PLAINTIFF'S EXHIBIT

IHF-299

The

ACTIVITIES and MEMBERS

of

INDUSTRIAL HYGIENE FOUNDATION



MELLON INSTITUTE, 4400 FIFTH AVENUE
PITTSBURGH 13, PA.

1954

RC963
.I4ac

[illegible] by copyright [illegible] U.S. Code).

INDUSTRIAL HYGIENE FOUNDATION
A Research Association of Industries for Advancing Industrial Health and Improving Working Conditions

INDUSTRIAL HYGIENE FOUNDATION

INDUSTRIAL HYGIENE FOUNDATION is a nonprofit research association of industries for advancing occupational health, improving working conditions and bettering human relations.

The Foundation's staff includes physicians, chemists, engineers, industrial hygienists and medical technicians—all specialists in health problems arising in manufacturing and mining. Through affiliation with INDUSTRIAL HYGIENE FOUNDATION, companies are entitled to the services of these specialists, plus the technical facilities of Mellon Institute, the Foundation's headquarters.

FOUNDATION ACTIVITIES

The activities of I-H-F fall into three major categories:

(1) To give direct professional assistance to member companies in the study and solution of industrial health problems.

(2) To assist companies in the development of health and medical programs as essential parts of industrial organizations.

(3) To contribute to the scientific advancement of industrial medicine and hygiene, through research, surveys and allied activities.

The broad scope of questions and problems that come to the Foundation for consideration is shown by the following tabulation of activities, classified under eight major headings: (1) medical, (2) chemistry, toxicology and industrial hygiene, (3) engineering, (4) air pollution, (5) noise, (6) research, (7) legal, and (8) general advancement of industrial health.

(1) Medical

(a) General information and advice on organization and administrative practices in industrial health services, cost finding and analysis, plans for physical layouts, personnel needs and training, interdepartmental relations, systems of record keeping, directives for medical personnel and registered nurse service standards, etc.

(b) Surveys of health problems, and comprehensive company-wide medical audits to appraise existing organizations and to recommend further needs.

(c) Information on specific industrial medical problems and experience.

(2) Chemistry, Toxicology and Industrial Hygiene

(a) Industrial hygiene field studies are conducted—appraisals of nature and magnitude of hazardous exposures and effectiveness of control measures. These may be on a plant basis or on an industry-wide scale.

(b) Information on toxicity of chemical and physical agents, and on hazards of particular processes; preparation of bibliographies, literature searches, and securing of information from other sources, as, for example, companies having related problems.

(c) Information and advice on sampling and analytical procedures, choice and availability of equipment.

(d) Preliminary training of industrial hygiene personnel in laboratory procedures, sources of information, organization of laboratory, record keeping, etc.

(e) Studies and development of new sampling and analytical methods and techniques.

(3) Engineering

(a) Information on engineering practices in control of hazardous processes, and on design procedures, data and sources of information. Advice on control requirements for specific operations.

(b) Specialized advice on new plant design, reconstruction in existing plants and changes in process to minimize or eliminate hazards.

(c) Review of plans for ventilating systems, as to design, capacity, etc. Advice on special air-cleaning problems.

(d) Advancement of engineering design practices and organization of engineering design programs; development of new data and design procedures for exhaust hoods. Assistance i[redacted] field tests of new control measures.

(4) Air Pollution

(a) Advice on industrial air pollution problems—investigational procedures and criteria.

(b) Development of methods, apparatus and techniques for collecting and measuring air pollutants.

(c) Investigations of air pollution potentials of plants—measurement of stack dusts, fumes, gases and odors. Estimation of neighborhood effects.

(d) Measurement and appraisal of pollution effects within adjoining community. Ascertaining sources of communal pollution.

(e) Assistance in engineering measures for controlling excessive stack emissions. Measurement of stack dust particle size and its relation to appropriate dust collectors.

(5) Noise

(a) Information on measurement of noise—sound level, frequency, magnetic tape recordings, availability of equipment, calibration and data record sheets.

(b) Comprehensive physical measurement of noise levels in industrial plants.

(c) Information on physiological response to noise—measurement of hearing impairment, permanent loss vs. fatigue aspects, treatment, susceptibility and placement.

(d) Information on control measures—accumulation of industrial practices that have proved satisfactory.

(e) Information on legal aspects—assembly of facts on laws and regulations relating to compensation for hearing loss.

(6) Research

(a) Short- and long-term toxicity studies on new chemicals to indicate nature of problems which may be encountered in manufacture and use.

(b) Research on nature and mechanism of action of hazardous dusts, fumes, vapors and gases, with special reference to actual conditions of plant exposure.

(c) Basic studies in physiology, toxicology and biochemistry of physical and chemical agents, their mode of entrance into the body in relation to physical and chemic[redacted]te in the atmosphere, and their subsequent toxic action [redacted]e body.

(7) Legal

(a) Summaries of legislative activities pertaining to occupational diseases, compensation, and other proposed legislation pertaining to industrial health; analysis of trends.

(b) Review of new compensation laws, revisions and additions, and analysis of decisions of compensation boards that are of special significance.

(c) Analysis of new codes pertaining to health hazards and related problems.

(8) General Advancement of Industrial Health

(a) Meetings: (1) annual meeting of members—discussion of broad objectives, policies and trends in industrial health and human resources; (2) conferences of professional specialists from member companies, (i) medical, (ii) engineering, (iii) chemistry and toxicology, (iv) legal; (3) special conferences on selected subjects or for discussion of common problems in particular industrial groups.

(b) Publications: (1) transactions of annual meeting; (2) monthly *Industrial Hygiene Digest;* (3) special bulletins prepared under the sponsorship of the several advisory committees; (4) informative letters and pamphlets on subjects of current interest; (5) technical papers by staff members.

(c) Special surveys and studies are undertaken on an industry-wide scale, as, for example, for an association or similar organization to develop fundamental information which will be of benefit to an entire industry in appraising and controlling occupational disease hazards.

