

AIP 40 YEARS



MICHAEL I. PUPIN
One West Seventy-Second Street
New York City

Norfolk, Connecticut,
November 3, 1931.

Henry A. Barton, Esq.,
Director,
American Institute of Physics,
604 Madison Avenue,
New York City.

My dear Sir:

The American Institute of Physics is an organization which was badly needed for many years. The activities of the science of physics are so many and reach out in so many different directions that only the cooperation of all our special societies, like the American Physical Society, the Optical Society of America, etc. can develop efficiently these activities. This cooperation, as represented by the American Institute of Physics, I predict, will be of the greatest benefit to pure and applied physics in America, and to all the American industries which derive their nourishment from the various phases of the science of physics.

Yours sincerely,

Michael Pupin, professor of physics at Columbia, congratulates first AIP director Henry Barton (photograph) on the founding of the Institute.

We are grateful to the Niels Bohr Library staff, who assembled the materials for this visual history. All photographs not otherwise credited are by courtesy of the Library or from the files of physics today.

—The Editors



Four decades of AIP

The American Institute of Physics began in October 1931, a time of great difficulty for our science. This was the decade of the Great Depression, and a widespread "stop-science" movement blamed us for society's problems. It was also a time of divisiveness within physics: In 1899 one group, the American Physical Society, could encompass all physicists, but separatism had given rise to five societies. The leaders of that time, men such as Paul D. Foote, George B. Pegram, F. K. Richtmyer and Karl T. Compton, conceived of the rather close federation that is AIP to bring physicists together again, to improve the relations between physics and the rest of society and, not incidentally, to serve as the publisher of the increasingly important US physics literature.

The Institute had its share of crises in its continuing efforts to cement the unity of the federated societies; like the nation, we had our Adams, Jefferson, Franklin and Washington; our own federalists and states' righters, and even a threat of secession. But we overcame these crises largely by our usefulness as a publisher, unifying the production of the existing journals and developing new ones as the need arose.

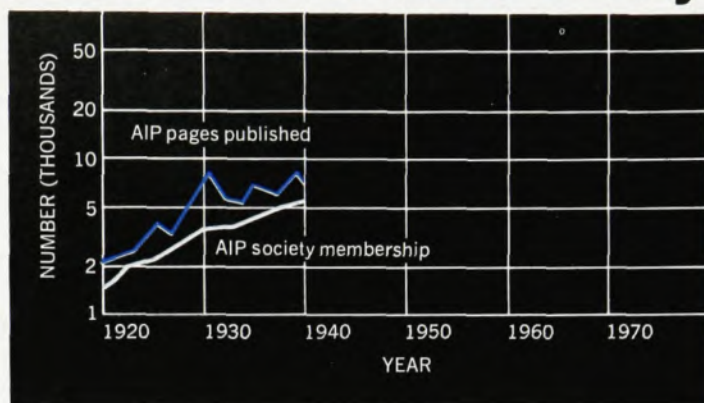
The Institute provides a staffed headquarters whose existence has proved useful in many other ways as well. Some of the advantages, as we shall see in the next eight pages, have included, in addition to publishing, increased administrative services for the member societies and the creation of special divisions to deal with education and manpower, with communication among ourselves and with our public relations. The establishment of physics today and the Niels Bohr Library are among the tangible results of AIP's efforts.

Physics shared the financial and employment famine of the 1930's, grew again the 1940's and 1950's, rode the boom of the 1960's and now again must tighten its belt. With the benefit of the time perspective of these cycles, we can be confident of continuing change. But it is up to the physics community and AIP to give the change some constructive guidance by reawakening the nation to the essential role of science and technology in the solution of today's major problems.

Henry A. Barton
Director, AIP 1931-1957

1930's

American Institute of Physics



Karl Compton, first chairman of the AIP Governing Board, tells of the importance of physics to industry (right) at a symposium "Science Makes More Jobs," organized in 1934 by AIP. The Institute, actively responding to those who blamed science for the Great Depression, broadcast the talks, along with letters from President Franklin D. Roosevelt (center) and Albert Einstein, nationwide.



