

Annual science exhibition / American Association for the Advancement of Science and associated societies.

Contributors

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• ANNUAL SCIENCE EXHIBITION •
**American Association for the Advancement of Science
 and Associated Societies**

MEETING IN PITTSBURGH, DECEMBER 27, 1934, to JANUARY 4, 1935



MELLON INSTITUTE OF INDUSTRIAL RESEARCH BUILDING

FEATURING
Science In Industry About Pittsburgh

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PITTSBURGH offers the Association and Exhibitors a unique opportunity for the Annual Science Exhibition. It has more industrial research laboratories than any other city. The results from these have been significant. The Exhibits will be on the street level floor off Bellefield Avenue of the new building of the Mellon Institute for Industrial Research. The Science Exhibition should be by far the greatest ever held and the single outstanding feature of the meetings. The cooperating exhibitors and the nature of the presentations will be given later in Science, other periodicals and the Press.

There will be from 3,000 to 5,000 scientists present from all over the country and Canada besides a somewhat larger number of industrialists, scientists and teachers from the Pittsburgh area. Exhibitors will find an unparalleled occasion, to make contacts, to extend good will and to maintain prominence before a class of visitors whose expressions are widely accepted. The applications for space at the Boston Exhibition exceeded the amount available. There seems to be a growing recognition of the importance of the Science Exhibition.

ANNUAL SCIENCE EXHIBITION

American Association for the Advancement of Science

September 1, 1934.

The Annual Science Exhibition has already arranged a larger number of high quality exhibits four months in advance of the showing than have been arranged in other years at the time of the exhibition. The Exhibition Committee, recognizing the fact that science is basic of modern industrial development, hopes that the steady increase in the interest in the exhibition may be an indication of a bright future for science and for industry.

The Scientists' Shopping Counter.—If a sufficient number of scientists will advise the director of exhibits of articles of special merit for the home or the laboratory, these may be displayed in a special booth. Occasionally a scientist because of experiences or special test knows of commodities that because of quality, price and for unique service other scientists should also know. If you have a suggestion will you please write the director.

The booths are to be erected by the William Penn Hotel and will be of the same character as used by the many commercial exhibits housed in that hotel. Incidentally this leading downtown hotel may be reached from the science exhibition in about ten minutes by motor and in less than fifteen minutes by street car.

The Mellon Institute for Industrial Research will be more than the generous host to the Annual Science Exhibition. Every one will be interested in this new temple of science. Some companies that have made developments through the Institute will have displays.

Lobby.—The reception room and lounge is designed to be an attractive place where the members of the Association may meet their friends for conferences or en route and more especially for seeing the exhibition together. The Aluminum Company of America has very courteously undertaken to make this room attractive. It will be furnished essentially with metal furniture and decorations of alloys of aluminum. Each afternoon of the exhibition tea will be served in this lounge.

The Science Library adjoins the main lounge. In the Science Library members will have the pleasure of seeing the output of science for the year 1934, classified by subject matter. The Science Library is a recognition of the finished product of science in the form of printing.

In portraying the scope and spirit of modern animal biology, the Department of Zoology of the University of Pittsburgh has planned its exhibits along three lines. (1) To illustrate the achievements: The several great generalizations that form the basis of present day knowledge in this field will be presented in graphic form. As far as possible they will be shown against a background of early misconceptions. (2) The advancement of knowledge will be suggested through demonstrations of research now in progress. (3) The interpretation and application of these discoveries will be illustrated by exhibits of the materials and techniques in general use in the teaching of biology.

The Central Scientific Company always has interesting demonstrations that hold the attention of every kind of scientist.

The Chicago Apparatus Company will have an interesting display of newly developed pieces of apparatus for physics, chemistry and biology.

Doctor A. Wilbur Duryee will demonstrate the effect of tobacco (chiefly cigarettes) on the circulation in the peripheral part of the body. The temperature changes of the extremities resulting from tobacco smoking will be demonstrated on some of the members of the A.A.A.S. by thermocouple readings of the skin at the base of the fingernails.

The nucleus of the University of Pittsburgh's physics exhibit, under the direction of Doctor E. Hutchisson, consists of three specially designed cabinets containing many experiments which illustrate some of the fundamental laws of physics. These experiments are set up in such a way that after being performed they return automatically to their original condition, ready for the next observer. These demonstration experiments are concerned with light, wave motion and sound, and the application of physics to the automobile. Many other interesting scientific experiments are presented which illustrate the work being done in certain fields in which the University specializes, such as high temperature measurements, sound and the development of shatter-proof glass. A display of original developments in laboratory apparatus is included.

The Ford Motor Company has made use of the fruits of science for the benefit of the masses exceeding that of any other company in the field of transportation. While the makeup of the exhibit has not yet been revealed, it is sure to be of outstanding interest.

The Gradwohl Laboratories will exhibit blood development; the Schilling methods of blood counting; blood changes in various infections and microscopic specimens of blood and blood parasites stained with Giemsa Stain. This stain was perfected by the Laboratories and accepted by the Commission on Standardization of Biological Stains.

