



Industrial Hygiene Digest

INDUSTRIAL HEALTH NEWS

LITERATURE ABSTRACTS

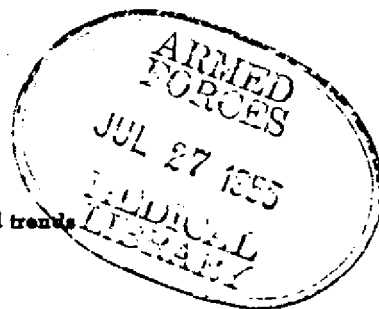
MEDICAL

ENGINEERING

CHEMICAL

TOXICOLOGICAL

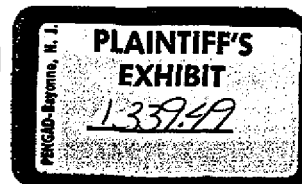
LEGAL . . . decisions and trends



JULY, 1955
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INDUSTRIAL HYGIENE FOUNDATION

4400 FIFTH AVENUE -- PITTSBURGH 13, PA.





FOUNDATION FACTS

Foundation Facts is a monthly news letter issued to industrial concerns holding membership in Industrial Hygiene Foundation. The Foundation is a nonprofit association of industries for the advancement of healthful working conditions.

June 17

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ANNOTATED NOISE BIBLIOGRAPHY PUBLISHED BY I. H. F.

Months of painstaking search and review went into the preparation of An Annotated Bibliography on Noise, Its Measurement, Effects and Control, publication of which was recently completed by Industrial Hygiene Foundation. The 364-page bibliography covers 2,336 articles and other literature, and is intended as a useful reference for engineers, physicians, executives and others who may be concerned with problems resulting from excessive noise.

The proper approach to an understanding of the problem of noise and its solution necessitated a systematic survey of the knowledge of the subject. The preparation and printing of this issue of the Bibliography was made possible by funds contributed by various organizations. Therefore it was possible to distribute a limited number of copies to member companies of Industrial Hygiene Foundation. If requests for additional copies indicate that more printing is necessary, they can be furnished to members at \$5.00 per copy.

CLOSE ASSOCIATE OF FOUNDATION DIES

Death claimed a long-time associate of Industrial Hygiene Foundation, Dr. R. E. Zimmerman, on June 20 in Summit, N. J. Dr. Zimmerman had been a member of the Foundation's Board of Trustees from 1929 until 1954 when he resigned from the Board at the time of his retirement from active service in the United States Steel Corporation. He was also a member of the Foundation's Research Advisory Council.

NEW COMMITTEE MEMBERS

Recent additions to the Medical Committee of the Foundation are Dr. Melvin N. Newquist, Medical Director, The Texas Company; Dr. Norman Roberts, Medical Director, The Pennsylvania Railroad; and Dr. Kenneth Smith, Medical Director, Johns-Manville Corporation.

Added to the Legal Committee is James Hill, Compensation Department, Ford Motor Company.

PATHOLOGY YEAR BOOK INCLUDES FOUNDATION LITERATURE

The Year Book of Pathology and Clinical Pathology for 1954-55 contains an abstract of the paper on "Permeability of Lung Parenchyma to Particulate Matter," by Dr. Paul Gross and Dr. Marian Westrick of the Foundation's toxicology laboratory. The year book outlines the significant advances in path-

(Cont. on next page)

silicic acid with a high degree of polymerization distinctly inhibited mobility and phagocytosis, that freshly prepared polysilicic acid had very little effect, and that monosilicic acid had no effect at all on phagocytosis.
-- Bull. Hyg.

- 854 The Reactivity of Finely Ground Quartz. C. Claeys and E. Quinot. Staub, No. 37, 393-403 (Sept. 15, 1954). German.

The surface layers of finely ground quartz and of silica were dissolved in distilled water. Optical, electrical, and chemical properties of the solutions were investigated, and their visible and ultraviolet absorption spectra were examined. Anomalies in the quartz spectra are attributed to carbon dioxide. The carbon dioxide content of the solution, estimated by Van Slyke's method, was greater than could be accounted for by carbon dioxide dissolved in the distilled and degassed water used in the experiments. The abnormal reactivity of finely ground quartz particles is ascribed to the presence of carbon dioxide, in the shape of carboxyl groups forming a complex with the silica. It is claimed that several biological effects of fine quartz may be explained by means of this hypothesis.
-- Cond. from Bull. Hyg.

- 855 Primary Cortical-Cell Tumor of the Peritoneum in a Case of Asbestosis. F. Leicher. Arch. Gewerbepath. Gewerbehyg. 13, 382-392 (1954). German.

A case of asbestosis following long exposure to asbestos is described. In addition to typical symptoms and findings, leptomeningitis was present and tubercle bacilli were found in the spinal fluid. The patient died with cachexia. Autopsy showed tuberculosis of the lumbar spine with bilateral psoas abscess and mixed infection in both lungs. Asbestosis, stage two, was found in the lungs with definite fibrosis; there was slight asbestosis in the lymphatic glands, and asbestos bodies were found in the spleen. On the peritoneum of the mesentery and over the peritoneal cavity there were thickened patches and many small nodules; a flat tumor, half the size of a hand and 1 cm. in thickness, was attached to the peritoneum on the under side of the diaphragm. The results of the examination of the tumor are fully described and illustrated. Asbestos was found in the tumor tissues by x-ray diffraction. It is uncertain how the asbestos reached the peritoneal cavity; the most probable route was thought to be by direct penetration of the asbestos fibers from the lung through the pleura and thence through the diaphragm.