KARL COMPTON



Van de Graaff generator. On 11 November 1931, the new AIP invited newsmen and scientists to a dinner at which Robert Van de Graaff first demonstrated his 1 500 000-volt "atom smasher." The New York Times, in a lengthy story, noted that the generator "...might be taken for two identical rather large floor lamps of modernistic design."

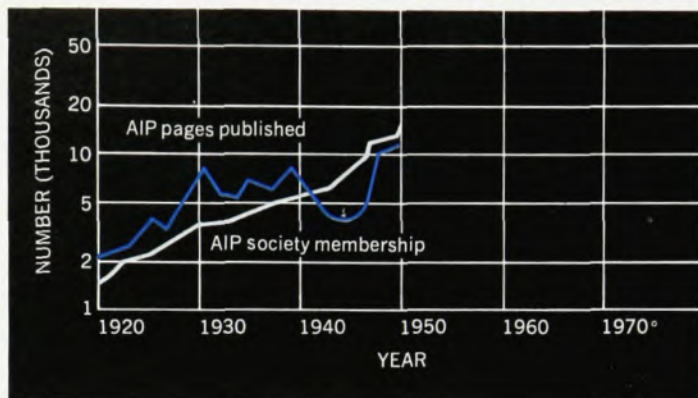


AIP guestbook. First to sign were Karl Compton, George Pegram (a founder of the Institute who wrote its constitution and was its first Secretary) and John Tate.

DATE	NAME
24 Oct 1931	Karl T. Compton
"	George Pegram
"	John T. Tate
20 Nov '31	Howard K. Urey
	Federick A. Saunders
	and a host
	F. H. Richardson
	Lloyd A. Jones
	Ingemar C. Ring
	Arthur H. Compton
	W. W. Rief
	Wendell P. Davis

1940's

American Institute of Physics



Shhh, Scientists at Work

- Atom-smashing research has now become secret at the University of California—including further developments of the half-built 4,900-ton cyclotron.
- “Voluntary censorship” of all U.S. scientific publications was announced by the National Academy of Sciences and the National Research Council. Reason: lest research data of indirect military significance fall under enemy eyes.
- There is so little new, non-secret research that *The Physical Review*, abstruse physicists’ tradesheet, now appears only once a month instead of twice a month; and other once-plump learned journals are beginning to show their ribs.

