

In general we think that *Volume 6: Pollution Reduction and Contaminant Control* presents technologies for “pollution reduction and contaminant control” as the Editor mentioned in the preface of this volume. However, the volume does not present pollution prevention and/or waste reduction technologies as defined in the U.S. Pollution Prevention Act of 1990 (Sec. 6602). It actually gives a broad overview of waste processing and wastewater treatment technologies.

In summary our review of both volumes underlined that while many of the papers are excellent, the volumes in total are not. The \$155 for each volume seems excessive.

R. OLBINA

Nickel and Human Health. Current Perspectives, edited by Evert Nieboer and Jerome O. Nriagu, John Wiley & Sons, Inc., New York, NY 10158, ISBN 0-471-50076-3, 680 pp., 1992, \$120.00.

This book, Volume 25 in the Wiley Series in Advances in Environmental Science and Technology, contains revised and updated papers presented at the Fourth International Conference on Nickel Metabolism and Toxicology, held in Helsinki, Finland, in 1988.

The initial chapter, written by a pioneer in work on nickel toxicity, provides an excellent historical account of the hazards from exposure to nickel in mining, refining, and processing. The essential role of nickel in several enzyme systems of plants, animals, and microorganisms is reviewed; although nickel is essential, the actual level needed is minimal. Routes of human exposure to nickel and levels to be expected in body fluids under OSHA, NIOSH and ACGIH exposure guidelines, as well as the toxicokinetics of the metal are discussed thoroughly. Analysis of nickel in biological materials, and the use of biological materials as an index of nickel exposure, along with several chapters on the biochemical, cytological and enzymatic aspects of nickel toxicity, especially to the kidney, are covered. The immunological aspects of nickel exposure, hypersensitivity, toxicity to the respiratory system and its various aspects are also included. There is a relatively long chapter which reviews animal studies with nickel, with emphasis on chronic-type experiments. The book concludes with surveys of respiratory cancer in various cohorts of nickel workers and miners.

Overall, this is a valuable compilation of studies on nickel which will be useful to anyone working in the field. It also would serve as an excellent background for anyone interested in the many aspects of the effects of nickel.

ELIZABETH K. WEISBURGER