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New AAAS Symposium Volumes

Biological and Chemical Control of Plant and Animal Pests, Louis P. Reitz, Ed. Papers from a symposium presented 28–30 December 1957 at the Indianapolis meeting of the AAAS. Probable publication date, March 1960.

Water and Agriculture, Roy D. Hockensmith, Ed. Papers from a symposium presented 29–30 December 1958 at the Washington meeting of the AAAS. Probable publication date, April 1960.

Calcification in Biological Systems, Reidar F. Sognaes, Ed. Papers from a symposium presented 29 December 1958 at the Washington meeting of the AAAS. Probable publication date, May 1960.

Congenital Heart Disease, Gordon K. Moe, Ed. Papers from a symposium presented 29–30 December 1958 at the

Washington meeting of the AAAS. Probable publication date, May 1960.

Oceanographic Symposium, Mary Sears, Ed. Papers from the morning lectures presented 31 August to 11 September 1959 at the First International Oceanographic Congress in New York. Probable publication date, July 1960.

AAAS Membership

1) Changes during 1959

New members elected	7,165
Losses	
Deaths	444
Resignations	2,561
Dropped for non-payment of dues	2,736
Total loss	5,741
Net increase during 1959	1,424

2) Totals as of 31 December 1959

Annual members in good standing	53,175
Life and emeritus members	1,072
Total in good standing	54,247
In arrears	4,327
New for 1960	718
Total membership	59,292

A Report of the Chicago Meeting

Raymond L. Taylor

From all reports, the recent seventh Chicago meeting of the American Association for the Advancement of Science was one of the smoothest running and most generally successful of the 126 national meetings the AAAS has held. Though there were instances of overcrowded session rooms—commonly due to underestimates of expected attendance but, in any event, tributes to the programs scheduled in them—usually it

was possible to make transfers. It was also possible to meet last-minute requests for projection because the Committee on Physical Arrangements wisely had provided extra equipment and not only had scheduled an operator for every session that had originally requested lanterns, but had several projectionists in reserve. Besides the sessions for programs, such aspects of the meeting as registration, traffic in the ex-

hibit and Science Theatre areas, and the various social functions, in general, went very well.

The quality of the programs was uniformly high and pleased comments were heard on every hand; those who arranged the sessions naturally were gratified at the good attendance and applause. The exhibitors, too, obviously were pleased with the serious attention their displays received.

The four hotels that housed the 18 sections and 101 participating organizations were so convenient to one another that virtually all registrants, it is believed, saw the exhibits at least once. Incidentally, the policy of restricting admission to the Exposition to those with registration badges—and registering no one younger than 16—was a decided success and will be continued. There were a few disappointed parents who felt that exceptions should be made for their exceptionally talented young children, but most people who inquired appreciated that the exhibits were designed

for professional scientists and other science-minded adults. This policy does not imply lack of interest in science-minded young people. The separate Junior Scientists Assembly, arranged by the Association's Academy Conference, and the Traveling Science Libraries, (now modified for, and circulated to, elementary schools as well as high schools) provide ample evidence to the contrary.

With 4636 paid registrants the seventh Chicago meeting was the fifth largest meeting among the 126 national conventions the 111-year-old AAAS has held. (The meeting was surpassed in size only by the New York meetings of 1949 and 1956, the Chicago meeting of 1947, which included the annual meetings of the entomologists and of nearly all of the larger biological societies, and the Washington meeting of 1958.) It is an impressive total when it is borne in mind that, in 1959, though 17 organizations held their annual meetings with the AAAS, none of the larger societies was represented except with a special program or as a cosponsor. The registration total thus affords eloquent evidence that the programs of the Association as a whole, of its 18 sections, and of the numerous regional and special meetings—in the aggregate—continue to make the AAAS meeting one of the largest as well as most significant scientific meetings of the year.

Since symposia and addresses predominate, it is further indicated that well-planned programs of this type, with well-chosen speakers, will draw an attendance from all parts of the nation.

Unfortunately, the weather that prevailed the first half of the meeting was unfavorable. Eastern airports were fogged in and flights were canceled. It is quite probable that if the skies had been clear, the additional few hundred registrants needed to have exceeded the 4940 of the previous Chicago meeting would have been present. In addition to the 4636 who registered, there were several thousand others who attended technical sessions, the evening addresses, and the brilliant lecture by George Gaylord Simpson especially arranged for the interested public.