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

— A —

Abingdon Potteries, Inc.
Abrasive Grain Association
Abrasive Products Company
Allegheny Ludlum Steel Corporation
Allegheny Pittsburgh Coal Company
Allis-Chalmers Manufacturing Company
Aluminum Company of America
American Abrasive Company
American Air Filter Company, Inc.
American Brake Shoe Company
American Can Company
American Emery Wheel Works
American Foundrymen's Society
American Iron & Steel Institute
American Mining Congress
American Optical Company
American Radiator & Standard Sanitary Corporation
American Smelting & Refining Company
American Wheelabrator & Equipment Corporation
American Zinc Institute
American Zinc, Lead & Smelting Company
Anaconda Copper Mining Company
Anthracite Institute
Arrow Mutual Liability Insurance Company
Asbestos Corporation Limited
Assn. of Casualty & Surety Companies*
Atlas Powder Company
Automobile Manufacturers Association

— B —

Ball Brothers Company
Bartlett-Collins Company
Bay State Abrasive Products Company
Bethlehem Steel Company, Inc.
Bird & Son, Inc.
Bituminous Casualty Corporation
Brush Beryllium Company
George H. Bullard Company
Bunker Hill & Sullivan Mining & Concentrating Company
A. M. Byers Company

— C —

Can Manufacturers Institute, Inc.
Carborundum Company
Celanese Corporation of America
Central Silica Company
Chicago Wheel & Manufacturing Company

— C —

Chromium Mining & Smelting Corp., Ltd.
Cincinnati Milling and Grinding Machines Inc., Cincinnati Products Division
Cleveland-Cliffs Iron Company
Cleveland Quarries Company, Sterling Grinding Wheel Division
Cobalt Chemicals Ltd.
Robert F. Coleman, Inc.
Colonial Abrasive Products Company
Commercial Solvents Corporation
Commonwealth Sanitation Company
Consolidated Mining & Smelting Company of Canada, Ltd.
Continental Can Company, Inc.
Cooper-Bessemer Corporation
Copperweld Steel Company
Corhart Refractories Company, Inc.
Corning Glass Works
Cortland Grinding Wheels Corporation
Crucible Steel Company of America

— D —

Davison Chemical Corporation
Deere & Company
A. P. DeSanno & Son, Inc.
Diamond Alkali Company
Doehler-Jarvis Corporation
Dow Chemical Company
B. F. Drakenfeld & Company, Inc.
Dravo Corporation

— E —

Eagle-Picher Company
Ebasco Services, Inc.
Electric Storage Battery Company
Electro Refractories & Abrasives Corporation
Elex S. A.
Eljer Company
Ethyl Corporation
Eureka Flint & Spar Company, Inc.
Exolon Company

— F —

Falk Corporation
Ferro Corporation
H. E. Fletcher Company
Foote Mineral Company
Ford Motor Company
Fostoria Glass Company
Foundry Facings Manufacturers Assn.
Fuller Merriam Company
Funkhouser Company

* Multiple Membership

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION, Cont'd.

— G —

Garco Products, Inc.
Gardner Machine Company
General Abrasive Company, Inc.
General Ceramics Corporation
General Electric Company
General Grinding Wheel Corporation
General Mills, Inc.
General Motors Corporation
General Refractories Company
General Steel Castings Corporation
Georgia Kaolin Company
Glenshaw Glass Company, Inc.
Grinding Wheel Institute
Gulf Oil Corporation

— H —

Hall China Company
Hamilton Emery & Corundum Company
Hampden Grinding Wheel Company
Hazel-Atlas Glass Company
Hercules Powder Company
John W. Higman Company
Homestake Mining Company
O. Hommel Company

— I —

Industrial Silica Corporation
Inland Steel Company
International Business Machines Corporation
International Nickel Company, Inc.

— J —

Jamison Coal & Coke Company
Jeffrey Manufacturing Company
Johns-Manville Corporation
Johnson & Johnson
Jones & Laughlin Steel Corporation
Joy Manufacturing Company

— K —

Keasbey & Mattison Company
Kennametal, Inc.
Kennecott Copper Corporation
Keystone Abrasive Wheel Company
Keystone Emery Mills
Kirk[illegible]m Manufacturing Company
Edwin[illegible] Knowles China Company
Koppers Company, Inc.

— L —

Homer Laughlin China Company
Lava Crucible Refractories Company
E. J. Lavino and Company
Lead Industries Association
Lion Grinding Wheels Ltd.

— M —

Mackintosh-Hemphill Company
Macklin Company
Magma Copper Company
Maryland Self-Insurers' Association
Mayer China Company
J. S. McCormick Company
McLain Fire Brick Company,
Division of H. K. Porter Company, Inc.
McLean Manufacturing Company
Metropolitan Life Insurance Company
Mexico Refractories Company
Mid-West Abrasive Company
Mine Safety Appliances Company
Monsanto Chemical Company
Mutual Chemical Company of America

— N —

National Association of Fan Manufacturers
National Association of Mutual Casualty Companies*
National Crushed Stone Association, Inc.
National Grinding Wheel Company
National Industrial Sand Association
National Lead Company
National Pulverizing Company
National Sand & Gravel Association
National Slag Association
National Steel Corporation
Neville Chemical Company
New Jersey Pulverizing Company
New Jersey Zinc Company
Norton Company
Norton Pike Company

— O —

Oriental Abrasive Company
Ottawa Silica Company
Owens-Corning Fiberglas Corpora[illegible]
Owens-Illinois Glass Company

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION, Cont'd.

— P —

Pabst Brewing Company
Pacific Grinding Wheel Company
G. H. Packwood Manufacturing Company
Pangborn Corporation
Peninsular Grinding Wheel Company
Penn-Rillton Company
Pennsylvania Glass Sand Corporation
The Pennsylvania Railroad Company
Phelps Dodge Corporation
Philadelphia Quartz Company
Phillips Petroleum Company
Pittsburgh Coke & Chemical Company
Pittsburgh Consolidation Coal Company
Pittsburgh Plate Glass Company
Portland Cement Association
Precision Grinding Wheel Company, Inc.
Prismo Safety Corporation
Pullman-Standard Car Manufacturing Company
Pyrene Manufacturing Company

— R —

Raybestos-Manhattan, Inc.,
Manhattan Rubber Division
United States Asbestos Division
Red Hill Grinding Wheel Corporation
The Refractories Institute
Rem-Cru Titanium, Inc.
Republic Steel Corporation
Revere Copper and Brass Incorporated
H. H. Robertson Company
Rome Cable Corporation
Ruberoid Company

— S —

Safety First Supply Company
St. Joseph Lead Company
St. Regis Paper Company
Sand Products Corporation
Sandia Corporation
Scaife Company
Claude B. Schneible Company
Scott Aviation Corporation
Sharon Steel Corporation
Shenango Furnace Company
Simonds Abrasive Company
Simonds Worden White Company
Socony-Vacuum Oil Company, Inc.
South West Box Company

— S —

Standard Lime & Stone Company
Standard Oil Development Company
Standard Ultramarine and Color Compan
Sugar Beet Products Company
Sun Oil Company
Sylvania Electric Products Inc.

— T —

Tata Industries, Ltd.
Taylor, Smith & Taylor Company
Tennessee Copper Company
Texas Company
Texas Gulf Sulphur Company
Titan Abrasives Company
Trenton Potteries Company
Trion, Inc.

— U —

Union Carbide & Carbon Corporation
United States Potters Association
United States Rubber Company
Abrasive Division
United States Smelting Refining & Mining Company
United States Steel Corporation
Universal-Rundle Corporation

— V —

Valley Mould & Iron Corporation
Vesuvius Crucible Company
Vitrified Wheel Company

— W —

Waltham Grinding Wheel Company
Warner Company
Washington Mills Abrasive Company
Wedron Silica Company
West Virginia Manufacturers Association
Western Electrochemical Company
Western Precipitation Corporation
Westfield Grinding Wheel Company
Westinghouse Air Brake Company
Westinghouse Electric Corporation
Whitehead Brothers Company
Willson Products, Inc.
Wyckoff Steel Company

— Y —

Youngstown Sheet and Tube Company

* Multiple Membership

SPECIAL SUBSCRIBERS

UNITED STATES GOVERNMENT

Armed Forces

Armed Forces Medical Library

Army Environmental Health Laboratory

Bureau of Medicine & Surgery, Navy Dept.

