

Book review

Mercury in the Environment, Edited by L. Friberg and J. Vostal, CRC Press, Cleveland, Ohio, 1972, 215 pp., \$32.50.

Organomercurials, long known to be toxic, have entered the domain of "popular science" in recent years, principally as a result of the tragic happenings in Minamata, Japan. Methylmercury species are the prime hazard since they can be formed by biological methylation of Hg^{II} and since they attack the central nervous system and are retained in the body for longer periods of time.

The present book, edited by two experts in the area, seeks to present a full account of mercury and its inorganic and organic compounds in our environment. The problems of how mercury gets into the environment and where and in what form it accumulates are treated only briefly in this book; rather, the editors present the reader mainly with an epidemiological and toxicological appraisal. According to the introduction, this book "has focused on information considered of special importance for understanding the toxic action of mercury and on quantitative information in regard to the relation between dose (exposure to mercury) and effects on human beings and animals."

An initial chapter on the methods of analysis of mercury and its compounds by G. Lindstedt and S. Skerfving is followed by discussions of the transport and transformation of mercury in nature (J. Vostal), metabolism of mercury and its derivatives (G.F. Nordberg and S. Skerfving), symptoms and signs of mercury poisoning (S. Skerfving and J. Vostal) and the normal concentrations of mercury in human tissue and urine (S. Skerfving). Chapters on the relation between exposure and effects of inorganic (L. Friberg and G.F. Nordberg) and organic (S. Skerfving) mercury compounds and on genetic effects (C. Ramel) continue the book. A final chapter by L. Friberg and J. Vostal gives a general discussion and conclusions.

Research in the area of organomercury chemistry is quite active at present. Organomercurials serve increasingly as intermediates in organic and organometallic syntheses. Inorganic mercury compounds are used as catalysts in organic reactions. The chemist who is active in such organomercury areas would do well to become acquainted with the potential hazards associated with the class of compounds with which he is working. This book serves well to present such information.

Although the organometallic chemist can benefit from selective reading in the chapters listed above, this book will be of value for the most part to toxicologists and environmental scientists.

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