The Chicago meeting's total of 307 sessions, summarized in Table 1, included programs sponsored by the Association as a whole, by all 18 AAAS sections, by two AAAS committees, and by 49 organizations that arranged programs varying from 1 to 16 sessions in length. In addition, there were 50 other participating organizations that official-

Table 1. Analysis of sessions at the seventh Chicago meeting.

Sessions for symposia, invited papers, and panels	137
Sessions for contributed papers	32
Sessions with addresses or lectures	30
Business sessions	40
Meals or social functions	51
Tours and field trips	5
Sessions for motion pictures	10
Junior scientists assembly	2
Total number of sessions	307

ly cosponsored programs of appropriate sections and societies.

Since all 18 AAAS sections had sessions, there were programs of interest to specialists in all the principal fields of science as well as interdisciplinary symposia for those who realize the contributions that one science may make to another. There were 51 social functions exclusive of small private parties. The comfortable book lounge of the Society of Systematic Zoology, the room of Sigma Delta Epsilon, and other headquarters rooms where business meetings, conferences, or spontaneous discussions could be held in comfort were welcome features.

It was possible to concentrate more than half of the meeting in the 1800-room, 44-story Morrison Hotel, AAAS Headquarters. The remaining sessions, with a very few exceptions—notably the Chicago Academy of Sciences—were located in the Sherman, La Salle, and Hamilton hotels, all within two blocks of one another.

Arrangements for the Meeting

The fact that the 126th AAAS meeting was particularly smooth-running and generally pleasant is a tribute to the many individuals—from program chairmen and AAAS office personnel to skilled workmen, porters, and high-school teachers—who contributed their thought and services to the planning and final operation of a meeting as large and uniquely complex as this one.

In general, the hotels used had enough session rooms of the right sizes, and these were adequately furnished and equipped. There were no known instances of failure of microphones, and nearly all projection went smoothly. The hotel personnel, from managers to bell-boys, were capable and cooperative.

The local committee on physical arrangements always has one of the most taxing assignments. For the Chicago meeting, nearly 200 projectors had to

be set up, and additional screens for rooms without them had to be located. Under the chairmanship of AAAS member James H. Smith (associate superintendent of the Chicago Public Schools), this committee was hard-working and efficient. Two key members of this committee were vice chairman Hobart H. Sommers (assistant superintendent), who played an active part, and James P. Fitzwater (director of visual education), who collected the many pieces of projection equipment—all except 16 mm film projectors—from the school system. The operators, also secured by the committee, were principally volunteer school teachers, supplemented by members of the participating societies and by graduate students. All who attended the meeting are much indebted to those named and to everyone else who gave his services for this essential phase of the meeting.

Housing and registration were ably handled by experienced staff members of the Chicago Convention Bureau. The booth layout and the Science Theatre were well handled by Morrison Hotel departments. The professional guard service supplied men who generally did their jobs with understanding and courtesy. The AAAS office, AAAS pressroom, information center, and the AAAS booth, all in the Morrison, were manned by AAAS staff who came from the Washington office, 21–25 Dec. Thanks are due all for their devoted services, which so greatly contributed to the meeting's success.

Registration slips were collected from three registration points at intervals throughout each day. The slips were quickly sorted into alphabetical order and carefully posted in the Visible Directory of Registrants, in the foyer leading to the exposition rooms and ballroom. A paid worker and volunteers handled the posting, and a staff member answered the Visible Directory telephone. They also assisted registrants in rapidly locating names or adding hotel-room data to their slips. The capacity of the directory permitted additions to be made without continual rearrangement of the slips already posted.

Pattern of the Meeting

One aspect of the Chicago meeting, apparent and noteworthy, was the balance between programs of appeal to specialists, to those interested in interdisciplinary areas, and to those con-

cerned with matters of concern to all scientists. In addition, there were sessions for the science-minded public and even two afternoon events for high-school science students. There was also an excellent balance among the physical, biological, social, medical, and other sciences. The multisessioned programs of 18 different sections ensure that no principal field of science is neglected. The sectional programs expand or contract according to the number and identity of the societies that meet with the AAAS in a particular year.