Naval Air Station, Alameda, Calif.

Naval Air Station, Norfolk, Virginia

Naval Air Station, Pensacola, Florida

Naval Gun Factory, Washington, D.C.

Naval Radiological Defense Laboratory

Naval Office of the Surgeon General

Naval Shipyard, Bremerton, Wash.

Naval Shipyard, Brooklyn, N.Y.

Naval Shipyard, Portsmouth, N.H.

Naval Shipyard, Portsmouth, Va.

Naval Shipyard, San Francisco, Calif.

Naval Shipyard, FPO, San Francisco, Calif.

Naval Shipyard, Vallejo, Calif.

Office of Industrial Relations, Navy Dept.

Other Federal Agencies

Public Health Education

Social Security Administration

Tennessee Valley Authority

U.S. Atomic Energy Commission
Idaho Falls New York
Washington, D.C.

U.S.Bureau of Mines

U.S. Civil Service Commission

U.S. Department of Labor

U.S. [redacted]ic Health Service
[redacted]nnati Salt Lake City
Washington, D.C.

STATE DEPARTMENTS OF HEALTH

California	New Jersey
Connecticut	North Carolina
Georgia	Ohio
Idaho	Oregon
Indiana	Pennsylvania
Iowa	Tennessee
Kansas	Texas
Kentucky	Utah
Maryland	Vermont
Michigan	West Virginia
Missouri	Wisconsin
New Hampshire	

Other State Agencies

California Department Industrial Relations

New Jersey Department of Labor

New York Department of Labor

New York State Library

New York Workmen's Compensation Board

Ohio Industrial Commission

CITY DEPARTMENTS OF HEALTH

Baltimore Detroit
St. Louis

COUNTY DEPARTMENTS OF HEALTH

Los Angeles

SPECIALISTS

Mr. T. J. Barry	Mr. J. H. Holden
Dr. E. L. Belknap	Dr. R. T. Johnstone
Dr. E. E. Dart	Dr. Hedw[redacted]hn
Dr. J. W. G. Hannon	Dr. M. M. [redacted]tz

SPECIAL SUBSCRIBERS, Cont'd.

INSTITUTIONS AND OTHER ORGANIZATIONS

American Association of Industrial Nurses, Inc.

American Medical Association

Argonne National Laboratory

Carnegie Library of Pittsburgh

College of Physicians of Philadelphia

Columbia University

Cornell University

Harvard University

Health Institute of the UAW-CIO

Industrial Medical Association

Jefferson Medical College

Johns Hopkins University

Massachusetts Institute of Technology

Milwaukee Public Library

New York Academy of Medicine

New York Hotel Trades Council & Hotel Association Health Center, Inc.

New York University

Ohio State University

University of California
Biomedical Library
General Library
Los Alamos Scientific Laboratory

University of Colorado

University of Michigan

University of North Carolina

University of Pennsylvania

University of Texas

University of Washington

Yale University

FOREIGN ORGANIZATIONS

Australia

University of Sydney, Sydney

Brazil

Faculdade de Higienee Saude Publica, São Paulo

Canada

Department of Health, Montreal

Department National Health & Welfare, Ottawa

Workmen's Compensation Board, Quebec

University of Toronto, Toronto

University of British Columbia, Vancouver

FOREIGN ORGANIZATIONS (Cont'

Canada

Workmen's Compensation Board, Vancouver

Department of Health & Welfare, Victo

Department of Health & Welfare, Winn

Denmark

Arbejds- og Fabrikstilsynets Bibliotek, Copenhagen

England

Industrial Health Research Board, Lond

Ministry of Labour & National Service, London

Holland

Instituut voor Sociale geneeskunde der Rijks-Universiteit, Utrecht

Koninklijke Nederlandsche Hoogovens en Staalfabrieken N.V., Ijmuiden

Japan

University of Tokyo, Tokyo

New Zealand

District Industrial Medical Officer Auckland

District Industrial Medical Officer Dunedin

Health Department, Wellington

Norway

Marinens Hovedverft, Horten

Eidanger Salpeterfabriker, Porsgunn

Puerto Rico

Bureau of Industrial Safety and Accident Prevention, San Juan

South Africa

Government Mining Engineer, Johannesburg

National Development Foundation Johannesburg

Bureau of Standards, Pretoria

Sweden

Caroline Hospital, Stockholm

Statens Institut for Folkhalsan Biblioteket, Tomteboda

Swedish Employer's Confederation, Stockholm

Switze[redacted]

International Labor [redacted]e, Geneva

BOARD OF TRUSTEES

ANDREW FLETCHER, *Chairman*
President, St. Joseph Lead Company, New York, N.Y.

V. P. AHEARN, *Secretary*
Executive Secretary, National Industrial Sand Association, Washington, D.C.

M. W. THOMPSON, *Treasurer*
Treasurer and General Manager, The Hall China Company, East Liverpool, Ohio

T. C. WATERS, *General Counsel*
Miles & Stockbridge, Baltimore, Md.

H. W. ANDERSON
Vice President, General Motors Corporation, Detroit, Mich.

H. K. CLARK
Director, The Carborundum Company, Niagara Falls, N.Y.

J. DEWEY DORSETT
General Manager, Association of Casualty & Surety Companies, New York, N.Y.

PHILIP DRINKER, Sc.D.
School of Public Health, Harvard University, Boston, Mass.

A. R. FISHER
President, Johns-Manville Corporation, New York, N.Y.

A. D. ROSS FRASER
President, Rome Cable Corporation, Rome, N.Y.

W. B. GIVEN, JR.
Board Chairman, American Brake Shoe Company, New York, N.Y.

C. S. GOLDEN
Graduate School of Business Administration, Harvard University, Boston, Mass.

A. C. HIRTH
Owens-Illinois Glass Company, Toledo, Ohio

B. E. KUECHLE
Vice President, Employers Mutual Liability Insurance Company, Wausau, Wis.

A. J. LANZA, M.D.
Chairman, Institute of Industrial Medicine, New York University, New York, N.Y.

GEORGE MIXTER
Director, U.S. Smelting Refining & Mining Company, Boston, Mass.