TIME, March 16, 1942

PHYSICS INSTITUTE ACQUIRES BUILDING

Scientific Body Buys Former Dwelling in 55th Street for Headquarters

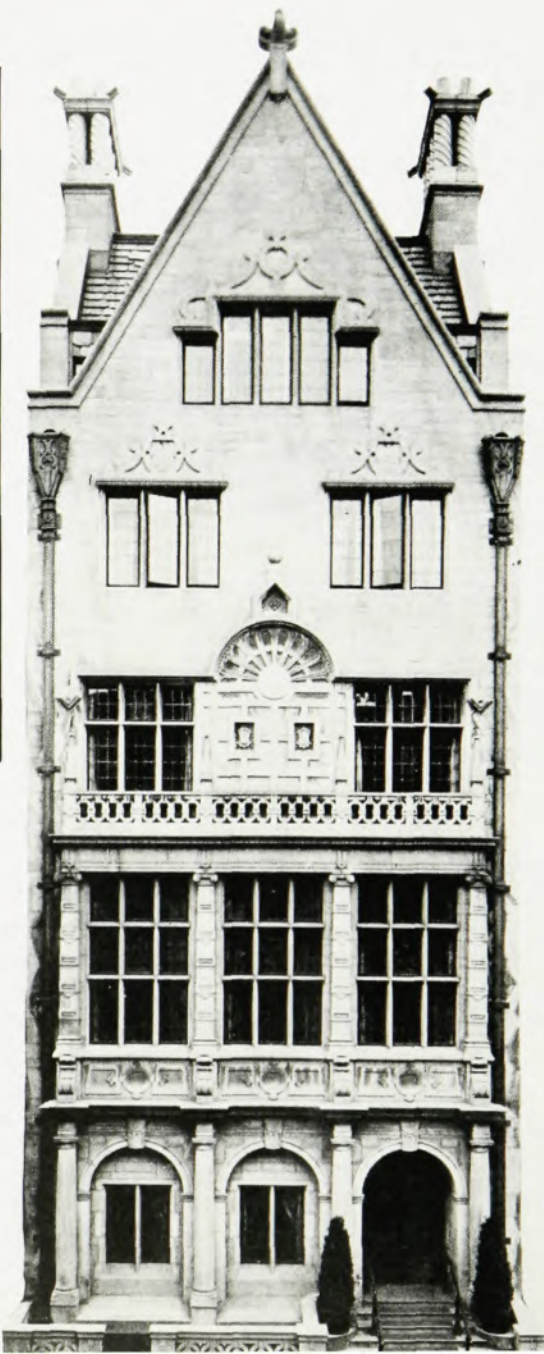
STUDIES POST-WAR WORK

Federation of Societies Has Used Rented Quarters in City Since 1931

The American Institute of Physics announced yesterday that it had acquired the five-story former residence at 57-59 East Fifty-fifth Street for national headquarters of the organization and its allied scientific societies.

The purchase was announced by the Federation of Societies for the Advancement of Science.

The Institute buys a home of its own—a brownstone on East 55th Street, New York.



AMERICAN INSTITUTE OF PHYSICS
First Report of War Policy Committee

May 1, 1942

Representatives of United States Government agencies, institutions of learning, the press, and various national associations are turning more and more frequently to the American Institute of Physics for information, advice, and cooperation from physicists as a national group. These appeals present opportunities for national service. It falls within the designated scope of the Institute to grasp such opportunities, but in order to do so it must first clearly understand the place of the science and the profession in the affairs of the nation and the world. Then it must accept the responsibility of speaking with authority about physics, of reflecting truly the wise consensus of physicists.

At Los Alamos, New Mexico "top secret" research led to the atomic bomb. Ernest O. Lawrence, Enrico Fermi and I. I. Rabi (below) were among those at Los Alamos. As physics became militarily important, AIP recognized the need for a War Policy Committee (see statement and clipping above). After the war, in his 1945 Director's Report (right) Barton stressed the need for social responsibility, as dramatized by the bomb.



American Institute of Physics
—Report of the Director for 1945

February 23, 1946

I. General Situation

A. The Bomb

Unless there was born in 1945 a philosopher whose teaching will instill in mankind a capacity for responsibility sufficient for the atomic age, the actual opening of the era on July 15, 1945 was the most important event of the year. The unprecedented physics experiment at Alamogordo had perhaps more social and political importance than scientific value. Leaders of the atomic bomb project claim no considerable advance in fundamental physics from the immense effort and time expended. Rather do they fear that considerations of mass life and death may henceforth hamper the freedom of research and publication without which the development of science in the service of mankind will be impossible.

B. New Concerns and Old

As never before physicists must now concern themselves with public opinion, the civil and military affairs of state, and the machinery of international cooperation. This concern may be all too demanding of the best efforts of physicists. For granting that a surviving civilization is essential to the advancement of science, it may be equally true that the further advancement of science will prove to be essential to the survival of civilization. Certainly the sciences have, in the hundred years, contributed more to the health of the world, a good culture.

Acute Shortage Of Physicists Is Predicted

Warning that this country faces an acute shortage of physicists, which would be inimical to the war effort, the American Institute of Physics yesterday recommended a five-point remedial program to the Government.

The institute's war policy committee calls upon the Army, Navy and War Man-Power Commission to:

Expand facilities for turning out physics teachers, particularly in connection with Army and Navy training programs "in which it is essential to convey some knowledge of physics."