The Metropolitan Life Insurance Company which has made such extensive use of science for the benefit of public health will show the Progress in Public Health Since 1900. This company hopes through such an exhibit to demonstrate the character of the scientific investigations conducted by it in the important fields of vital statistics and of public health work.

The Instruments Publishing Company will exhibit their publication INSTRUMENTS, and also the following books: "Fundamentals of Instrumentation", "Temperature and Humidity Measurement and Control", "The Engine Indicator", "Process and Operation Time and Speed Control", "Pressure and Vacuum Measurement and Control".

The Williams and Wilkins Company specialize in the publication of the results of research science in book and periodical form. This company will exhibit some twenty journals, many of which are official vehicles of science societies. They will also have an extensive exhibit of books in practically all the fields of science, more especially medicine, biology, physics and chemistry.

Doctor Paul S. Donchian has been credited by experts with producing the finest mathematical models yet made. His exhibit should excite the curiosity of even those outside the field of mathematics. This applies especially to his models having more than three dimensions.

The Astronomical Section of the Academy of Science and Arts, under the direction of the secretary, Leo J. Scanlon, is planning an unusual amateur astronomical exhibit. In this exhibit will be two completed amateur telescopes and other equipment and material used in connection with telescopes. There will be a grinding and polishing of telescope glass in progress throughout the exhibition and a telescope mirror and objective under knife-edge and Ronchi tests for curvature. Besides these will be interesting astronomical transparencies and prints.

Mr. Anthony Magg of the Duquesne Light Company is the chairman of a special committee organizing an amateur radio broadcasters' exhibit. The work done by this group will amaze most of the members of the Association.

The Kellogg Cereal Company, under the direction of Miss Mary I. Barber, will have an interesting display of foods which have been developed by the use of science. Kaffee Hag Coffee will be served to our members and it is expected that Doctor Donald Laird of Colgate University will give an interesting demonstration in connection with one phase of the scientific work of this company.

At a later date we will expect to give more explicit information with reference to the exhibits and demonstrations by the following companies who have made extensive use of science:

American Window Glass Co.	Gulf Refining Co.
Baker and Company	E. Leitz, Inc.
Bausch and Lomb Optical Co.	McGraw-Hill Book Co.
P. Blakiston's Son and Co.	Macmillan Co.
The Bureau of Standards	National Broadcast Co.
Burrell Technical Supply Co.	Ohio Chemical and Manufacturing Co.
Cambridge Instrument Co.	Spencer Lens Co.
Clay-Adams Co., Inc.	Triarch Botanical Products
Coleman and Bell Co.	D. Van Nostrand Co., Inc.
Fisher Scientific Co.	W. M. Welch Manufacturing Co.
General Biological Supply Co.	B. Westermann Co., Inc.
W. J. Gilmore Drug Co.	Weston Electrical Instrument Corp.
	Fred S. Carver

F. C. BROWN, *Director of Exhibits,*

American Association for the Advancement of Science,
Smithsonian Institution Building,
Washington, D. C.

SPECIAL ATTRACTIONS

Judged by achievement, 1934 is to be another gala year for science and the annual Science Exhibition. Never before have so many distinctive arrangements been made for the exhibition so far in advance.

Cosmic Rays

Cosmic rays still command the center of the stage. Professor Robert A. Millikan, Professor Arthur H. Compton and The Bartol Research Foundation will all have interesting exhibits in this field. Dr. W. F. G. Swann has accepted the chairmanship of this committee.

Deuterium

Doctor F. G. Brickwedde of the Bureau of Standards, as chairman of the committee, has engaged the cooperation of the significant laboratories working in this field. There will be a showing of the properties of this heavy isotope of hydrogen and apparatus and demonstrations of apparatus used in the investigations.

Neutrons

Professor George B. Pegram expects to have an exhibit of equipment used in the production of neutrons and possibly a working demonstration.

Induced Radioactivity

The California Institute of Technology will have a showing of apparatus used in producing artificial radioactivity and a presentation of the results with charts and photographs.

Stratosphere Exhibition

The Advisory Committee of the National Geographic Society-Army Air Corps Stratosphere Flight has promised whole-hearted cooperation in making available such apparatus and equipment as may be accessible from forthcoming flights of the stratosphere balloon.

Talking Films

There will be demonstrations of the University of Chicago talking films with new subjects in the physical sciences, both with sound on film as well as sound on disc.

Biology

Professor Robert T. Hance of the University of Pittsburgh, as chairman of special committee, will have a most extensive and interesting operating display in zoology.

Physics Demonstrations

Professor Charles T. Knipp of the University of Illinois, and Professor J. B. Nathanson of Carnegie Institute of Technology, are arranging a series of unusually attractive demonstrations in recent advances in physics.

Other demonstrations and exhibits will be announced later by circular and in the press.