E. V. MURPHREE, Sc.D.
President, Standard Oil Development Company, New York, N.Y.

C. B. POLLOCK
Vice President, Allegheny Ludlum Steel Corporation, Pittsburgh, Pa.

A. M. SCAIFE
Vice President, T. Mellon & Sons, Pittsburgh, Pa.

R. C. TAYLOR
Executive Vice President, American Can Company, New York, N.Y.

C. RICHARD WALMER, M.D.
Managing Director, Industrial Hygiene Foundation, Pittsburgh, Pa.

W. P. YANT, Sc.D.
Director, Research & Development, Mine Safety Appliances Company, Pittsburgh, Pa.

EXECUTIVE STAFF

C. Richard Walmer, M.D.	Managing Director
H. H. Schrenk, Ph.D.	Research Director
Theodore Hatch, S.M.	Research Adviser
W. C. L. Hemeon, S.M.	Engineering Director
D. C. Braun, M.D.	Medical Director
Paul Gross, M.D.	Research Pathologist
J. F. Osterritter, M.D.	Medical Associate
J. F. Morgan	Head Chemical Hygienist
F. F. Rupert, Ph.D.	Head Chemical Analyst
G. F. Haines, Jr.	Chemical Engineer
S. D. Puntureri, M.S.	Chemical Engineer
Lee Schreibeis, Jr., M.P.H.	Industrial Hygiene Engineer
J. Deane Sensenbaugh, M.S.	Chemist
Marian Westrick, Ph. D.	Research Toxicologist
J. M. McNerney, M.S.	Research Associate
H. M. Ide	Bacteriologist
T. David Truan, M.A.	Biostatistician
Michael Cerreta	Chemist
R. K. Dumbauld	Research Assistant
Ellen C. Diamond	Office Manager
Vivian M. Colonna	Editor

RESEARCH ADVISORY COUNCIL

Theodore Hatch, S.M., *Secretary*	Graduate School of Public Health, University of Pittsburgh, and Industrial Hygiene Foundation
W. A. Hamor, Sc.D.	Mellon Institute, Pittsburgh
T. Lyle Hazlett, M.D.	University of Pittsburgh, Pittsburgh
A. J. Lanza, M.D.	New York University, New York
Willard Machle, M.D.	National Research Council, Washington, D.C.
W. P. Yant, Sc.D.	Mine Safety Appliances Company, Pittsburgh
R. E. Zimmerman, Sc.D.	U.S. Steel Corporation, New York

COMMITTEES

MEDICAL COMMITTEE

O. A. Sander, M.D., *Chairman* . . . . . Marquette University, Milwaukee
A. G. Kammer, M.D., *Co-Chairman* . . . . University of Pittsburgh, Pittsburgh
D. C. Braun, M.D., *Secretary* . . . . Industrial Hygiene Foundation, Pittsburgh
E. H. Carleton, M.D. . . . . Inland Steel Company, East Chicago, Ind.
L. E. Hamlin, M.D. . . . . American Brake Shoe Co., Chicago
R. A. Kehoe, M.D. . . . . University of Cincinnati, Cincinnati
E. M. Kline, M.D. . . . . General Electric Company, Cleveland
C. Howard Marcy, M.D. . . . . Tuberculosis League of Pittsburgh, Pittsburgh
L. C. McGee, M.D. . . . . Hercules Powder Company, Wilmington, Del.
C. M. Peterson, M.D. . . . . Council on Industrial Health, AMA, Chicago
C. D. Selby, M.D. . . . . University of Michigan, Ann Arbor, Mich.
W. P. Shepard, M.D. . . . . Metropolitan Life Insurance Co., New York
J. F. Shronts, M.D. . . . . General Mills, Inc., Minneapolis

LEGAL COMMITTEE

T. C. Waters, *Chairman* . . . . . Miles & Stockbridge, Baltimore
Vandiver Brown . . . . . Attorney-at-Law, Waco, Texas
A. J. Gentholts . . . . . Republic Steel Corporation, Cleveland
Theodore Hetzler, Jr. . National Association of Mutual Casualty Companies, New York
A. C. Hirth . . . . . Owens-Illinois Glass Company, Toledo, Ohio
Andrew Kalmykow . . . . . Association Casualty & Surety Companies, New York
C. R. Oviatt . . . . . Union Carbide & Carbon Corporation, New York
Ivan Sabourin . . . . Quebec Asbestos Producers Association, Montreal, Canada
J. J. Regan . . . . . The Self-Insurers Association, New York
R. Worth Vaughan . . . . . American Smelting & Refining Company, New York
W. E. Zimmerman . . . . . Sun Oil Company, Philadelphia

PREVENTIVE ENGINEERING COMMITTEE

Philip Drinker, Sc.D., *Chairman* . . School of Public Health, Harvard University
W. C. L. Hemeon, *Secretary* . . . . . Industrial Hygiene Foundation, Pittsburgh
A. D. Brandt, Sc.D. . . . . Bethlehem Steel Co., Bethlehem, Pa,
J. M. Kane . . . . . American Air Filter Company, Louisville, Ky.
C. F. McElwain . . . . . International Business Machines Corp., Endicott, N.Y.
R. T. Pring . . . . American Wheelabrator & Equipment Corp., Mishawaka, Ind.
C. W. Schwenzfeier, Jr. . . . . Brush Beryllium Company, Luckey, Ohio
K. F. S[redacted] . . . . . The Funkhouser Company, Hagerstown,
F. E. T[redacted] . . . . . American Brake Shoe Company, De
W. H. Thomas . . . . . Pittsburgh Coke and Chemical Company, Pittsburgh

COMMITTEES

CHEMICAL-TOXICOLOGICAL COMMITTEE

Anna M. Baetjer, Sc.D., *Chairman* . . . . Johns Hopkins University, Baltimo
J. F. Morgan, *Secretary* . . . . . Industrial Hygiene Foundation, Pittsburg
E. C. Barnes . . . . . Westinghouse Electric Corporation, Pittsburg
W. A. Cook . . . . . University of Michigan, Ann Arbor, Mic
F. C. Flint . . . . . Hazel-Atlas Glass Company, Wheeling, W.V
N. V. Hendricks . . . . . Standard Oil Development Company, Linden, N.
D. D. Irish, Ph.D. . . . . Dow Chemical Company, Midland, Mic
F. S. Mallette . . . . . American Society Mechanical Engineers, New Yor
F. A. Patty . . . . . General Motors Corporation, Detroi
H. F. Smyth, Jr., Ph.D. . . . . Mellon Institute, Pittsburg
H. E. Stokinger, Ph.D. . . . . U.S. Public Health Service, Cincinnat
W. P. Yant, Sc.D. . . . . Mine Safety Appliances Company, Pittsburg

AIR-POLLUTION CONTROL COMMITTEE

W. C. L. Hemeon, *Chairman* . . . . . Industrial Hygiene Foundation, Pittsburgh
H. H. Schrenk, Ph.D., *Secretary* . . . Industrial Hygiene Foundation, Pittsburgh
W. F. Davidson . . . . . Consolidated Edison Company of New York, New York
H. F. Hebley . . . . . Pittsburgh Consolidation Coal Company, Pittsburgh
W. L. Latshaw . . . . U.S. Smelting Refining & Mining Company, Salt Lake City
L. C. McCabe, Ph.D. . . . . U.S. Bureau of Mines, Washington D.C.