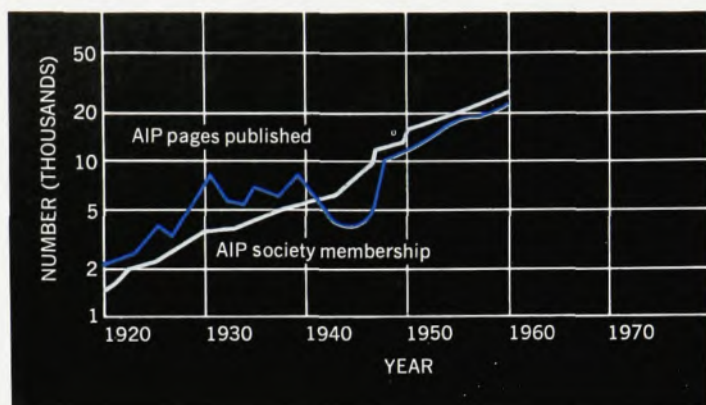
PHYSICS today



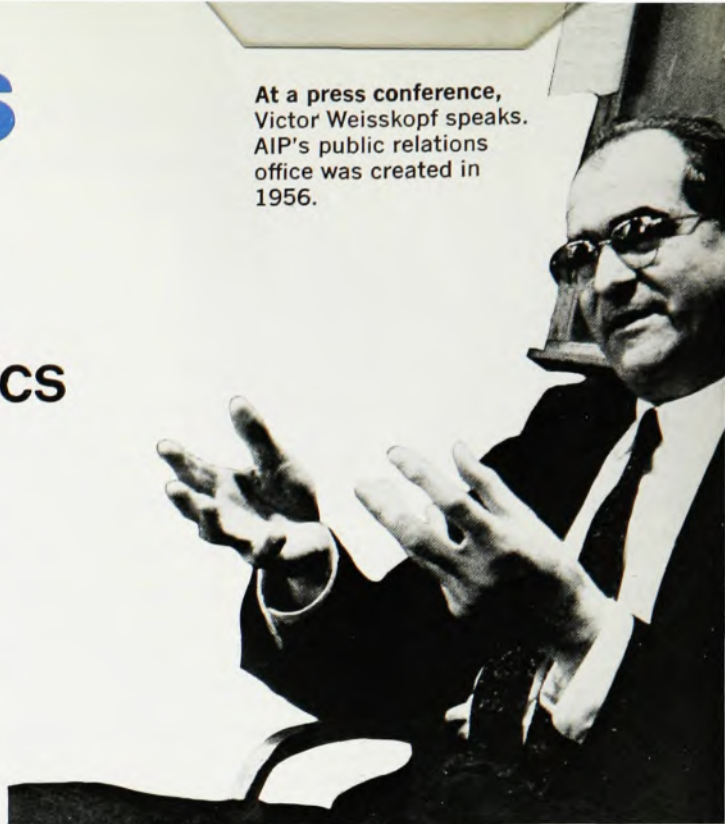
First issue of physics today in May 1948. The cover, showing J. Robert Oppenheimer's porkpie hat on a cyclotron, symbolizes the victory of civilian over military interests for control of atomic energy.

1950's

American Institute of Physics



At a press conference, Victor Weisskopf speaks. AIP's public relations office was created in 1956.



Dedicating the new building. AIP outgrew its brownstone and bought its present home on East 45th Street (right). At the building-dedication ceremonies, Prince Philip of the UK presents (above) the first Compton award to Pegram; in the background is Elmer Hutchisson, who became AIP director when Barton retired in 1957.



Talent Scouts Go Hunting With Jobs for Scientists

By WILLIAM PERCIVAL,
Staff Writer.

When last seen today six technical recruiters in search of a Ph.D. were seen pursuing a likely young scientist down a side corridor of the Hotel New Yorker's "talent market" in a vain effort to give him a job.

The young man had made the near-fatal error of walking into the wrong recruiting suite and came within an ace of being signed up by an electronics firm when he really wanted to work on guided missiles.

The incident was another illustration of the fanastic demand for scientific brains that has grown with the advances

describes himself as "a sort of scientific talent scout," says the demand has turned the job hunter into the hunted.

"You don't interview the job hunter any more," he said. The job hunter interviews you and he wants to know all about wages, opportunities, living conditions and extra benefits before he'll go to work for you.

One young man the other day even inquired about the stability of my company. I was forced to tell him our capital investment only amounted to \$500 million."

