

- 874 Prognostic Aspects of Benzene Poisoning. S. Hernberg, et al.
Brit. J. Ind. Med. 23, 204-209 (July, 1966).

In 1955, a benzene mass-poisoning was detected in a shoe factory in Finland. One hundred and forty-seven persons were heavily exposed, and more than 100 had abnormal blood counts. One died and ten required hospital treatment. This paper deals with a re-examination of the involved workers nine years later. One hundred and twenty-five persons attended for re-examination. Eight had died, two refused, and 11 could not be located. The possibility of death due to benzene poisoning having occurred among these persons was ruled out by checking the national death register. Each of the subjects underwent a hematological examination which included the hemoglobin value and the erythrocyte, reticulocyte, leucocyte, and thrombocyte counts. A differential count of the leucocytes was also made. A randomly chosen group of 86 persons served as a control group. The thrombocytes of the whole patient group and the erythrocytes of the men were significantly lower than those of the controls, whereas the leucocytes of the whole group and the erythrocytes of the women failed to show any statistical difference. In a multiple discriminant function analysis, considering all three counts at the same time, only the men differed slightly from the controls at the re-examination. The analysis also showed that the prognosis of the severe cases did not differ from that of the mild ones, provided the acute stage had been passed. Some illustrative case reports are added. One patient developed leukemia after a latency of seven years, whereas most of the others—chosen because of grave symptoms in the initial stage—have recovered. The results are discussed from the point of view of prognosis.

-- Authors' abst.

- 875 Detection of 1,1-Dimethylhydrazine by Frustrated Multiple Internal Reflection Spectroscopy. M. J. Prager. Am. Ind. Hyg. Assn. J. 27, 272-277 (May-June, 1966).

The detection of vapors, especially of missile propellant fuel, 1,1-dimethylhydrazine, by frustrated multiple internal reflection (FMIR) spectroscopy was studied. This method is most sensitive to substances with high boiling points; however, it can be used to detect microgram quantities of substances with relatively low boiling points by coating the FMIR plate with a thin adsorptive film or by dissolving the samples in a suitable solvent. Five references are given. -- Author's abst.

- 876 Directory of Pesticides. Anon. Pest Control 34, 53-74 (17pp.) (March, 1966).

A directory of pesticides is given that lists products under their common or trade mark name. The basic manufacturer or advertising formulator is listed for each product along with an index of their addresses.

-- Public Health Eng. Absts.

INDUSTRIAL DUSTS

- 877 Notes on the Modification and Use of a Cascade Impactor for Sampling in Ducts. R. A. Gussman and D. Gordon. Am. Ind. Hyg. Assn. J. 27, 252-255 (May-June, 1966).

Although the cascade impactor has been widely applied to the sampling of gently moving air streams as found in mine shafts or in the open atmosphere, only limited use has been made of it in ducts and stacks. An earlier duct probe design for the cascade impactor has been redeveloped, and a method has been found to prevent deposition of aerosol on the first stage prior to the actual sampling period. A control system has been devised which permits reproducible sampling periods as brief as 0.6 second.

-- Authors' abst.

- 878 Ultrasonic Microscreening. E. Ioos. Staub 25, 540-543 (Dec. 1965). German.

A method for ultrasonic microscreening is reported and a device is described which makes it possible to carry out particle size analyses down to five millimicrons by sieves arranged vertically above one another. A comparison of the results of this particle size analysis with those obtained by sedimentation analysis by Andreasen, and with microphotographs, shows that ultrasonic microscreening permits dust to be investigated or fractionated with regard to its fineness. -- APCA Absts

- 879 Alveolar Clearance: Its Relation to Lesions of the Respiratory Bronchiole. P. Gross, E. A. Pfitzer and T. F. Hatch. Am. Rev. Resp. Dis. 94, 10-19 (July, 1966).
Reprints Available from Industrial Hygiene Foundation Upon Request.

This paper was presented at the British Occupational Hygiene Society's symposium on "Inhaled Particles and Vapours" at Cambridge, England, September 26-October 1, 1965. The proximal portion of the pulmonary racemus is the most vulnerable portion of the lung inasmuch as the initial attack of irritants seems to concentrate at that site. (In rats, the proximal portion of the pulmonary racemus is composed of the respiratory bronchiole and adjoining alveolar ducts.)