

Analytical Methods

- 940 Odor Detection and Thresholds. E.C. Crocker and L.B. Hjoström. Chem. & Eng. News 27, 1922-1925 (July 4, 1949).

There is no substitute for the human nose for detection of odors. However, for the qualitative and quantitative detection of odorous substances, there are a number of physical means, of which the mass spectrograph is the most useful for those of low molecular weights, and chemical means are applicable in a few cases. In this article, various theories of odor perception are reviewed, the principle of odor accumulations is given, and determination of threshold limits is discussed. There are not many serious differences between normal persons in sensitivity to odors, but there are some variations from day to day in the same person. The published material on threshold values is presented, and the use of odorants as warning agents in gas is described.

Laboratory Toxicological Studies

- 941 Elimination of Carbon Monoxide from the Blood of Acutely Poisoned Dogs. H. Schwerma, W. Wolman, A.E. Sidwell, Jr. and A.C. Ivy. J. Applied Physiol. 1, 350-363 (Nov. 1948).

The therapeutic value of carbon dioxide in carbon monoxide poisoning is considered. Since it apparently plays no part in fortifying cardiac function and its addition to oxygen confers little value in resuscitation, its use is unnecessary.

-- Authors' Summary

- 942 Experimental Aluminum Dust Lungs. A. de Marche. Schweiz. Ztschr. f. Tuberk. 4, 413 (1948) German.

Animal experiments which were undertaken to determine the effects of the inhalation of aluminum dust are described. The animals were killed at periods varying from two days to twelve months after the insufflation of aluminum. Microscopic examination of the lung tissues of the animals revealed three phases of the experimental aluminum pneumoconiosis, as follows: (1) The initial phase with a duration of several hours to two days is characterized by exudation of leukocytes; (2) The intermediate monocyte phase may last for several months; (3) The aluminum granulomas that characterize the final granulomatous phase show considerable proliferation of fibroblasts, monocytes, and foreign body giant cells and moderate interstitial substance. The aluminum particles are not carried away by the lymphatic route or by the blood vessels. The microscopic picture of the granuloma is in general that of a foreign body reaction.

-- Condensed from J. Ind. Hyg. & Tox.