Happy hunting grounds for the recruiters on the fifth-floor of the Hotel New Yorker, where

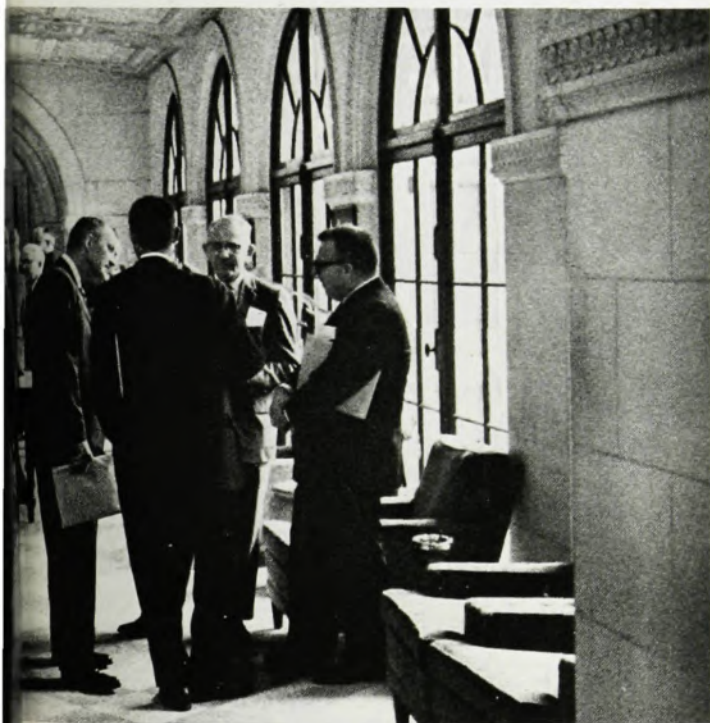
firms trying to give more than 1000 jobs to 225 graduate physicists who have indicated they might be in the market.

A Westinghouse Electric Corp. recruiter, one of 20 sent to New York for the meeting, says his company alone would like to hire 10 percent of the young physicists who will be given their doctorates this year.

A recruiter for the Glenn L. Martin Aircraft Corp. of Baltimore says he tries to interest young scientists in the challenge of working on the jet aircraft, guided missile or the earth satellite projects of the company.

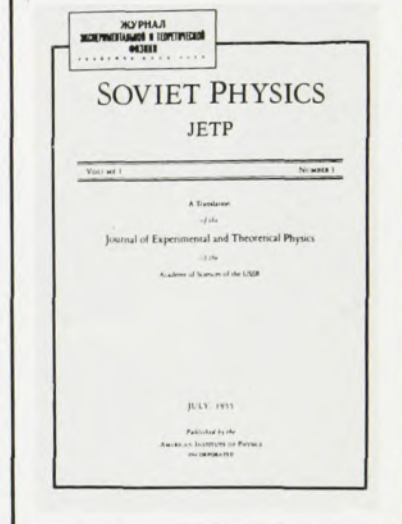
An electronics recruiter says

The Education and Manpower Division's placement service is overrun by employers in the post-"Sputnik" era.



Corporate Associates of AIP meet at Arden House, N. Y. The Associates became more active during the 1950's.

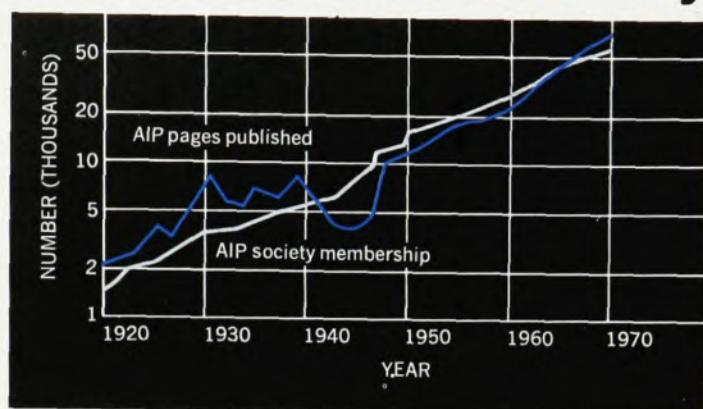
Visiting-scientists program in physics, administered jointly by AAPT and the AIP Education and Manpower Division, sponsors short visits of physicists to liberal-arts colleges without graduate programs in physics.