Over the past decade, the pattern of the Association's annual meeting has gradually moved toward a well-balanced meeting. Partly this has been in response to the suggestions made by the Committee on AAAS Meetings, which plans the General Symposium, and the section secretaries who, jointly with the committee, devote much time and thought to how the meeting can be improved; partly it reflects the parallel thinking of the participating societies.

Within the limits of the available physical facilities, societies affiliated with the AAAS are welcome to meet with the Association on any scale preferred—full national meeting, a special or regional meeting, or simply the co-sponsorship of a program arranged by a section or other society. There is a tendency for more societies to participate each year—there were 101 such organizations at Chicago—but usually no one society's meeting requires an excessively large number of concurrent session rooms, nor does any large bloc of societies within one discipline take up a disproportionate part of the entire program. By the cooperation of the sections and of most of the societies, it now is possible to keep relatively clear one evening and one afternoon for the two parts of the AAAS general symposium. In the evenings, too, events that conflict are eliminated or kept to a minimum.

Highlights of the Meeting

One innovation at the Chicago meeting was the addition of an evening address sponsored by the recently affiliated Tau Beta Pi Association, coordinate with the other special sessions or evening events for the attendance as a whole. The first Tau Beta Pi speaker was T. Keith Glennan, administrator of the National Aeronautics and Space Administration. His address, "A new order

Table 2. Comparison of AAAS-sectional programs and society programs.

Item	AAAS sections, committees, and conferences	Participating societies	Total number of sessions with papers	Total number of speakers
Sessions for symposia, invited papers, and panels	71 (410 speakers)	66 (372 speakers)	137	782
Sessions for contributed papers*	21 (181 papers)	11 (98 papers)	32	279
Sessions with addresses or lectures	20 (38 speakers)	10 (19 speakers)	30	57
Business sessions	19	32		
Total			199	1118

* Each paper is assumed to have been presented by a single speaker.

of technological challenge in the nation's space program," given 27 December to a large and interested audience, will appear in the February 1960 issue of *The Bent*, the Tau Beta Pi Association's quarterly.

Another innovation, in recent years at least, was the provision for a Popular Lecture, planned especially for the science-minded public. At Chicago, on the evening of 29 December, George Gaylord Simpson, Museum of Comparative Zoology, Harvard College, spoke on "The world into which Darwin led us." The audience, which nearly filled the large ballroom (capacity 2000) of the Hotel Sherman, included a number of the attending scientists as well as the lay public for which it was intended. His paper will appear in *Science*.

On the same evening, the Society of the Sigma Xi and the United Chapters of Phi Beta Kappa jointly presented Lee A. DuBridge, president of California Institute of Technology, who spoke eloquently on "The adventure of learning" to an equally large and attentive audience.

On 30 December, the annual lecture and film of the National Geographic Society, this year on "Dzibilchaltun: lost city of the Maya," was given by E. Wyllys Andrews, associate in archeology at Tulane University.

Still another innovation—an experiment—was a "Dutch treat" social hour following two of the evening addresses. It was more successful the second time when the presiding officer made it clear that the refreshment arrangements in the rear of the room were not for a large private party, but for AAAS registrants who might prefer to sit down at tables where they were than to visit a public cocktail lounge.

Fourteen of the 18 AAAS sections sponsored vice-presidential addresses, and other presidential addresses were given under the auspices of the participating societies. Most of these are mentioned in the separate reports which appear elsewhere in this issue.

AAAS Presidential Address and Reception

On 28 December, the customary evening, the traditional address of the retiring (111th) president of the Association, Wallace R. Brode, was given before an audience that nearly filled the large Terrace Casino (capacity 2000) of the Morrison Hotel. President Paul E. Klopsteg presided and introduced Edward L. Ryerson, former chairman of the board of Inland Steel Company, and general chairman of the seventh Chicago meeting, who graciously welcomed all visiting registrants to the scientific community of Chicago, now the world's leading steel-producing region and a great center of technology. Retiring president Brode's paper on the steps needed to center full responsibility for government science programs in the government, entitled "Development of a science policy," has already been published [*Science* 131, 9 (1 Jan. 1960)].