The

ACTIVITIES and MEMBERS

of

INDUSTRIAL HYGIENE FOUNDATION



MELLON INSTITUTE, 4400 FIFTH AVENUE
PITTSBURGH 13, PA.

1954

RC963
.I4ac

Notice: This material may be protected by copyright law (Title 17 U.S. Code).

INDUSTRIAL HYGIENE FOUNDATION
A Research Association of Industries for Advancing Industrial Health and Improving Working Conditions

INDUSTRIAL HYGIENE FOUNDATION

INDUSTRIAL HYGIENE FOUNDATION is a nonprofit research association of industries for advancing occupational health, improving working conditions and bettering human relations.

The Foundation's staff includes physicians, chemists, engineers, industrial hygienists and medical technicians—all specialists in health problems arising in manufacturing and mining. Through affiliation with INDUSTRIAL HYGIENE FOUNDATION, companies are entitled to the services of these specialists, plus the technical facilities of Mellon Institute, the Foundation's headquarters.

FOUNDATION ACTIVITIES

The activities of I-H-F fall into three major categories:

(1) To give direct professional assistance to member companies in the study and solution of industrial health problems.

(2) To assist companies in the development of health and medical programs as essential parts of industrial organizations.

(3) To contribute to the scientific advancement of industrial medicine and hygiene, through research, surveys and allied activities.

The broad scope of questions and problems that come to the Foundation for consideration is shown by the following tabulation of activities, classified under eight major headings: (1) medical, (2) chemistry, toxicology and industrial hygiene, (3) engineering, (4) air pollution, (5) noise, (6) research, (7) legal, and (8) general advancement of industrial health.

(1) Medical

(a) General information and advice on organization and administrative practices in industrial health services, cost finding and analysis, plans for physical layouts, personnel needs and training, interdepartmental relations, systems of record keeping, directives for medical personnel and registered nurse service standards, etc.

(b) Surveys of health problems, and comprehensive company-wide medical audits to appraise existing organizations and to recommend further needs.

(c) Information on specific industrial medical problems and experience.

(2) Chemistry, Toxicology and Industrial Hygiene

(a) Industrial hygiene field studies are conducted—appraisals of nature and magnitude of hazardous exposures and effectiveness of control measures. These may be on a plant basis or on an industry-wide scale.

(b) Information on toxicity of chemical and physical agents, and on hazards of particular processes; preparation of bibliographies, literature searches, and securing of information from other sources, as, for example, companies having related problems.

(c) Information and advice on sampling and analytical procedures, choice and availability of equipment.

(d) Preliminary training of industrial hygiene personnel in laboratory procedures, sources of information, organization of laboratory, record keeping, etc.

(e) Studies and development of new sampling and analytical methods and techniques.

(3) Engineering

(a) Information on engineering practices in control of hazardous processes, and on design procedures, data and sources of information. Advice on control requirements for specific operations.

(b) Specialized advice on new plant design, reconstruction in existing plants and changes in process to minimize or eliminate hazards.

(c) Review of plans for ventilating systems, as to design, capacity, etc. Advice on special air-cleaning problems.

(d) Advancement of engineering design practices and organization of engineering design programs; development of new data and design procedures for exhaust hoods. Assistance in field tests of new control measures.

(4) Air Pollution

(a) Advice on industrial air pollution problems—investigational procedures and criteria.

(b) Development of methods, apparatus and techniques for collecting and measuring air pollutants.

(c) Investigations of air pollution potentials of plants—measurement of stack dusts, fumes, gases and odors. Estimation of neighborhood effects.

(d) Measurement and appraisal of pollution effects within adjoining community. Ascertaining sources of communal pollution.

(e) Assistance in engineering measures for controlling excessive stack emissions. Measurement of stack dust particle size and its relation to appropriate dust collectors.

(5) Noise

(a) Information on measurement of noise—sound level, frequency, magnetic tape recordings, availability of equipment, calibration and data record sheets.

(b) Comprehensive physical measurement of noise levels in industrial plants.

(c) Information on physiological response to noise—measurement of hearing impairment, permanent loss vs. fatigue aspects, treatment, susceptibility and placement.

(d) Information on control measures—accumulation of industrial practices that have proved satisfactory.

(e) Information on legal aspects—assembly of facts on laws and regulations relating to compensation for hearing loss.

(6) Research

(a) Short- and long-term toxicity studies on new chemicals to indicate nature of problems which may be encountered in manufacture and use.

(b) Research on nature and mechanism of action of hazardous dusts, fumes, vapors and gases, with special reference to actual conditions of plant exposure.

(c) Basic studies in physiology, toxicology and biochemistry of physical and chemical agents, their mode of entrance into the body in relation to physical and chemical state in the atmosphere, and their subsequent toxic action in the body.

(7) Legal

(a) Summaries of legislative activities pertaining to occupational diseases, compensation, and other proposed legislation pertaining to industrial health; analysis of trends.

(b) Review of new compensation laws, revisions and additions, and analysis of decisions of compensation boards that are of special significance.

(c) Analysis of new codes pertaining to health hazards and related problems.

(8) General Advancement of Industrial Health

(a) Meetings: (1) annual meeting of members—discussion of broad objectives, policies and trends in industrial health and human resources; (2) conferences of professional specialists from member companies, (i) medical, (ii) engineering, (iii) chemistry and toxicology, (iv) legal; (3) special conferences on selected subjects or for discussion of common problems in particular industrial groups.

(b) Publications: (1) transactions of annual meeting; (2) monthly *Industrial Hygiene Digest;* (3) special bulletins prepared under the sponsorship of the several advisory committees; (4) informative letters and pamphlets on subjects of current interest; (5) technical papers by staff members.

(c) Special surveys and studies are undertaken on an industry-wide scale, as, for example, for an association or similar organization to develop fundamental information which will be of benefit to an entire industry in appraising and controlling occupational disease hazards.

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

— A —

Abingdon Potteries, Inc.
Abrasive Grain Association
Abrasive Products Company
Allegheny Ludlum Steel Corporation
Allegheny Pittsburgh Coal Company
Allis-Chalmers Manufacturing Company
Aluminum Company of America
American Abrasive Company
American Air Filter Company, Inc.
American Brake Shoe Company
American Can Company
American Emery Wheel Works
American Foundrymen's Society
American Iron & Steel Institute
American Mining Congress
American Optical Company
American Radiator & Standard Sanitary Corporation
American Smelting & Refining Company
American Wheelabrator & Equipment Corporation
American Zinc Institute
American Zinc, Lead & Smelting Company
Anaconda Copper Mining Company
Anthracite Institute
Arrow Mutual Liability Insurance Company
Asbestos Corporation Limited
Assn. of Casualty & Surety Companies*
Atlas Powder Company
Automobile Manufacturers Association

— B —

Ball Brothers Company
Bartlett-Collins Company
Bay State Abrasive Products Company
Bethlehem Steel Company, Inc.
Bird & Son, Inc.
Bituminous Casualty Corporation
Brush Beryllium Company
George H. Bullard Company
Bunker Hill & Sullivan Mining & Concentrating Company
A. M. Byers Company

