BOOK REVIEWS

High-Level Radioactive Waste Management

Author	Milton H. Campbell
Publisher	American Chemical Society
Pages	166
Price	$18.50
Reviewer	R. B. Goranson

This book, the proceedings from an April 1974 symposium, contains a collection of technical papers that represented the state-of-the-art for high-level radioactive waste management in the late-1973, early-1974 time frame. The authors of the respective papers were certainly leaders in the field at that time. However, there have been major policy changes with corresponding major changes in program direction since the symposium. Furthermore, it should be recognized that extensive technology development has occurred in this time period. The net result of these factors is that the material in the book is outdated and is strictly of historical interest.

The author states in the preface that his objective was to report the status of technology at the time of the symposium in 1974. This objective was indeed accomplished through the publication of a series of papers of high technical quality from key members of the waste management field.

Richard B. Goranson (MS, nuclear engineering, University of Arizona, 1966) is chief of the Nuclear Waste Technology Branch of the U.S. Department of Energy (DOE), Richland Operations Office. He is currently responsible for all commercial and long-term defense waste management programs assigned to the Hanford site and is program manager of the Basalt Waste Isolation Program. During the past five years, he has been responsible for the coordination and direction of a wide array of research, development, and demonstration programs, including waste vitrification, the commercial generic environmental impact statement, spent fuel handling and packaging, etc. He was the recipient of a 1977 U.S. Energy Research and Development Administration Special Achievement Award for his efforts in establishing and managing these programs.

Prior to joining the U.S. Atomic Energy Commission (now DOE) in 1973, he was a project engineer at the Donald W. Douglas Laboratories in Richland, Washington. His duties included management of programs for application of radioisotope heat sources to spacecraft systems and the development of an implantable radioisotope-fueled Stirling engine for artificial heart power sources, on which he holds a copatent.

Nuclear Fusion (World Survey of Major Facilities in Controlled Fusion Research)

Publisher	International Atomic Energy Agency (1976) (Distributed by Unipub, Inc.)
Pages	866
Price	$48.00
Reviewer	W. Morris Farr

This reference work contains a complete worldwide listing of major fusion devices, with a brief description of each. Parameters listed include dimensions, magnetic field strength, plasma source type and strength, and plasma density and temperature. Brief statements are given of the research programs and major experimental results obtained with each device. Although almost all of these results will be well outdated by the time readers have this work in hand, the experimental descriptions at least give an idea of the general direction of research activities with each device. The listing of personnel associated with each machine will be of considerable usefulness to researchers in the field. This should not be regarded as an up-to-the-minute statement of progress in controlled fusion. However, it is a useful addition to the bookshelf of anyone who contemplates frequent interaction with fusion research efforts.

William Morris Farr (BA, physics, Rice University, 1960; MS, nuclear science, University of Michigan, 1962; PhD, nuclear science, University of Michigan, 1966) is an assistant professor of nuclear engineering at the University of Arizona. His interests lie in the field of controlled thermonuclear reactors and plasma instabilities.