Members of the platform party included Ryerson and all but one member of the Board of Directors. Each one was introduced. The AAAS reception which followed was well attended. The receiving line included members of the platform party and a number of their wives. For those in the line, it was, as always, a pleasure to be able to greet so many members and friends of the Association.

AAAS General Symposium

The general symposium of the Association, "Moving Frontiers of Science IV," which is planned by the Committee on AAAS Meetings, was held the evening of 26 December and the afternoon of 27 December in the Terrace Casino of the Morrison Hotel. Part I consisted of two lectures, "How did life begin?" by Sidney W. Fox, professor of chemistry and director of the Oceanographic Institute, Florida State University, and "How can artificial satellites help scientific research?" by William H. Pickering, director of the Jet Propulsion Laboratory, California Institute of Technology. In the second session Wendell M. Stanley, professor of biochemistry and virology and director of the Virus Laboratory, University of California, spoke on "Genes, viruses and cancer," and Robert E. Marshak, chairman of the department of physics and astronomy, University of Rochester, on "Elementary particles of modern physics." Alan T. Waterman, director of the National Science Foundation, presided at both sessions.

On the morning of 27 December, the AAAS Committee on Science in the Promotion of Human Welfare sponsored a symposium, "Science and our future," that attracted a large attendance. Committee chairman Barry Commoner presided; the two papers were "The nature of social dangers of the control machines of the future" by Norbert Wiener, Massachusetts Institute of Technology, and "Acceptance and use of scientific progress" by Brock Chisholm, former director-general of the World Health Organization. H. Burr Steinbach, chairman of the department of zoology, University of Chicago, who served as discussant, materially contributed to this program.

Other Symposia

In the past ten years at AAAS meetings there has been an increasing emphasis on symposia and a relative reduction in the number of sessions for contributed papers, on the part of both sections and the societies. At the Chicago meeting, only six sections and seven societies had a total of 32 sessions for submitted short reports of current research. In contrast, the AAAS, its sections and two committees, and the participating organizations sponsored a grand total of 137 sessions for symposia

of one to five parts, panels, or invited papers on chosen subjects. Incidentally, in planning these symposia, more and more care seems to be given to the choice of topic, selection of speakers, and provision for discussion.

As Table 1 shows, there were four times as many sessions devoted to programs of the symposium type as to sessions for contributed papers, although 17 organizations were holding national meetings with the Association. Even more striking is the fact, as shown in Table 2, that the participating societies, including an additional 32 societies which held regional or special meetings with the Association, in the aggregate, had exactly six times as many sessions of this type as they had sessions for contributed papers. The total of 782 symposium participants markedly outnumbered the 336 other speakers.

Among the 137 symposia, the following were noteworthy for their interdisciplinary scope:

"Trends in the application of mathematics," sponsored by AAAS Section A (Mathematics), cosponsored by the Society for Industrial and Applied Mathematics, arranged by Brockway McMillan (Bell Telephone Laboratories).

"Structure and metabolism of collagen," sponsored by AAAS Section C (Chemistry), cosponsored by the Chicago section of the American Chemical Society, arranged by Jerome Gross (Massachusetts General Hospital).

"Great Lakes basin" (three sessions), jointly sponsored by AAAS Section E (Geology and Geography), Section M (Engineering), the Geological Society of America, American Geophysical Union, and the Association of American Geographers, arranged by George B. Maxey (Illinois Geological Survey) and others.

"Some unsolved problems in biology, 1959" (two sessions), a joint program of AAAS Sections F (Zoological Sciences) and G (Botanical Sciences), cosponsored by the American Society of Zoologists, Botanical Society of America, and the Genetics Society of America, arranged by Norman G. Anderson (Oak Ridge National Laboratory) and Barry Commoner (Washington University).

"The impact of electron microscopy on biology," joint program of AAAS Section F, the Division of Biological and Medical Research of Argonne National Laboratory, and the U.S. Atomic Energy Commission, cosponsored by the American Society of Zoologists and

the Electron Microscope Society of America, arranged by a committee of the Division, with E. L. Powers as chairman.

"Interactions in nature: a symposium on modern ecology" (four sessions), a program of the American Society of Naturalists, cosponsored by the Ecological Society of America and the American Society of Limnology and Oceanography, arranged by Arthur D. Hasler (University of Wisconsin).

