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BOOK REVIEW

WALKER, R. A., GRICUTE, L., CASTEGNARO, M., BÖRZSÖNYI, M. (ed.): N-NITROSO COMPOUNDS: ANALYSIS, FORMATION AND OCCURRENCE. — International Agency for Research on Cancer, Lyon, 1980. 841 pp., Sw. fr. 70.—, US \$ 40.00.

The 31st volume in the IARC series on potential carcinogens in the human environment presents the Proceedings of the VIth International Symposium on N-nitroso compounds, held in Budapest 16—20 October 1979. N-nitroso compounds are potent mutagens and carcinogens and many of them are known to be widespread in the environment at relatively high levels. They are readily formed by reaction of nitrite or nitrate with secondary and tertiary amines or mono-substituted amides under acidic conditions, such as those found in the human stomach. Since both nitrite and nitrosable amines and amides are environmentally ubiquitous, the possible human exposure to precursors of N-nitroso compounds is now recognized as a potential health hazard. The introductory section of the book presents 28 papers on the chemistry and formation of N-nitroso compounds, e.g. reactions of nitrosamines with nucleophiles, the role of phenols in catalysis of nitrosamine formation, synthesis of monosaccharid nitrosamines etc. The following section includes 8 papers dealing with the analysis of N-nitroso compounds, especially volatile N-nitrosamines and N-nitrosodiethanolamine. Recent work in the field of N-nitroso compounds has focussed considerable attention on their detection in food, in tobacco products, in pesticides, in animal feed, drugs etc. All these topics are considered in 18 papers of the 3rd section. The 4th section "Experimental pathology" deals mainly with the carcinogenic effects of N-nitroso compounds on laboratory animals (17 papers). Special attention is devoted to the carcinogenic properties of N-nitrosodiethanolamine (contained in some cosmetic products) and to the mutagenic and carcinogenic effects of nitrosated urea herbicides metabolites. The concluding part of the Proceedings presents the recommendations of 5 subcommittees for further N-nitroso compound studies.

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