OF IMMENSE VALUE, BUT. . .

Title Air Conservation. (The Report of the Air Conservation Commission of the American Association for the Advancement of Science)

Author James P. Dixon (Commission Chairman)

Publisher American Association for the Advancement of Science, 1965

Pages xi + 335

Price $8.00

Reviewer Merril Eisenbud

This report is an outgrowth of a 1960 recommendation of the AAAS Committee on Science in Promotion of Human Welfare which called attention to the need for organized study by scientists of the impact of technological matters on human welfare. The Air Conservation Commission, under the chairmanship of James P. Dixon, President of Antioch College, was formed shortly thereafter in response to this recommendation, and it began work immediately on preparation of this 335-page report.

The Commission consisted of a number of individuals well informed in problems involving environmental health, the basic sciences, and urban affairs. They have produced a document that should prove of immense value as a relatively concise statement of the scientific, sociological, and organizational problems associated with conservation of our atmospheric resources.

From the point of view of the reader of *Nuclear Applications*, it is perhaps somewhat unfortunate that the chapter on "Radioactive Pollution of the Atmosphere" seems to be on a much less solid basis than the chapters concerned with chemical pollution. This chapter does contain a well-balanced discussion of contamination of the atmosphere by radioactive debris from weapons tests, but the portion dealing with contamination by the reactor fuel cycle is not in proper perspective, and fails to present a well-balanced analysis of the public health implications of the kinds and amounts of nuclides released from power reactors now in operation.

The shortcomings of the chapter on "Atmospheric Radioactivity" should not be allowed to detract from the remaining portion of the report that describes the physical chemistry and meteorology of air pollution, and the chemical and biological characteristics of the principal nonradioactive atmospheric contaminants. The extensive literature on sulphur and its compounds, the chemical carcinogens, carbon monoxide, the photochemical reactions, the toxic metals, fluorides, and the economic poisons are summarized in a lucid and well-balanced form. There are also excellent chapters on the legal and organizational problems associated with air-pollution control programs.

The book is intended for the nonspecialist who wants to be informed about the technical factors underlying the enormous problems in air conservation with which communities have suddenly become concerned. This book has, in many respects, accomplished this objective, and, despite the shortcomings noted above, your reviewer recommends this volume as a useful addition to any book shelf on contemporary scientific problems.

Merril Eisenbud is Professor of Environmental Medicine and Director of the Environmental Radiation Laboratory of the Institute of Environmental Medicine at the New York University Medical Center. He has been associated with the atomic energy program since 1947 when he joined the staff of the USAEC's Health and Safety Laboratory. In 1949 he was appointed Director of the Laboratory and in 1957 became Manager of the Atomic Energy Commission's New York Operations Office, a position he held until 1959 when he joined the faculty of the NYU Medical Center. He holds a degree in Electrical Engineering from New York University and an honorary ScD from Fairleigh Dickinson University.

LOST IN TRANSLATION

Title Applied Dosimetry

Authors K. K. Aglintsev, V. M. Vodyukov, A. F. Lyzkov, Vu. V. Sivintsev

Publisher The Chemical Rubber Co.

Pages 235

Price $17.00

Reviewer Gordon L. Brownell

Any discussion of the book *Applied Dosimentry* must be prefaced with comments on the translation and format. Usually, the minor errors arising from the translation and reprinting of a book are only a nuisance. However, the many obvious typographical and grammatical errors appearing in this book are not only a nuisance, but greatly reduce its value. There is scarcely a paragraph that does not contain a sentence having a shade of meaning which could be misleading to the reader, an equation that does not have an error in typesetting, a figure that does not have an extraneous undefined symbol, or a table that does not include some symbol or number which requires further thought. Again and again unfortunate situations arise, as on page 19, where it is stated that the values of the k factor for a few gamma emitters are shown in Table 3. Table 3 then proceeds to show the values of a quantity called P_γ, a symbol previously undefined, but which is presumably the k factor referred to above. In addition, the dimension of P_γ is given as r/hr-mc instead of the correct quantity, cm^2-r/mc-hr. In most cases, someone familiar with the field would have little difficulty with these numerous gaffes; to a beginning student they would appear to be a serious hurdle.