"Sand dune systems: physical and biological aspects of their development" (two sessions), a program of the Ecological Society of America, cosponsored by AAAS Sections E (Geology and Geography) and G, arranged by Jerry Olsen (Oak Ridge National Laboratory).

"Biology and history in archeology," a program of Section H (Anthropology) arranged by John C. McGregor (University of Illinois).

"Technology as a backstop to anthropology and archeology" (three sessions), a program of Section H, arranged by Ray Winfield Smith (Archaeological Institute of America).

"World population and international relations," a joint session of AAAS Section K (Social and Economic Sciences), the National Institute of Social and Behavioral Science, the American Economic Association, and the Population Association of America, arranged by Donald P. Ray (National Institute of Social and Behavioral Science).

The entire group of seven sessions of AAAS Section L (History and Philosophy of Science), cosponsored by the American Philosophical Association and the Philosophy of Science Association, arranged by Herbert Feigl (University of Minnesota), dealing with theory construction in logical and historical perspectives (two sessions), empirical and conventional elements in physical theory, induction-probability-simplicity, the logic of variables and constants, philosophical issues of the quantum theory, and methodological problems of psychology and the social sciences.

"Aging" (four sessions), a program of AAAS Section N (Medical Sciences), cosponsored by AAAS Sections F, K, and Nd (Dentistry), and by the Gerontological Society, arranged by Nathan W. Shock (Baltimore City Hospitals).

"Roots of behavior: animal behavior" (four sessions), a program of the American Psychiatric Association, cosponsored by AAAS Section I (Psychology), the Section of Animal Behavior and

Sociobiology of the Ecological Society of America, and the American Society of Zoologists, arranged by Eugene L. Bliss (University of Utah).

"Germ plasm resources in agriculture: development and protection" (five sessions), a program of AAAS Section O (Agriculture), cosponsored by AAAS Sections F, G, N, and Nd, and by 15 interested societies, arranged by R. E. Hodgson (U.S. Agriculture Research Service, Beltsville, Md.).

"Science looks at the food industry," a program of AAAS Section P (Industrial Science), cosponsored by the Institute of Management Sciences, arranged by Allen T. Bonnell (Drexel Institute of Technology).

"Upper atmosphere—solar relations" (two sessions), a joint program of the American Geophysical Union and the U.S. National Committee for the International Geophysical Year, cosponsored by AAAS Section D (Astronomy) and the American Meteorological Society, arranged by John A. Simpson (University of Chicago) and Stanley Ruttenberg (National Academy of Sciences).

"Higher education and training in

emerging fields of science and technology" (two sessions), a program of the Conference on Scientific Manpower, cosponsored by the Engineering Manpower Commission, the Scientific Manpower Commission, the National Research Council, the National Science Foundation, and AAAS Section M (Engineering), arranged by a committee, Thomas J. Mills (National Science Foundation), chairman.

The Association expresses its deep appreciation to all who prepared papers for these and for the other, more specialized, symposia.

Conferences

At each AAAS meeting three recurrent conferences are held. The Academy Conference, composed of the official delegates of the 45 (now 46) academies of science affiliated with the Association and of others interested in academy affairs, following an afternoon session on junior academies, had a day of sessions which included routine reports and business, a panel discussion on current senior academy problems, and a dinner at which A. M. Winchester (Stetson University) gave the Academy Conference presidential address.

The 13th annual Junior Scientists Assembly—a program especially for high-school students sponsored by the Association through the Academy Conference—arranged by M. B. Sailsbury (Evanston Township High School), consisted of a morning session, 29 December, and an afternoon session, 30 December, both in the Little Theatre of the Museum of Science and Industry. Selected projects and exhibits were on display.

The program of the Conference on Scientific Manpower has already been mentioned.

The Conference on Scientific Communication as arranged by its program chairman, George L. Seielstad (Applied Physics Laboratory, Johns Hopkins University), had four sessions concerned with research in documentation, international communication in science, reporting scientific research, and the principles of the communication of science. In each of these sessions able speakers drew upon their experience and evoked valuable discussions.

A Conference on Encouraging the Participation of Women in Science, jointly sponsored by the American Council on Women in Science and

Sigma Delta Epsilon, was held 28 December. Alan T. Waterman gave the keynote address, and there were three panel workshops.

