RADIOPHARMACEUTICALS, Gopal Subramanian, Buck A. Rhodes, James F. Cooper, and Vincent J. Sodd, eds, New York, Society of Nuclear Medicine, 1975, 555 pp, $30.00.

This book contains papers presented at the International Symposium on Radiopharmaceuticals held in Atlanta, Georgia, February, 1974. The meeting was sponsored by the Society of Nuclear Medicine and the U.S. Food and Drug Administration.

Editing of the presentations for publication was done by a highly competent panel of experts in the field; cited references up to and including 1975 appear. Hence, the book is more up-to-date than is initially apparent. After editing, the 56 papers were divided among 13 main sections entitled: Basic concepts; Technetium; Indium; Halogens; Cyclotron products; Quality control; Lung; Bone, bone marrow, and RES; Heart, Kidney; Cisternography; Tumors; and Fibrinogen and thromboembolism.

Elaborate descriptions are given of the chemistry and uses of technetium and indium. A vast amount of detailed information appears on quality control methods for both the routine and the more exotic radiopharmaceuticals; more of the recent analytic methods are consolidated in this book than can be found in any other single source since the IAEA publication of 1970.

Extensive coverage is devoted to accelerator-produced radioisotopes in terms of methods of production, steps for synthesizing radiopharmaceuticals, and subsequent medical utilization. Great attention is paid throughout to biologic distribution and radiation dose data for radiopharmaceuticals. Each chapter is well written, informative (perhaps overly so), and frequently well illustrated. Most of the presentations are accompanied by a substantial body of references which facilitate seeking further information.

A few comments of a negative nature can be made. Rare typographic errors appear, such as in the table of half-lives given on page 297. Surprisingly, a typo is on the cover of the book, where ^{113}In is listed along with radioisotopes used medically. Also, personal communications are often referenced with no identification other than the individual's name; the author may know who the investigator is, but the reader may not. In vitro radiopharmaceuticals such as radioimmunoassays and saturation assays are scarcely mentioned.

A very complete and handy-to-use subject index is provided in the book. Each radiopharmaceutical is conveniently cross-indexed by radionuclide and by tagged moiety or chemical compound, where appropriate. Body organs with pertinent radiopharmaceuticals are individually tabulated.

Overall, the book spans the intricacies from radioisotope production, to radiopharmaceutical formulation and analysis, to medical use of the product. It is evident that a great deal of work by authors and editors went into its production. *Radiopharmaceuticals* will rapidly find its place as a basic reference and textbook for the clinician, scientist, radiochemist, and radiopharmacist alike.

JOHN J. COUPAL, Ph.D.
Veterans Administration Hospital
Lexington, Kentucky