

characteristics. This book summarizes present knowledge of the cause, course, and consequences of dust explosions.

Since the windmill was introduced in 1752 for grinding cereal grains, dust explosions have been reported. Although grain was involved in a quarter of such explosions in the U.S. during 1900–1952, wood, feedstuff, flour, starch, cork, sugar, plastics and other substances have been recorded. In recent years, silos and bunkers, grinding plants, conveyors, separators and dryers have been the scene of dust explosions. For an ignition source, mechanical sparks, smoldering particles, mechanic heating and static electricity are known sources.

Possibly the most useful chapter in the book is Chapter 5 on protective measures. The range of options is broad – from inerting, prevention of effective ignition sources and hot surfaces, proper design of equipment, and process venting. It is unfortunate that metal dusts, especially aluminum, magnesium, and zirconium do not receive more editorial attention. The photographs in the book are excellent, many in color. A total of 140 references are given, most of which are to be found in the German literature.

This book is truly an excellent updated reference which should be useful to anyone concerned with production, handling, storage or shipment of dusts in any form.

HOWARD H. FAWCETT

Chemical Carcinogens. Some Guidelines for Handling and Disposal in the Laboratory, by M. Castegnaro and E.B. Sansone, Springer-Verlag, New York, NY, 1986, ISBN 0-387-16719-6. 97pp., \$ 17.00.

This little book appears to be a result of merging the National Institutes of Health (NIH-USA) guidelines for laboratory work with chemical carcinogens and similar guidelines published by the International Agency for Research on Cancer (IARC). The introduction provides lists of the chemicals or processes considered by IARC to be known, probably, or possibly carcinogenic in humans. This chapter also outlines the responsibilities of each person in a research group which handles chemical carcinogens. Further discussion covers supply, storage and transport of carcinogens, what to do in case of a spill, protection of staff, proper experimental procedures in laboratory and animal rooms, and the design and outfitting of rooms where carcinogens are used. Methods for treatment and disposal of waste from experiments with carcinogens are given, as well as an evaluation of available methods for chemical deactivation of various structural classes of carcinogens.

A list of almost 200 references is added. Unfortunately, older editions of some of the main references are included when newer editions are now available. For future editions, more effort should be expended to update the book.

However, for laboratories just entering the field of research on carcinogens, it is a useful book.

ELIZABETH WEISBURGER and HOWARD H. FAWCETT

For Our Kid's Sake. How to Protect Your Child against Pesticides in Food, by A.W. Garland, Sierra Club Books, San Francisco, CA, 1990, ISBN 0-87156-613-3, 128 pp. (paperback), \$6.95.

This book has some useful and relevant sections on how to decrease pesticide exposure in foods by common sense methods that conscientious parents have been using for years, and how pesticide usage in agriculture can be decreased by integrated pest management, crop rotation, and the like. Whether there will be acceptance of "organically" grown produce at the grocery store remains to be seen.

Lists of various pesticides which may be found in specific fruits and vegetables are given. Although the banning of DDT over 15 years ago is mentioned in a footnote, the cancellation of crop uses for dieldrin, BHC and chlordane is not indicated, even though this occurred several years ago.

The book also purports to show that children are receiving an overdose of pesticides in foods, a concept based largely to the U.S. Environmental Protection Agency (EPA) "worst estimates" of the levels of pesticide residues on foods. In turn, these EPA estimates were based on a report which has been criticized for overestimating the exposure and use of pesticide groups on crops, rather than relying on actual data on pesticide residues. Although the aim of the book may be worthy, the atmosphere of fear and the method of attaining support for the Natural Resources Defense Council are not commendable.

ELIZABETH WEISBURGER and HOWARD H. FAWCETT

Hazardous Waste Minimization Handbook, by T.E. Higgins, Lewis Publishers, Chelsea, MI, 1989, ISBN 0-87371-176-9, 260 pp., \$49.95.

Early in 1988, the U.S. Environmental Protection Agency established its Pollution Prevention office ushering in, for that Agency at least, a new philosophy in hazardous waste management based on avoiding waste production. And as this review is being written, there is legislation before Houses of the U.S. Congress furthering the concept of waste minimization/elimination by placing new regulations on waste production with a view to minimizing its generation. Clearly this is a book published in the right place at the right time.