

standard views on the mechanism of accommodation will require alteration.

There is also an interesting paper by Best and Bohnen, of Bonn, on the disturbance of the electroretinogram by movements of the lids and the eye; a very interesting description by Meyer-Schwickerath of the new clinical technique for sealing retinal holes by coagulation with light, a mechanism which can also be used for the destruction of retinal tumours and even for burning an artificial pupil in the iris; a detailed description by Leydhecker, of Bonn, of the clinical aspects of tonography; an extraordinary clinical experiment by Čavka, of Belgrade, on the transplantation of a cadaver lens (which remained transparent) into a blind human eye; and an interesting description by Müller, of Bonn, of the planning of the new Ophthalmic Clinic and Research Institute which has recently been opened in that University city.

STEWART DUKE-ELDER

## BIOLOGY AND MEDICINE AT THE GENEVA CONFERENCE

### Progress in Nuclear Energy

Series 6: Biological Sciences. Edited by J. C. Bugher, J. Coursaget and J. F. Loutit. Vol. 1. Pp. xi+205. 50s. net. Series 7: Medical Sciences. Edited by J. C. Bugher, J. Coursaget and J. F. Loutit. Vol. 1. Pp. xii+165. 42s. net. (London: Pergamon Press, Ltd., 1956.)

AT the Geneva Conference on the Peaceful Uses of Atomic Energy about one hundred papers were read in the sections on biology and medicine and a further two hundred were submitted but not read. All the papers submitted, together with the discussions at the meetings, were later published by the United Nations.

The purpose of the two volumes now under review was, according to the foreword, to bring together the significant matters of the sessions at Geneva in as compact a form as possible and to provide the reader with the essence of the discussions. This was a worthy aim, but it is only very partially realized, largely because of a lack of consistency in the method of approach of the various contributors. Some have given little but verbatim excerpts from the Conference papers, others have attempted a review of all the papers submitted in their section, while a third group have written general reviews of their particular subject with reference to the Conference papers where relevant. Thus these two volumes are a very mixed bag. There are certainly some excellent contributions, particularly in the volume on biological sciences, which includes a general review by Brues on radiation injury, by Scott Russell and others on the use of radioactive isotopes in agriculture and in the study of plant nutrition, by Bassham, Calvin and Porter on carbon-14 studies in plant biochemistry and by Comar and Wasserman on the use of radioisotopes in the study of mineral metabolism. The chapter by Carter dealing with radiation and human genetics, although consisting largely of verbatim excerpts (including the complete transcript of Muller's paper), indicates clearly the difference in approach of the various schools to the problem of quantitative assessment of human genetic hazard.

The volume on medical sciences is less successful, since certain of the chapters consist largely of excerpts

or pure summaries of a limited number of papers. It is difficult to see what advantage this offers since the reader may as well refer directly to the Conference papers. However, the reviews on the use of radioactive isotopes in medical diagnosis, by Belcher and Mayneord and by Ross, provide a very useful summary of the present position. The chapter by Binks on "Principles and Standards of Radiation Safety" gives a good account of the way in which this subject is being attacked in various countries.

The format and appearance of these volumes are good, but the lack of uniformity in the method of presenting references is a further indication of the inadequate editorial control.

These two volumes form part of a series on progress in nuclear energy to be issued annually. Since the present volumes deal so largely with the Geneva Conference it is not possible to foresee the future policy of the series with regard to form of review or the audience to which they are directed. It is hoped that it will be such as to satisfy a real need. There are already a number of annual reviews which include the subject of the applications of nuclear energy in medicine and biology, and there is a risk that too much effort can be diverted into writing reviews of essentially the same material.

L. F. LAMERTON

## WATER POLLUTION

### Aspects of River Pollution

By Dr. Louis Klein. With Chapters by Dr. J. R. Erichsen Jones and H. A. Hawkes. Pp. xii+621. (London: Butterworths Scientific Publications; New York: Academic Press, Inc., 1957.) 84s.; 14.50 dollars.

### Disposal of Sewage and other Water-Borne Wastes

By Dr. Karl Imhoff, Dr. W. J. Müller and D. K. B. Thistlethwayte. (Based on a translation of "Taschenbuch der Stadtentwässerung". 16th edition. By Dr. Karl Imhoff.) Pp. x+347. (London: Butterworths Scientific Publications, 1956.) 45s.

### Rural Water Supply and Sanitation

By Prof. Forrest B. Wright. Second edition. (Wiley Farm Series.) Pp. xvi+347. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1956.) 40s. net.

DR. KLEIN'S "Aspects of River Pollution" is an outstandingly good book, dealing in great detail with the wide field of work of a river board in controlling pollution in an industrial district. This involves a knowledge of the various methods of purifying sewage and trade wastes, of the legal aspects of the matter, of methods of examination of effluents and surface waters, and of the effects of polluting discharges on the chemistry and biology of rivers and their suitability for various purposes including domestic and industrial water supply. Dr. Klein, now the chief chemist of the Mersey River Board, has had a long acquaintance with all these aspects of pollution, and in writing his book has supplemented this experience with a most detailed and careful survey of the literature. His chapter on detection and measurement of pollution—more than one hundred pages in length—would have made a complete book in itself and is easily the best account of methods of chemical analysis in this field known to the reviewer.