

adding 1983 references to the extensive bibliography

The association between blood lead concentration and lead levels in motor fuels (petrol or gasoline) is reexamined in the light of new research findings in the U.S.A., the U.K., and the remainder of Europe. The methodology used for measuring lead in the environment is discussed, legislation and control are reviewed, and the specific disease syndromes, both physical and psychological, associated with lead exposures in adults and children are discussed in detail. The review in the introduction to the book of scientific issues and the state of the art in the 1980s is an excellent summary, leading into discussions of sources of lead in the environment, including lead in water and air and in dust from other sources, and the contribution of lead from organolead compounds in motor fuels. The toxicity of lead and of organolead compounds both in animals and in humans is explored in depth, as is the subject of the neuropsychological effects of lead, especially in the context of low-level lead exposure of children. Various techniques to correlate lead levels in the body with IQ and other markers in young children are explored in detail, ending with an excellent chapter containing conclusions as to low-level lead exposure sources, effects and implications. The book should interest chemists as well as pediatricians, neurologists, psychiatrists, industrial and environmental engineers, and others concerned with proper control of this valuable substance.

H H FAWCETT

Asbestos, Vol 2, Properties, Applications, and Hazards, by S S Chissick and R Derricott (Eds), Wiley-Interscience, New York, 1983, 625 pages plus index, \$110 00

This book, a supplement to Volume 1 published in 1979, is a very comprehensive review and update on the potential hazards of asbestos. The timeliness of this volume is confirmed by three separate events occurring on the day in February 1984 this review is written: the U.S. National Academy of Sciences issued a report on non-occupational aspects of asbestiform exposures (*Nonoccupational Health Risks of Asbestiform Fibers*, Board on Toxicology and Environmental Health Hazards, National Academy Press, Washington, DC 20418, U.S.A., 1984), the Wall Street Journal predicted that the U.S. EPA is considering mandatory inspections of asbestos exposures in schools (present regulations are voluntary), and two separate television stations in Baltimore, Maryland, an industrial city, reported on the evening news that 100 of the 250 public schools in that city needed remedial action to prevent further exposure from insulation installed years ago when asbestos was widely used in pipe lagging.

In volume 1 of *Asbestos*, the chemistry and physics of asbestos were covered, the effect on the health of people exposed to asbestos in industrial

and non-industrial situations, the approaches of governments, employers, workers, and trade unions in America and in Europe to the material and its attendant hazards, and the collection and identification of asbestos in solid and airborne samples

Volume 2 begins with an interesting chapter on asbestos in society, by Mr Penney of the Asbestos Information Center, which reviews the current public interest, and notes the problem of fear as a motivator in the politics of health and safety (which this reviewer found most interesting), risk assessment, and issues an appeal to value judgments based on relative risks, technical performance, and cost, in order to enjoy the benefits but to control the risks Ms Nancy Tait then presents the role of SPAID (The Society for the Prevention of Asbestosis and Industrial Diseases) in the prevention of disease and the welfare of sufferers SPAID is a charity non-profit organization organized in 1977, of which the mission is to collect independent information and disseminate the information to the benefit of the public It is her opinion that neither industry nor unions recognize that prevention can save them money in the long term (as witnessed by the filing of bankruptcy under Title 11 of the Code in the U S by a large multi-national company, in order to protect the company from approximately 17000 claims of asbestos disability) Several case histories are presented, which suggest that the whole problem is still not understood well at all levels Mr W Simpson of the U K Health and Safety Commission reviews the role of the Health and Safety Executive with respect to asbestos, noting that the advisory committee on asbestos has made recommendations, and the factory inspectorate has actively worked on their implementation Mr J E Chisholm has contributed an excellent and very comprehensive chapter on the transmission electron microscopy of asbestos, which totals 74 pages, followed by ten pages of specific references Mr J Prentice discusses monitoring the atmosphere for respirable asbestos fibers with respect to work on asbestos insulations "Dust Control Development 1970-1980", by D T Chambers, gives the fundamentals of exhaust ventilation "Personal Protection," by S S Chissick, reviews personal respiratory protection in the asbestos industries, preventive maintenance records, and a list of respiratory devices currently approved in the U K for use under exposures to asbestos. (This is equivalent to the NIOSH approval in the United States.) Mr F G Ward has contributed a chapter on the basics of respiratory function in asbestos-related disease, followed by a chapter by K S Bragman on the treatment of malignant mesotheliomas by surgery, radiotherapy, and chemotherapy In another chapter, S S Chissick discusses the various forms of asbestos in detail, with particular attention to sprayed blue asbestos fire insulation The remainder of the book (pages 299-625) is a compendium of information on asbestos from various countries, including the U K, Republic of South Africa, United States, Israel, Canada, and the action program on Health and Safety at Work of the European Economic Community

In the current interest climate, this book should appeal to a wide range

of professional and academic personnel, including physicians, safety officers, trade unionists, architects and designers, industrial hygienists, occupational health nurses, chemists, and factory inspectors, not only in the U K but anywhere this valuable mineral has been used. When one notes that one case of asbestos disease had a forty-three year induction period, the importance of prompt and adequate controls is clearly in order.

H H FAWCETT

Toxic and Biomedical Effects of Fibers, by P Gross and D C Braun, Noyes Publications, Park Ridge, NJ, 1980, 257 pages, \$36

When I received this book in the mail directly from the publisher, I was surprised because a book written by medical doctors is one I would not ordinarily be interested in. However, an initial scan of the table of contents quickly allayed my fears. The subject material is of great interest to those who routinely deal with hazardous materials and are concerned about their health effects. What caught my eye quickly in the table of contents was the second chapter, Asbestos and Lung Cancer — certainly one of the key areas of current environmental/hazardous material concern.

Of course the concern with asbestos and similar materials is not a one-time exposure. The writer in the book really deals with constant exposure to and the health effects resulting therefrom of fibers such as asbestos, talc, glass, fiberglass, carbon, nickle, cotton, bagasse, nylon, rayon and aramid.

The book is mainly medical in content, delineating the impact of inhaled and ingested fibers on the lungs and the gastrointestinal tract. However, the definition of fibers (description), a survey of their uses, their chemical properties, etc., are of great interest to industrial readers.

GARY F BENNETT

Handbook of Chemical Industry Labelling, by J C O'Connor and S L Lirtzman (Eds), Noyes Publications, Park Ridge, NJ, 1984, 487 pages, \$64

Workers' right-to-know laws, which are becoming very common in the United States, and the "need-to-know" information during chemical spills or emergencies, have created a need for a comprehensive treatment of labelling in the chemical industry. The authors describe their book as a "concise treatment" of the topic. However, with 487 pages the book is hardly concise, but in view of the need to transmit information on labels in the work place, in transportation, in distribution and disposal operations, while simultaneously complying with complex government regulations,