— C —

Can Manufacturers Institute, Inc.
Carborundum Company
Celanese Corporation of America
Central Silica Company
Chicago Wheel & Manufacturing Company

— C —

Chromium Mining & Smelting Corp., Ltd.
Cincinnati Milling and Grinding Machines Inc., Cincinnati Products Division
Cleveland-Cliffs Iron Company
Cleveland Quarries Company, Sterling Grinding Wheel Division
Cobalt Chemicals Ltd.
Robert F. Coleman, Inc.
Colonial Abrasive Products Company
Commercial Solvents Corporation
Commonwealth Sanitation Company
Consolidated Mining & Smelting Company of Canada, Ltd.
Continental Can Company, Inc.
Cooper-Bessemer Corporation
Copperweld Steel Company
Corhart Refractories Company, Inc.
Corning Glass Works
Cortland Grinding Wheels Corporation
Crucible Steel Company of America

— D —

Davison Chemical Corporation
Deere & Company
A. P. DeSanno & Son, Inc.
Diamond Alkali Company
Doehler-Jarvis Corporation
Dow Chemical Company
B. F. Drakenfeld & Company, Inc.
Dravo Corporation

— E —

Eagle-Picher Company
Ebasco Services, Inc.
Electric Storage Battery Company
Electro Refractories & Abrasives Corporation
Elex S. A.
Eljer Company
Ethyl Corporation
Eureka Flint & Spar Company, Inc.
Exolon Company

— F —

Falk Corporation
Ferro Corporation
H. E. Fletcher Company
Foote Mineral Company
Ford Motor Company
Fostoria Glass Company
Foundry Facings Manufacturers Assn.
Fuller Merriam Company
Funkhouser Company

* Multiple Membership

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION, Cont'd.

— G —

Garco Products, Inc.
Gardner Machine Company
General Abrasive Company, Inc.
General Ceramics Corporation
General Electric Company
General Grinding Wheel Corporation
General Mills, Inc.
General Motors Corporation
General Refractories Company
General Steel Castings Corporation
Georgia Kaolin Company
Glenshaw Glass Company, Inc.
Grinding Wheel Institute
Gulf Oil Corporation

— H —

Hall China Company
Hamilton Emery & Corundum Company
Hampden Grinding Wheel Company
Hazel-Atlas Glass Company
Hercules Powder Company
John W. Higman Company
Homestake Mining Company
O. Hommel Company

— I —

Industrial Silica Corporation
Inland Steel Company
International Business Machines Corporation
International Nickel Company, Inc.

— J —

Jamison Coal & Coke Company
Jeffrey Manufacturing Company
Johns-Manville Corporation
Johnson & Johnson
Jones & Laughlin Steel Corporation
Joy Manufacturing Company

— K —

Keasbey & Mattison Company
Kennametal, Inc.
Kennecott Copper Corporation
Keystone Abrasive Wheel Company
Keystone Emery Mills
Kirk & Blum Manufacturing Company
Edwin Knowles China Company
Koppers Company, Inc.

— L —

Homer Laughlin China Company
Lava Crucible Refractories Company
E. J. Lavino and Company
Lead Industries Association
Lion Grinding Wheels Ltd.

— M —

Mackintosh-Hemphill Company
Macklin Company
Magma Copper Company
Maryland Self-Insurers' Association
Mayer China Company
J. S. McCormick Company
McLain Fire Brick Company,
Division of H. K. Porter Company, Inc.
McLean Manufacturing Company
Metropolitan Life Insurance Company
Mexico Refractories Company
Mid-West Abrasive Company
Mine Safety Appliances Company
Monsanto Chemical Company
Mutual Chemical Company of America

— N —

National Association of Fan Manufacturers
National Association of Mutual Casualty Companies*
National Crushed Stone Association, Inc.
National Grinding Wheel Company
National Industrial Sand Association
National Lead Company
National Pulverizing Company
National Sand & Gravel Association
National Slag Association
National Steel Corporation
Neville Chemical Company
New Jersey Pulverizing Company
New Jersey Zinc Company
Norton Company
Norton Pike Company

— O —

Oriental Abrasive Company
Ottawa Silica Company
Owens-Corning Fiberglas Corporation
Owens-Illinois Glass Company

* Multiple Membership

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION, Cont'd.

— P —

Pabst Brewing Company
Pacific Grinding Wheel Company
G. H. Packwood Manufacturing Company
Pangborn Corporation
Peninsular Grinding Wheel Company
Penn-Rillton Company
Pennsylvania Glass Sand Corporation
The Pennsylvania Railroad Company
Phelps Dodge Corporation
Philadelphia Quartz Company
Phillips Petroleum Company
Pittsburgh Coke & Chemical Company
Pittsburgh Consolidation Coal Company
Pittsburgh Plate Glass Company
Portland Cement Association
Precision Grinding Wheel Company, Inc.
Prismo Safety Corporation
Pullman-Standard Car Manufacturing Company
Pyrene Manufacturing Company

— R —

Raybestos-Manhattan, Inc.,
Manhattan Rubber Division
United States Asbestos Division
Red Hill Grinding Wheel Corporation
The Refractories Institute
Rem-Cru Titanium, Inc.
Republic Steel Corporation
Revere Copper and Brass Incorporated
H. H. Robertson Company
Rome Cable Corporation
Ruberoid Company

— S —

Safety First Supply Company
St. Joseph Lead Company
St. Regis Paper Company
Sand Products Corporation
Sandia Corporation
Scaife Company
Claude B. Schneible Company
Scott Aviation Corporation
Sharon Steel Corporation
Shenango Furnace Company
Simonds Abrasive Company
Simonds Worden White Company
Socony-Vacuum Oil Company, Inc.
South West Box Company
Standard Lime & Stone Company
Standard Oil Development Company
Standard Ultramarine and Color Company
Sugar Beet Products Company
Sun Oil Company
Sylvania Electric Products Inc.

— T —

Tata Industries, Ltd.
Taylor, Smith & Taylor Company
Tennessee Copper Company
Texas Company
Texas Gulf Sulphur Company
Titan Abrasives Company
Trenton Potteries Company
Trion, Inc.

— U —

Union Carbide & Carbon Corporation
United States Potters Association
United States Rubber Company
Abrasive Division
United States Smelting Refining & Mining Company
United States Steel Corporation
Universal-Rundle Corporation

— V —

Valley Mould & Iron Corporation
Vesuvius Crucible Company
Vitrified Wheel Company

— W —

Waltham Grinding Wheel Company
Warner Company
Washington Mills Abrasive Company
Wedron Silica Company
West Virginia Manufacturers Association
Western Electrochemical Company
Western Precipitation Corporation
Westfield Grinding Wheel Company
Westinghouse Air Brake Company
Westinghouse Electric Corporation
Whitehead Brothers Company
Willson Products, Inc.
Wyckoff Steel Company

— Y —

Youngstown Sheet and Tube Company

* Multiple Membership

SPECIAL SUBSCRIBERS

UNITED STATES GOVERNMENT

Armed Forces

Armed Forces Medical Library

Army Environmental Health Laboratory

Bureau of Medicine & Surgery, Navy Dept.

