

	Papers
Chemical synthesis	8
Polymerization and the modification of polymers	31
Dosimetry	5
Engineering	5

It is difficult to prepare a meaningful review of any Symposium; one has to have participated directly. Furthermore, there is usually only a skeletal continuity to the program, and there are often many gaps in the scope of the information that is presented. This particular Symposium was characterized, in a few well chosen concluding remarks by Joseph Silverman, University of Maryland, as "the most realistic group I have ever encountered at a radiation processing meeting. . . . When a speaker has been optimistic, he has been challenged from the floor, specifically on matters of cost and feasibility . . ." Indeed, the published discussions to the papers provide valuable additional insight to the progress and problems in this specialized field, and the lively tempo of the Symposium can be discerned in these informal remarks. The multilingual reader will also benefit from those reports that are published in French and Russian.

As a staunch defender of electron accelerators, I have to take issue with Silverman's criticism that "they are still inadequate as radiation tools," although I must admit that I found little in the Proceedings of the Symposium to rebut his words. It is indeed unfortunate that there are so few published details on the long-term performance of electron accelerators in production use. These data certainly exist, but in some cases at least they are considered as proprietary information.

Rather than to comment individually on the reports on so many varieties of radiation-induced processes, I prefer to generalize by saying there is in these Proceedings a wealth of interesting (and sometimes provocative) data and commentary for the industrial-process engineer as well as for the radiation chemist.

E. Alfred Burrill has recently become vice president of Accelerators, Inc., Austin, Texas, after a two-year period as an independent consultant. Prior to 1969, he had been a vice

president of High Voltage Engineering Corporation, with which he had been affiliated since 1947. He has been involved, since 1939, in the development of particle accelerators and their applications in research, medicine, and industry. A member of several scientific and technical societies, he is currently a member of the Board of Directors of the American Nuclear Society and a member (past chairman) of the ANS Publications Committee. His BS degree (in physics and chemistry) was won from Massachusetts Institute of Technology in 1943.

Title Handbook of Atomic Elements

Author R. A. Williams

Publisher Philosophical Library, Inc.

Pages 125

Price \$6.00

Reviewer Adrian H. Daane

This is a book containing one page of data on selected properties for each of "the atomic elements" (supposedly omitting the non-atomic elements). It provides little or no information not available in the many other handbooks already published, although the arrangement may be more convenient for some purposes. A brief examination of the book found the following points which raise questions about the general value of the publication:

1. The number of protons and number of electrons are tabulated for each element as items of data, an unnecessary semi-redundancy.
2. The choice of 30°C for the standard state seems strange.
3. The hexagonal unit cell (p. 116) is incorrect.

Although a random checking of some of the specific values of some of the data found them correct, the work does not seem such that it can be recommended for the \$6 price when everyone is forced to carefully budget expenditures for one's pro-

fessional library. Of even more concern is the fact that this represents a cluttering of the literature by an uncritical publisher.

Adrian H. Daane received his BS from the University of Florida in 1941, then worked in the Manhattan Project on uranium metallurgy and alloy systems at Iowa State University. Upon receiving his PhD from Iowa State University in 1950 he became member of its Department of Chemistry and of the U.S. Atomic Energy Commission's Ames Laboratory. In 1963 he was appointed head of the Department of Chemistry at Kansas State University. His research interests are the preparation of rare-earth metals, the properties of these metals, and the vapor pressures of metals and alloy systems.

Title Peaceful Uses of Atomic Energy in Africa

Editor International Atomic Agency and the Nuclear Science Commission of the Democratic Republic of the Congo

Publisher Unipub, Inc.

Pages 574 + front and rear material

Price \$16.00

Reviewer David M. Richman

It has long been my view that the publication of the proceedings of a symposium, except when the subject is limited and the papers provide complete and up-to-date coverage, is anticlimactic; the value of a symposium comes from the interaction among its participants and what they derive from it. The proceedings normally have limited value and any major scientific contributions are ultimately published in scientific journals that receive much wider dissemination.

There is, I have happily discovered, another aspect to the publication of proceedings of symposia. It is in the recording of problems and the grouping together of approaches to their solutions. *Peaceful Uses of Atomic Energy in Africa* is an important contribution to recording such problems and the evolution of