Translation journals. In 1955, before "Sputnik," the Institute began providing English-speaking physicists with translations of Soviet physics journals.

1960's

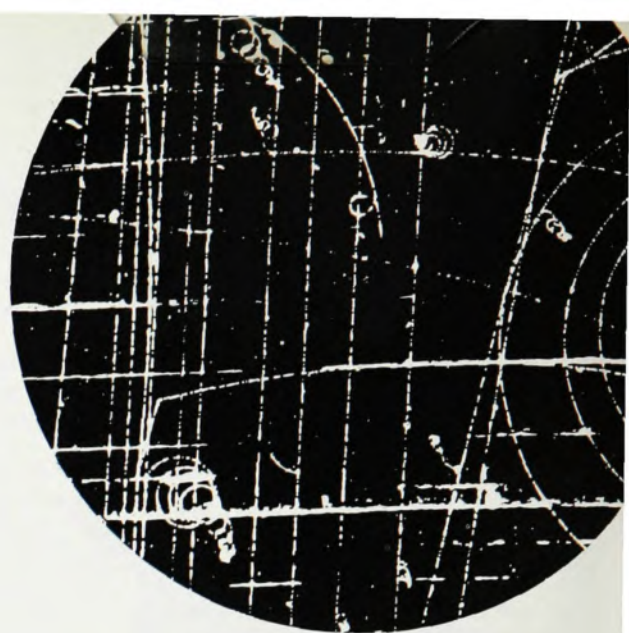
American Institute of Physics



Four directors of AIP. Talking together are Ralph Sawyer, Van Zandt Williams (1965–66), Barton (1931–57) and Hutchisson (1957–65). Sawyer, chairman of the Governing Board until this year, was acting director twice; when Hutchisson retired and after the sudden death of Williams in 1966.



Information program. To help physicists keep up with the growing literature, AIP established an Information Division. One of its projects, the National Information System for Physics and Astronomy (NISPA) is exhibited at the 1971 Physics Show.



The New Yorker magazine visits AIP.

Omega Minus

FOR the better part of a wintry afternoon, we sat in the Karl Taylor Compton Boardroom of the American Institute of Physics, on East Forty-fifth Street, and listened to five physicists from the Brookhaven National Laboratory talk about the discovery, in January, of the subatomic particle called the omega minus. The talks were officially billed by the American Institute of Physics as a press conference, but, as it



turned out, the physicists lectured and the members of the press, including us, remained respectfully silent, except during a brief question-and-answer period at the end of the session. All this is somewhat by the way, though, for the occasion, whatever its name, was a fascinating one, and we found ourselves increasingly interested not only in the physicists' discovery but in their reactions to it.

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Funding cuts. As the decade ended, the Government reduced its support of physics research. These cuts, combined with the general economic recession, have caused unemployment and distress among physicists. (See Koch's accompanying article.)

Scientist Cautions Against Cut in Funds For Basic Research

A scientist told about 450 colleagues of the American Physical Society on Tuesday night it would be a "tragedy" should future governmental science appropriations be chopped to the detriment of basic research in favor of technological development. when he said it took a minimum of \$50,000 "to launch" each of the 6000 doctors of science Dr. Frederick Seitz, head of American colleges and universities, said at the annual meeting.

A recent "New York meeting." The annual joint meeting of APS and AAPT can be depended on to provide a challenge for the AIP Society Services Division.



Niels Bohr Library. J. Robert Oppenheimer speaks at the library dedication in 1962. The library is part of the Institute's Center for the History and Philosophy of Physics, which studies the recent history of physics.

COMPAS. The Committee on Physics and Society was formed in 1967. Commenting on the new committee, director Koch noted:

"... These contributions [of physics] have influenced our society and it is now important to evaluate [them] by a study of the role of physics in education, industry, and government, the direction of basic and applied research, the need for manpower, and the relationship of physics to the other sciences and the humanities. . ."



H. William Koch, director since 1967, notes increase in journal publication between 1956 and 1966 (far left). The Publications Division takes advantage of new composition methods; typewriter composition (left) has been used for some journals since 1969.