Naval Air Station, Alameda, Calif.

Naval Air Station, Norfolk, Virginia

Naval Air Station, Pensacola, Florida

Naval Gun Factory, Washington, D.C.

Naval Radiological Defense Laboratory

Naval Office of the Surgeon General

Naval Shipyard, Bremerton, Wash.

Naval Shipyard, Brooklyn, N.Y.

Naval Shipyard, Portsmouth, N.H.

Naval Shipyard, Portsmouth, Va.

Naval Shipyard, San Francisco, Calif.

Naval Shipyard, FPO, San Francisco, Calif.

Naval Shipyard, Vallejo, Calif.

Office of Industrial Relations, Navy Dept.

Other Federal Agencies

Public Health Education

Social Security Administration

Tennessee Valley Authority

U.S. Atomic Energy Commission
Idaho Falls New York
Washington, D.C.

U.S.Bureau of Mines

U.S. Civil Service Commission

U.S. Department of Labor

U.S. Public Health Service
Cincinnati Salt Lake City
Washington, D.C.

STATE DEPARTMENTS OF HEALTH

California	New Jersey
Connecticut	North Carolina
Georgia	Ohio
Idaho	Oregon
Indiana	Pennsylvania
Iowa	Tennessee
Kansas	Texas
Kentucky	Utah
Maryland	Vermont
Michigan	West Virginia
Missouri	Wisconsin
New Hampshire	

Other State Agencies

California Department Industrial Relations

New Jersey Department of Labor

New York Department of Labor

New York State Library

New York Workmen's Compensation Board

Ohio Industrial Commission

CITY DEPARTMENTS OF HEALTH

Baltimore Detroit
St. Louis

COUNTY DEPARTMENTS OF HEALTH

Los Angeles

SPECIALISTS

Mr. T. J. Barry	Mr. J. H. Holden
Dr. E. L. Belknap	Dr. R. T. Johnstone
Dr. E. E. Dart	Dr. Hedwig [redacted]n
Dr. J. W. G. Hannon	Dr. M. M. S[redacted]z

SPECIAL SUBSCRIBERS, Cont'd.

INSTITUTIONS AND OTHER ORGANIZATIONS

American Association of Industrial Nurses, Inc.

American Medical Association

Argonne National Laboratory

Carnegie Library of Pittsburgh

College of Physicians of Philadelphia

Columbia University

Cornell University

Harvard University

Health Institute of the UAW-CIO

Industrial Medical Association

Jefferson Medical College

Johns Hopkins University

Massachusetts Institute of Technology

Milwaukee Public Library

New York Academy of Medicine

New York Hotel Trades Council & Hotel Association Health Center, Inc.

New York University

Ohio State University

University of California
Biomedical Library
General Library
Los Alamos Scientific Laboratory

University of Colorado

University of Michigan

University of North Carolina

University of Pennsylvania

University of Texas

University of Washington

Yale University

FOREIGN ORGANIZATIONS

Australia

University of Sydney, Sydney

Brazil

Faculdade de Higienee Saude Publica, São Paulo

Canada

Department of Health, Montreal

Department National Health & Welfare, Ottawa

Workmen's Compensation Board, Quebec

University of Toronto, Toronto

University of British Columbia, Vancouver

FOREIGN ORGANIZATIONS (Cont'

Canada

Workmen's Compensation Board, Vancouver

Department of Health & Welfare, Vict

Department of Health & Welfare, Winn

Denmark

Arbejds- og Fabrikstilsynets Bibliotek, Copenhagen

England

Industrial Health Research Board, Lond

Ministry of Labour & National Service, London

Holland

Instituut voor Sociale geneeskunde der Rijks-Universiteit, Utrecht

Koninklijke Nederlandsche Hoogovens en Staalfabrieken N.V., Ijmuiden

Japan

University of Tokyo, Tokyo

New Zealand

District Industrial Medical Officer Auckland

District Industrial Medical Officer Dunedin

Health Department, Wellington

Norway

Marinens Hovedverft, Horten

Eidanger Salpeterfabriker, Porsgunn

Puerto Rico

Bureau of Industrial Safety and Accident Prevention, San Juan

South Africa

Government Mining Engineer, Johannesburg

National Development Foundation Johannesburg

Bureau of Standards, Pretoria

Sweden

Caroline Hospital, Stockholm

Statens Institut for Folkhalsan Biblioteket, Tomteboda

Swedish Employer's Confederation, Stockholm

Switzer[redacted]

International Labor Office, Geneva

BOARD OF TRUSTEES

ANDREW FLETCHER, *Chairman*
President, St. Joseph Lead Company, New York, N.Y.

V. P. AHEARN, *Secretary*
Executive Secretary, National Industrial Sand Association, Washington, D.C.

M. W. THOMPSON, *Treasurer*
Treasurer and General Manager, The Hall China Company, East Liverpool, Ohio

T. C. WATERS, *General Counsel*
Miles & Stockbridge, Baltimore, Md.

H. W. ANDERSON
Vice President, General Motors Corporation, Detroit, Mich.

H. K. CLARK
Director, The Carborundum Company, Niagara Falls, N.Y.

J. DEWEY DORSETT
General Manager, Association of Casualty & Surety Companies, New York, N.Y.

PHILIP DRINKER, Sc.D.
School of Public Health, Harvard University, Boston, Mass.

A. R. FISHER
President, Johns-Manville Corporation, New York, N.Y.

A. D. ROSS FRASER
President, Rome Cable Corporation, Rome, N.Y.

W. B. GIVEN, JR.
Board Chairman, American Brake Shoe Company, New York, N.Y.

C. S. GOLDEN
Graduate School of Business Administration, Harvard University, Boston, Mass.

A. C. HIRTH
Owens-Illinois Glass Company, Toledo, Ohio

B. E. KUECHLE
Vice President, Employers Mutual Liability Insurance Company, Wausau, Wis.

A. J. LANZA, M.D.
Chairman, Institute of Industrial Medicine, New York University, New York, N.Y.

GEORGE MIXTER
Director, U.S. Smelting Refining & Mining Company, Boston, Mass.

