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BOOK REVIEW

O'NEILL, I. K., VON BORSTEL, R. C., MILLER, C. T., LONG, J., BARTSCH, H. (ed.): *N-NITROSO COMPOUNDS: OCCURRENCE, BIOLOGICAL EFFECTS AND RELEVANCE TO HUMAN CANCER*. IARC Scientific Publications No. 57. International Agency for Research on Cancer, Lyon 1984. 1011 pp. £ 75.00.

N-nitroso compounds comprise a very important group of chemicals to which organisms, including plants, are exposed through soil, air or water. The objective of this publication, representing the Proceedings of the Eight International Meeting on N-Nitroso Compounds, held in Lyon 1984, was to overview our present knowledge of the occurrence of these genotoxic compounds in our environment and to find means for preventing exposure to them. Altogether 116 presentations are divided into the following sections: 1. Environmental occurrence of N-Nitroso compounds [further NOC] and nitrosable precursors, 2. New NOC and improved methods of analysis, 3. Endogenous formations of NOC, 4. Formation of NOC-catalysis, inhibition and mechanisms, 5. Metabolism of N-nitrosamines and N-nitramines, 6. Modifiers of metabolisms and carcinogenicity of NOC, 7. Biological effects, 8. Biological effects related to tobacco and betel quid, 9. Epidemiology and laboratory studies, 10. DNA repair and detection of alkylated macromolecules. According to the conclusions of the IARC committee, preventive measures against the induction of cancer should include: 1. limiting the use of tobacco products, 2. use of inhibitors of the nitrosation reactions to reduce exposure to NOC, and, 3. selective inhibition of the metabolic activation of N-nitrosamines. A special annex is devoted to the nomenclature of NOC and to abbreviations of these compounds.

This IARC publication will be valuable to all those interested in the genotoxic effects of N-nitroso compounds and in their mechanisms of action in various biological systems.

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