approach to geophysics from one country to another.

D. DAVIES

## POPULAR OPTICS

### Masers and Lasers

By H. Arthur Klein. Pp. 184. (London: George Allen and Unwin, Ltd., 1967.) 28s. net.

THE author of this little book is clearly an enthusiast. He writes in a style that might be called racy—it leaves the reader with the impression that the author is perpetually breathless from contemplating the marvels that he is describing. Not that the book lacks merit; it deals with the basic theory of lasers and masers and the history of the development of these devices in a non-technical fashion that will help readers totally ignorant of quantum theory. It is not intended for the specialist, and is presumably intended for the growing market in pop science books. There are a large number of plates and line drawings some of which illustrate aspects of the text very clearly. This said, it should be pointed out that the book is filled out with more than its fair share of anecdotal material. Much of this will perhaps tend to irritate the reader who is used to the cooler style of most scientific writing. The book would have been more solid without it.

J. SPENCER

## TOWARDS CLEAN GAS

### Industrial Gas Cleaning

The Principles and Practice of the Control of Gaseous and Particulate Emissions. By W. Strauss. (International Series of Monographs in Chemical Engineering, Vol. 8.) Pp. xix + 471. (Oxford, London and New York: Pergamon Press, Ltd., 1966.) 100s. net.

THIS volume is the eighth in the series of international monographs in chemical engineering, produced by Pergamon Press under the general editorship of P. V. Danckwerts. In keeping with the earlier volumes in the series it is very well produced, clearly printed, with excellent illustrations and good tabulation. Formulae are also clearly set out, without excessive use of solids instead of the much more readable horizontal lines where a number of symbols appear in numerator and denominator. The book covers the field of industrial gas cleaning more thoroughly than any so far produced, ranging from the legal limits of emission to descriptions of the available methods of attaining these emissions. The book gives a good balance between simple description of the equipment and a reasonable amount of basic theory. All the better-known theories of capture of particles are reviewed and more than 550 references are included in the bibliography.

The only omission in terms of complete coverage is a discussion on costs, although the author excuses himself for this omission by pointing out that these can be obtained "from other sources and in any case each situation is different so that true comparison can only be made in a particular case". While agreeing that this is generally true, I feel that some guidance would have been helpful.

Such is the wealth of detail in the book that it becomes difficult to decide for whom the work is really intended. It will undoubtedly provide useful background reading for the beginner, but it is probably too detailed for the student and insufficiently precise for use as a designer's text-book. It will probably be most useful to users of equipment, who will find valuable information on improving the performance of their plant.

The book will, therefore, find its way into the hands of many non-specialists and it is unfortunate that it contains

a number of mistakes which are not immediately obvious. An example which may be cited is in the section on spray towers where it is stated that I showed that "the maximum collection by inertial impaction . . . is independent of the collected particle size", whereas the curves given (and the original reference) show that it is the droplet size which is not critical: the dust size is of paramount importance. Again, on page 317, it is stated that a low inertial impaction parameter is required for high collection efficiency, whereas on page 302 the reverse is suggested. The matter is correctly resolved in chapter 7, which deals at length with the various theories of inertial impaction. These and other errors in the text are unfortunate.

Less serious, but none the less irritating, are a large number of spelling mistakes, such as "flouride" for "fluoride", "reverbatory" for "reverberatory", "inertical" for "inertial", and "tetraphthalate" for "terephthalate"; and, perhaps even more irritating to some, mis-spelling of well-known names, such as Millikan, and Whytlaw-Gray.

It is to be hoped that some rather more detailed checking will be done so that the more serious "errors of fact" can be eliminated in future editions, and possibly a more critical comparison on the application of the various types of equipment to particular problems included.

These criticisms are, however, comparatively minor, and the volume makes a very valuable contribution to a subject which is becoming of increasing importance as larger and larger single-stream plants are being erected all over the world, with correspondingly greater interest being taken by local authorities and governmental bodies in the containment of pollution. The book is a valuable source reference, and is eminently readable—it will, no doubt, remain a standard reference for a long time, and as such should find a place in busy plant offices, as well as on library bookshelves.

C. J. STAIRMAND

## INHERITED DISEASE

### Mendelian Inheritance in Man

Catalogs of Autosomal Dominant, Autosomal Recessive, and X-Linked Phenotypes. By Victor A. McKusick. Pp. xvii + 344. (London: William Heinemann Medical Books, Ltd., 1967.) 60s. net.

THIS volume is more difficult to review than any I have previously met. This is not because it is a bad book—quite the contrary, it is a very good one—but because it is an encyclopaedia of genetically determined diseases in man. Consequently the only way to review the book satisfactorily is to dip into it at intervals and try to discover what has been included and what has been left out. So far I have failed to find anything of consequence that has been omitted!

The compilation is from information stored on magnetic tapes which, as the author points out, allows corrections and additions to be made easily in future editions. Because the book is produced directly from data tapes, some of the symbols normally used in genetic work have had to be modified. This has not detracted, however, from the clarity of the presentation.

There are three main parts to the book, one concerned with autosomal recessive inheritance, one with autosomal dominant characters and one with sex-linked recessives. Each entry consists of the name of the condition, a short description of it and suitable key references. In addition, the author has indicated by means of an asterisk where, in his opinion, the mode of inheritance of the condition is certain. Furthermore, his opinion seems to be pretty reliable.

This book is indispensable to human geneticists and to physicians concerned with genetic counselling. It should certainly be in every library which has a medical section.

P. M. SHEPPARD