E. V. MURPHREE, Sc.D.
President, Standard Oil Development Company, New York, N.Y.

C. B. POLLOCK
Vice President, Allegheny Ludlum Steel Corporation, Pittsburgh, Pa.

A. M. SCAIFE
Vice President, T. Mellon & Sons, Pittsburgh, Pa.

R. C. TAYLOR
Executive Vice President, American Can Company, New York, N.Y.

C. RICHARD WALMER, M.D.
Managing Director, Industrial Hygiene Foundation, Pittsburgh, Pa.

W. P. YANT, Sc.D.
Director, Research & Development, Mine Safety Appliances Company, Pittsburgh, Pa.

EXECUTIVE STAFF

C. Richard Walmer, M.D.	Managing Director
H. H. Schrenk, Ph.D.	Research Director
Theodore Hatch, S.M.	Research Adviser
W. C. L. Hemeon, S.M.	Engineering Director
D. C. Braun, M.D.	Medical Director
Paul Gross, M.D.	Research Pathologist
J. F. Osterritter, M.D.	Medical Associate
J. F. Morgan	Head Chemical Hygienist
F. F. Rupert, Ph.D.	Head Chemical Analyst
G. F. Haines, Jr.	Chemical Engineer
S. D. Puntureri, M.S.	Chemical Engineer
Lee Schreibeis, Jr., M.P.H.	Industrial Hygiene Engineer
J. Deane Sensenbaugh, M.S.	Chemist
Marian Westrick, Ph. D.	Research Toxicologist
J. M. McNerney, M.S.	Research Associate
H. M. Ide	Bacteriologist
T. David Truan, M.A.	Biostatistician
Michael Cerreta	Chemist
R. K. Dumbauld	Research Assistant
Ellen C. Diamond	Office Manager
Vivian M. Colonna	Editor

RESEARCH ADVISORY COUNCIL

Theodore Hatch, S.M., *Secretary*	Graduate School of Public Health, University of Pittsburgh, and Industrial Hygiene Foundation
W. A. Hamor, Sc.D.	Mellon Institute, Pittsburgh
T. Lyle Hazlett, M.D.	University of Pittsburgh, Pittsburgh
A. J. Lanza, M.D.	New York University, New York
Willard Machle, M.D.	National Research Council, Washington, D.C.
W. P. Yant, Sc.D.	Mine Safety Appliances Company, Pittsburgh
R. E. Zimmerman, Sc.D.	U.S. Steel Corporation, New York

COMMITTEES

MEDICAL COMMITTEE

O. A. Sander, M.D., *Chairman* . . . . . Marquette University, Milwaukee
A. G. Kammer, M.D., *Co-Chairman* . . . . University of Pittsburgh, Pittsburgh
D. C. Braun, M.D., *Secretary* . . . . Industrial Hygiene Foundation, Pittsburgh
E. H. Carleton, M.D. . . . . Inland Steel Company, East Chicago, Ind.
L. E. Hamlin, M.D. . . . . American Brake Shoe Co., Chicago
R. A. Kehoe, M.D. . . . . University of Cincinnati, Cincinnati
E. M. Kline, M.D. . . . . General Electric Company, Cleveland
C. Howard Marcy, M.D. . . . . Tuberculosis League of Pittsburgh, Pittsburgh
L. C. McGee, M.D. . . . . Hercules Powder Company, Wilmington, Del.
C. M. Peterson, M.D. . . . . Council on Industrial Health, AMA, Chicago
C. D. Selby, M.D. . . . . University of Michigan, Ann Arbor, Mich.
W. P. Shepard, M.D. . . . . Metropolitan Life Insurance Co., New York
J. F. Shronts, M.D. . . . . General Mills, Inc., Minneapolis

LEGAL COMMITTEE

T. C. Waters, *Chairman* . . . . . Miles & Stockbridge, Baltimore
Vandiver Brown . . . . . Attorney-at-Law, Waco, Texas
A. J. Gentholts . . . . . Republic Steel Corporation, Cleveland
Theodore Hetzler, Jr. . National Association of Mutual Casualty Companies, New York
A. C. Hirth . . . . . Owens-Illinois Glass Company, Toledo, Ohio
Andrew Kalmykow . . . . . Association Casualty & Surety Companies, New York
C. R. Oviatt . . . . . Union Carbide & Carbon Corporation, New York
Ivan Sabourin . . . . Quebec Asbestos Producers Association, Montreal, Canada
J. J. Regan . . . . . The Self-Insurers Association, New York
R. Worth Vaughan . . . . . American Smelting & Refining Company, New York
W. E. Zimmerman . . . . . Sun Oil Company, Philadelphia

PREVENTIVE ENGINEERING COMMITTEE

Philip Drinker, Sc.D., *Chairman* . . School of Public Health, Harvard University
W. C. L. Hemeon, *Secretary* . . . . . Industrial Hygiene Foundation, Pittsburgh
A. D. Brandt, Sc.D. . . . . Bethlehem Steel Co., Bethlehem, Pa,
J. M. Kane . . . . . American Air Filter Company, Louisville, Ky.
C. F. McElwain . . . . . International Business Machines Corp., Endicott, N.Y.
R. T. Pring . . . . American Wheelabrator & Equipment Corp., Mishawaka, Ind.
C. W. Schwenzfeier, Jr. . . . . Brush Beryllium Company, Luckey, Ohio
K. F. Spe[illegible] . . . . . The Funkhouser Company, Hagerstown, M[illegible]
F. E. Ta[illegible] . . . . . American Brake Shoe Company, Det[illegible]
W. H. Thomas . . . . . Pittsburgh Coke and Chemical Company, Pittsburgh

COMMITTEES

CHEMICAL-TOXICOLOGICAL COMMITTEE

Anna M. Baetjer, Sc.D., *Chairman* . . . . Johns Hopkins University, Baltimor
J. F. Morgan, *Secretary* . . . . . Industrial Hygiene Foundation, Pittsburg
E. C. Barnes . . . . . Westinghouse Electric Corporation, Pittsburg
W. A. Cook . . . . . University of Michigan, Ann Arbor, Mic
F. C. Flint . . . . . Hazel-Atlas Glass Company, Wheeling, W.V
N. V. Hendricks . . . . . Standard Oil Development Company, Linden, N.J
D. D. Irish, Ph.D. . . . . Dow Chemical Company, Midland, Mic
F. S. Mallette . . . . . American Society Mechanical Engineers, New Yor
F. A. Patty . . . . . General Motors Corporation, Detroi
H. F. Smyth, Jr., Ph.D. . . . . Mellon Institute, Pittsburg
H. E. Stokinger, Ph.D. . . . . U.S. Public Health Service, Cincinnat
W. P. Yant, Sc.D. . . . . Mine Safety Appliances Company, Pittsburg

AIR-POLLUTION CONTROL COMMITTEE

W. C. L. Hemeon, *Chairman* . . . . . Industrial Hygiene Foundation, Pittsburgh
H. H. Schrenk, Ph.D., *Secretary* . . . Industrial Hygiene Foundation, Pittsburgh
W. F. Davidson . . . . . Consolidated Edison Company of New York, New York
H. F. Hebley . . . . . Pittsburgh Consolidation Coal Company, Pittsburgh
W. L. Latshaw . . . . U.S. Smelting Refining & Mining Company, Salt Lake City
L. C. McCabe, Ph.D. . . . . U.S. Bureau of Mines, Washington D.C.

INDUSTRIAL HYGIENE FOUNDATION