glaucoma. For the most part, however, the subjects are well chosen and largely bear out the editors' contention that the sub-speciality of glaucoma is changing rapidly. Doubtless in a few years time Butterworths will ask them to reorganise the book in view of the additional advances that have occurred in the interim. In the meantime this book is well worth reading and should form part of the continuing education all ophthalmologists need to undergo.

ROGER A HITCHINGS

Environmental Health Criteria 54: Ammonia. Pp. 210. Sw Fr 18-00. WHO: Geneva. 1986.

This handbook is the latest title in the Environmental Health Criteria series commissioned by the International Programme on Chemical Safety (IPCS), and it documents the known effects of ammonia on human health and the quality of the environment.

Prepared by a distinguished WHO task group, this report considers the environmental sources and levels of ammonia with respect to human exposure, the important effects on aquatic organisms, and the consequences of short and long term exposure. Atmospheric ammonia is principally derived from natural biological activity, but point sources from sewage treatment and industrial plants may give rise to local regional increases in concentration and contamination of surface waters. There are important toxic effects on aquatic organisms, in particular fresh-water fish, and they can present an important pollution problem. There is no evidence that ammonia is mutagenic in mammals or carcinogenic following long term exposure. Indeed ammonia does not appear to represent a direct threat to man except as a result of accidental exposure, with the familiar irritant or caustic effects. Exposure to ammonia in water supplies and food appears insignificant compared with the nitrogen intake through the diet available as metabolic ammonia. The effects of short term inhalation and oral exposure are described, but the ophthalmologist will be disappointed by the passing reference to the acute effects of ammonia on the eye. In general, the report makes interesting reading and there is clearly little room for complacency, since point source emissions of ammonia from urbanisation, industry, and farming when deposited in a sensitive environment can induce significant toxic effects on man and his environment.

ROBERT J COOLING

Human Ophthalmic Pathology. A Short Practice. By OA Jensen. Pp. 192 Dkr. 395-00. Munksgaard: Copenhagen. 1986.

The author is an ophthalmic pathologist with a rich experience based on personal study of specimens submitted to the Eye Pathology Institute in Copenhagen. With his expertise in clinical ophthalmology and long practice in lecturing to students in both ophthalmology and pathology, he is thus well equipped to compose an authoritative text acceptable to trainees in either discipline.

Before launching into a systematic, tissue-orientated account of the histopathology of ocular disease he provides an eminently practical and useful introductory section which tells the aspiring ophthalmic pathologist how to process and examine the eye and its adnexal tissues and how

to interpret a range of staining methods. Given the stated readership this is a most valuable inclusion, and, although there is some risk in writing at this level, the author has judged the matter nicely and the result is neither condescending nor overelaborate.

Within a fairly short space few disorders of importance are omitted, and there is a wealth of apposite illustrations, mostly of histological preparations. Those incorporated within the text are in monochrome and are of generally acceptable, if not outstanding, quality, but an appendix provides helpful colour representations of the several staining reactions to which the text alludes. The text itself is concerned principally with histological descriptions and cannot often be faulted.

If there is a criticism it is that from the ophthalmologist's point of view a little more emphasis on the biological nature of the various lesions and their expected behaviour might have been useful. This is particularly relevant in respect of diseases, such as the non-neoplastic disorders of the retina, in which histopathological examination is rarely necessary to establish the diagnosis and is put to best advantage, if used, to derive an improved understanding of the disease process. Correspondingly, purely descriptive accounts in such circumstances are of little avail unless there is some attempt to explain how the changes come about.

But one cannot have everything without expansion in space and cost, and this is an intentionally short and moderately priced book. The above criticism is offered in a constructive spirit relevant to the future editions which must surely come, because it is much the best short book on the subject at present available.

ALEC GARNER

Textbook of Glaucoma. 2nd Edn. By M Bruce Shields. Pp. 549. £83-00. Williams and Wilkins: London. 1987.

For many years the world of glaucoma was dominated by two standard textbooks '*Lecture notes in glaucoma*' by Chandler and Grant, and Becker and Shaffer's '*Diagnosis and therapy of the glaucomas*.' Both offered in a single volume information about the whole subject of glaucoma. The former was characterised by a personal approach, cases histories, and no illustrations, while the latter was illustrated with good quality photographs, diagrams, and graphs crisply laid out and fairly didactic. Residents and glaucoma fellows used one (or both, for their emphases differed) for all essential information on the glaucomas. These books were the launching pads into the universe (field ?) of glaucoma. These two standard books have now been joined by a third, '*Textbook of Glaucoma*' by M Bruce Shields.

The 'Textbook' (as it will surely become known) arose out of an earlier '*Study guide for glaucoma*' and is slightly misleadingly shown as a second edition. The textbook may be seen as an updated expanded volume of the study guide which has so outgrown its predecessor as to merit more than the term 'revised edition.' Using a standard chapter format the author covers the whole of the subject in just over 500 pages. Each chapter begins with an overview (summary) providing a framework for the beginner. The style is easy to follow and well written. The text and opinions are backed by 3950 references (up to July 1985), so that the book will act as