



Book Reviews

To cite this article: (1984) Book Reviews, American Industrial Hygiene Association Journal, 45:10, B-14-B-14, DOI: [10.1080/15298668491400511](https://doi.org/10.1080/15298668491400511)

To link to this article: <https://doi.org/10.1080/15298668491400511>



Published online: 04 Jun 2010.



Submit your article to this journal [↗](#)



Article views: 3



View related articles [↗](#)

Book Reviews

Short and Thin Mineral Fibers — Identification, Exposure and Health Effects. E.J. Charfield. 180 p. National Board of Occupational Safety and Health, Research Department, Solna, Sweden. 1983. \$20.00.

Reviewed by Robert C. Voborsky, CIH; Stevens Point, WI

This publication is a documentation of the proceedings of a symposium sponsored by the Swedish National Board of Occupational Safety and Health. The symposium was held in Stockholm, Sweden during September, 1982. It is a compilation of four papers written for the industrial hygienist, occupational physician and microscopist. Methods for identification and measurement including transmission, electron microscopy (TEM), energy dispersive x-ray analysis (EDXA), and selected area electron diffraction (SAED), and the scanning electron microscope (SEM), are discussed. Monitoring data support the conclusion that the ambient asbestos air samples contain only two to five percent fibers longer than five micrometers. Several studies illustrate the selective retention of amphibole asbestos over chrysotile in lung tissue. Evidence for the greater involvement of amphibole asbestos in both the incidence of asbestosis and mesothelioma is presented in several epidemiological studies and animal toxicity experiments. The text also provides a discussion of several epidemiological studies involving fiber length, lung deposition, and associated pulmonary diseases.

The content and organization of this book suggests its use as a reference text on the subject of asbestos. It contains very valuable information on the identification, exposure and health effects of short mineral fibers, particularly asbestos including 217 references.

Biological Effects of Ultrasound: Mechanisms and Clinical Implications. 266 p. National Council on Radiation Protection and Measurements, 7910 Woodmont Ave., Washington, DC 20814. 1983. Price on application.

Reviewed by John K. Kam, CIH; Los Angeles, California

This book is one of a series of technical reports published by NCRP on the biological effects of sound wave energies in the frequency range above 20 kHz.

It discusses the basic properties of ultrasound, the acoustic properties of biological effects of ultrasound, and recent experimentation using ultrasound in *in vivo* and *in vitro* experiments.

In terms of presenting a qualitative description of the state-of-the-art on research of ultrasound effects, the book is complete in itself. It is meant for the biologists and not the physicists. As such, there is very minimal mathematics throughout the book. Calculus is not used, even in the Appendix where there is a discussion on the "Calculation of Temperature Elevation in a Beam of Ultrasound."

Reading this report is not particularly stimulating unless one is involved with radiation protection. For a regular industrial hygienist whose work does not focus primarily on ultra-

sound, this book is not of much use. However, it serves as an excellent report on current research directions. The list of references at the end could be valuable to researchers in the area.

IAC Noise Control Reference Handbook. Martin Hirschorn. 152 p. Industrial Acoustics Company, 1160 Commerce Avenue, Bronx, NY 10462. 1982. \$10.00

Reviewed by Charles W. Reed, P.E.; Dallas, TX

As the title indicates, this publication is a "handbook" on noise control. It is however, a very inclusive handbook, and well organized. The data is practical and readily usable.

As stated in the Introduction, the handbook provides definitions of acoustical engineering terminology as well as certain basic equations which can offer useful guidelines. Some of the noise control criteria of general interest is summarized for easier reference. Noise reduction products are discussed and include air and gas flow silencers, quiet rooms, traffic barriers, acoustical wall and ceiling treatments as well as others.

Illustrations and diagrams add significantly to the understanding and application of the data presented. While the products and services discussed are Industrial Acoustics oriented, the manner in which the relationship is handled is very appropriate. The handbook is certainly of value to industrial hygienists, acoustical or noise control specialists, safety and health personnel, design architects, as well as management personnel and others with noise control responsibilities.

Books and Reports Received

Guidelines for Controlling Hazardous Energy During Maintenance and Servicing. DHHS (NIOSH Publication No. 83-125. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Institute for Occupational Safety

and Health, Division of Safety Research, Morgantown, WV 26505 (September 1983).

Comprehensive Safety Recommendations for Land-Based Oil and Gas Well Drilling. DHHS (NIOSH) Publication No. 83-127. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Institute for Occupational Safety

and Health, Division of Safety Research, Morgantown, WV 26505 (September 1983).

Dioxin, Agent Orange and Human Health. The Dow Chemical Company, 2020 Dow Center, Midland, MI 48640.

Evaluation of Exposure to Airborne Particles in the Work Environment. WHO Offset Publication No. 80. World Health Organization, Geneva.