



Industrial Hygiene Digest

INDUSTRIAL HEALTH NEWS

LITERATURE ABSTRACTS

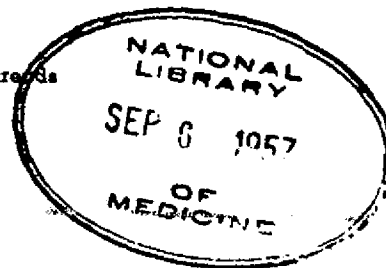
MEDICAL

ENGINEERING

CHEMICAL

TOXICOLOGICAL

LEGAL ... decisions and trends



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INDUSTRIAL HYGIENE FOUNDATION

MELLON INSTITUTE

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FOUNDATION FACTS

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

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NEW MEMBERS OF I-H-F

Three companies have newly affiliated with Industrial Hygiene Foundation, and are welcomed to membership. They are:

The American Metal Company, Ltd.
Ingersoll-Humphries Division of
Borg-Warner Corporation
Laclede Steel Company

HATCH LECTURING IN EUROPE

Theodore F. Hatch, Research Adviser to Industrial Hygiene Foundation, is currently in Europe where he is surveying industrial health programs and lecturing. Under a Rockefeller Travel Fellowship he is devoting three months to visiting various research institutions, universities and industries in Sweden, Finland, Norway, Denmark, Germany, Austria, Switzerland and England. He has been invited to lecture in the major cities of these countries. From September to December, under a Fulbright Lectureship, he will present a series of lectures at the London School of Hygiene and Tropical Medicine.

While in Finland Mr. Hatch attended the International Congress on Occupational Health, at which he participated in a Symposium on Human Engineering.

TWENTY-SECOND ANNUAL MEETING OF I-H-F

Remember the dates of the fast-approaching 22nd Annual Meeting of Industrial Hygiene Foundation: October 30 and 31, 1957. We hope that each and every member company will be represented at the management and technical conferences. Registration material and program will be mailed shortly.

ANNUAL REPORT OF I-H-F

The Annual Report of Industrial Hygiene Foundation for the year ending May 1957 was distributed recently. Additional copies of this bulletin are available.

NEW REPRINTS AVAILABLE

Reprints may be obtained upon request of the Donald E. Cummings Memorial Lecture for 1957, "Growth and Progress in Industrial Hygiene," by Dr. H. H. Schreck.

A limited number of reprints have been obtained of two papers which appeared in the Transactions of the 21st Annual Meeting of Industrial Hygiene Foundation. They are:

"Legal Aspects of Industrial Medical Practice", by William A. Challener, Jr. and Francis S. McQuilkin.

"Research and Development of Equipment for Cleaning of High Temperature Gases", by Leslie Silverman.

- 1010 The Theory of the Cause of Silicosis. K. H. Soffge.
Neues Jahrb. Mineral., Monatsh. No. 1, 12-22 (1957). German.

The author discusses the causes of silicosis and reports experiments on the adsorption of silicic acid. Results are given in graphical form only. One graph shows the adsorption of silicic acid by $\text{Al}_2\text{O}_3 \cdot n\text{H}_2\text{O}$ from Ringer solution containing 106 mg. silica per liter as a function of pH (5.5-8.0). On another graph the adsorption of silicic acid by $\text{Fe}_2\text{O}_3 \cdot n\text{H}_2\text{O}$ from Ringer solution containing 28.7 mg. SiO_2 per l. plus 30.4 mg. CaF_2 per l. is shown as a function of pH (6.8-8.0). In all cases there is a marked but irregular increase in the adsorption with pH. The breaks in the curves are interpreted as being connected with silicic acid polymers.
-- Chem. Absts.

- 1011 Results of Functional Respiratory and Circulatory Tests of Workers Exposed to Asbestos Dust over a Number of Years. M. Navratil, V. Krecek, and L. Cvachova.
Pracovní Lékarství 8, 329-333 (1956). Czech.

Sixty workers exposed to asbestos dust were classified according to severity of asbestosis and according to age. They were subjected to functional tests for prolonged expiration and for ventilatory coefficients, and to electrocardiography. In the over 50 age group, quite apart from all radiological data, a drop in vital capacity is found, due not merely to age but also to emphysema which was detected in 19 patients. The ventilation coefficients in the asbestosis-free and early asbestosis groups were within normal limits. In those with advanced asbestosis there was a distinct drop in the ventilation coefficients, due to fibrosis and associated pathological conditions. The differences in the carbon dioxide ventilation coefficients and in the vital capacity figures were on the limit of significance. Hypertrophy of the right heart was present in two subjects with advanced asbestosis.
-- Cond. from Bull. Hyg.

- 1012 Industrial Hygiene Problems in Open Pit and Underground Mines. M. L. Roberts.
Presented at Eighth Conference of McIntyre Research Foundation on Silicosis, Oct. 22-24, 1956. 6 pp. (1957).

The hazards discussed in this paper include: the dust hazard in open pits; the dust hazard underground; heat and humidity; noise; fumes and gases; and radiation. The larger portion of the paper deals with the dust hazard. Various sources of dust both in open-pit and underground mining are evaluated, and methods of dust sampling and determination are discussed briefly.

PHYSICAL ASPECTS OF THE ENVIRONMENT

- 1013 Acoustic Power Level Determination for Machinery in Hard Rooms. W. J. Burch.
Heat, Pip. Air Cond. 29, 161-164 (June 1957).

The purpose of this investigation was to determine the feasibility of writing noise specification in terms of acoustic power (or acoustic power level) instead of the presently used system involving sound pressure levels. It was desired to determine whether power level measurements could be made in acoustically untreated rooms. Tests using three different sound sources in rooms of various acoustic properties show these measurements to be feasible. Various types of machinery mountings had negligible effect upon recalculated power levels.
-- Editor's summary