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Industrial Hygiene Digest

INDUSTRIAL HEALTH NEWS

LITERATURE ABSTRACTS

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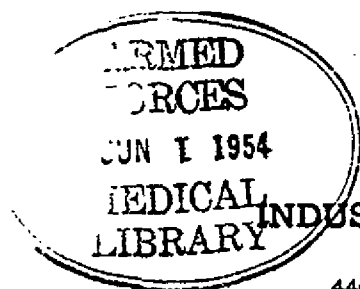
ENGINEERING

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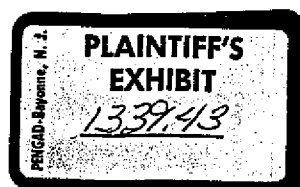
LEGAL - - - decisions and trends

MAY, 1954
(Vol. 18, No. 5)



INDUSTRIAL HYGIENE FOUNDATION

MELLON INSTITUTE
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.

Volume 16

May, 1954

No. 5

1954 ANNUAL MEETING

- - - November 17 and 18 - - -

The Nineteenth Annual Meeting of Industrial Hygiene Foundation will be held at Mellon Institute, the Foundation's headquarters, in Pittsburgh, on Wednesday and Thursday, NOVEMBER 17 and 18. The dates were fixed by the Foundation's Board of Trustees at the spring (semi-annual) meeting held in New York on May 5.

The various committees of the Foundation have also met to shape up plans for the technical conferences which are an important part of the meeting. While tentative programs have been outlined, we would be pleased to consider any topics suggested by our members. This is your opportunity to bring before leading industrial health specialists the specific health problems encountered in your industry and to stimulate discussion and interchange of valuable information on the subject.

SCHRENK ELECTED COMMITTEE OFFICER

Dr. H. H. Schrenk, Research Director of I-H-F, has been elected Vice Chairman of the ASA Z37 Sectional Committee on Allowable Concentrations of Toxic Dusts and Gases.

PAPERS PRESENTED BY IHF STAFF

Three papers were given by staff members of the Foundation at the Industrial Health Conference held in Chicago from April 24 to 30. W. C. L. Hemeon discussed "Theoretically Required Exhaust Rates for Dust Control in Bulk Material Handling Systems." Theodore Hatch participated in a panel discussion on threshold limits, for which his topic was "Dusts." Mr. Hatch also presented a paper on "Respiratory Gas Exchange in Relation to Laboratory Performances" at another session of the AIHA program.

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NEW REPRINTS

Reprints are available of a paper on "Industrial Noise--A National Problem," by Henry D. Sayer, General Manager, New York Compensation Insurance Rating Board, which was presented at the 18th Annual Meeting of Industrial Hygiene Foundation on November 19, 1953.

Also available on request are reprints of a paper on "The Permeability of Lung Parenchyma to Particulate Matter" by Dr. Paul Gross and Dr. Marian L. Westrick, published in the American Journal of Pathology in February, 1954.

I-H-F

- 549 Further Thoughts on Silicosis. P. Heffernan.
Tubercle 34, 246-249 (Sept. 1953).

The author rejects the solubility theory of silicosis and propounds instead a surface valency theory. The structure of freshly fractured silica is held to possess chemical surface activity with ability to coagulate and fix large masses of organic material. The freshly fractured ends of asbestos are postulated to possess the same activity; hence asbestosis. Freshly powdered aluminum forms a protective coating over the silica particles to render them harmless. Further details are given, but the discussion is entirely theoretical.

-- Cond. from Bull. Hyg.

- 550 The Nature of Lesions Caused by Asbestos and Mica in Experimental Pneumoconiosis in Guinea Pigs. A. S. Ramaswamy, D. S. Venkatesh, and R. Rama Rao. J. Indian Inst. Sci. 35, Sect. A, 319-331 (Oct. 1953).

Guinea pigs were subjected to intratracheal injections of mica and asbestos dusts. Stress is laid on the development, after long periods, of lesions in other organs besides the lungs, especially in the adrenal glands. Mica dust was found to lead to some degree of nodular formation in the lungs, but the asbestos dust set up diffuse fibrosis only. These differences are portrayed in a series of photomicrographs. Mica induced hypertrophy of the adrenal cortex with extensive foamy disintegration of the cortical cells; asbestos induced lesser changes, but small areas of necrosis were occasionally found in the zona fasciculata and zona reticulata. In a theoretical discussion, the authors attempt to draw a relation between the atomic structure of mica and asbestos and the pathological lesions in the lungs and other organs. Their theory, however, leaves many points unexplained.--Cond. from Bull. Hyg.

- 551 Action of Testosterone in Guinea Pigs Infected with Koch's Bacillus with Reference to Therapy of Silico-Tuberculosis. A. Raule, L. Pecchiai, and R. Grisler. Med. lavoro 44, 475-484 (1953). Italian with English summary.

Of 20 guinea pigs infected with 1 mg. of tubercle bacilli suspended in water 10 received daily 0.5 mg. testosterone propionate. The treated animals showed less reaction in the lymph glands at the site of injection than in other parts and the granulomata were less developed. The sclerotic scar tissue which replaces granulomata appeared in the controls to be hyperplastic, but not in the treated animals.

-- Chem. Absts.

Of all U.S. business firms--slightly over two million--only 5% have 20 or more employees, and only 25% have four or more employees.

-- Supervisor's Personnel Newsletter
Bureau of Business Practice, Dec. 7, 1953