AAAS Business Sessions

As required by the constitution, the Association's board of directors held its fourth regular meeting of the year at the annual meeting. Two of the sessions, as usual, preceded the two sessions of the Council (27 and 30 December), which are reported elsewhere in this issue. It is gratifying to note that the Council sessions were well attended, and that at least two past presidents of the Association were present. The AAAS section officers' luncheon and business meeting, held on 28 December, was also well attended. Several members of the Committee on AAAS Meetings were present and contributed to a brief survey of the status of plans for this year's New York meeting.

Smokers

In addition to the traditional Section E Smoker for geologists and geographers, held the evening of 29 December, and the AAAS Smoker for all registrants, held the evening of 30 December, Sections F and G, for the second year, arranged a biologists' smoker, the evening of 29 December. This event was especially fitting in view of the meetings of the American Society of Naturalists, the American Society of Plant Taxonomists, Beta Beta Beta Biological Society, the National Association of Biology Teachers, and the Society of Systematic Zoology, and of the sessions of the Ecological Society of America and the Mycological Society of America, all in addition to the programs of Sections F and G. Local biological departments and societies were hosts in a real sense, since they had contributed the funds for the coffee. Those in charge were Albert Wolfson (Northwestern University), chairman, and Austin L. Rand (Chicago Museum of Natural History). Originally scheduled for the Museum, the biologists' smoker, for greater convenience, was transferred to the ballroom of the Morrison Hotel. It was a well-attended and pleasant affair.

In contrast, the AAAS Smoker was poorly attended. Though it was intended to be the terminal event of a full day, a large majority of the attendance

Table 3. Registrants by subject fields.

Mathematics and computers	135
Physical sciences	
Physics	267
Astronomy	61
Chemistry	412
Geology and geography	168
Engineering and industrial science	149
Biological sciences	
Ecology	122
Electron microscopy (in biology)	19
Botanical sciences	182
Zoological sciences	410
Genetics	103
Microbiology	56
Biology (in general, and other)	525
Agricultural sciences	62
Medical sciences	
Bacteriology	21
Biochemistry, including nutrition	171
Clinical chemistry	37
Physiology and space medicine	123
Psychiatry	38
Dental research	46
Pharmacology and pharmacy	106
Medicine (in general, and other)	280
Social and economic sciences	
Criminology	49
Social and economic sciences (in general, and other)	69
Anthropology and archeology	30
Psychology and neurophysiology	181
History and philosophy of science	47
Scientific communication	39
Science teaching	238
Education	169
General	84
No field indicated	237
Total	4636

either found two smokers on consecutive evenings a poor idea or had booked evening flights and train reservations. At the AAAS Smoker, as in past years, the Coca-Cola Company (through the Chicago Coca-Cola Bottling Company), the National Biscuit Company, and Philip Morris, Inc., donated their products. The Association gratefully acknowledges these generous and recurrent donations.

Attendance

As previously mentioned, in number of registrants (4636) the seventh Chicago meeting was the fifth largest in the 111-year annals of the Association. The number of paid registrations at the 1959 meeting substantially exceeded the registration at all other Chicago meetings except for the previous one, in 1947, which had 304 more registrants (a total of 4940). On that occasion the entomologists and most of the other larger biological societies held their national meetings with the AAAS; this is now a physical impossibility. In view of this and of the fact that air travel was blocked in the East during the first half of the meeting, the 1959 registration figure is impressive. To date, only 14 of the 126 AAAS meetings have exceeded 3000 registrants, and eight of the 14 have been meetings held in the past 11 years.

It is always true that the total attendance at any national meeting of the Association is greater than the number of registrants, since all programs and most events are open to everyone. This year nearly 100 percent of the professional scientists and teachers registered. (In the past certain societies have had a separate registration and some of their members may have regarded a "double registration" as superfluous or onerous, but there were no separate registrations at Chicago.) Always, however, there are several thousands of the science-minded general public who attend the evening lectures (particularly the Popular Lecture planned especially for them) or some other event and who do not register at all. Even a technical program for specialists may be attended by several times the number of registrants for that discipline (see Table 3). It is probable that at the Chicago meeting at least an additional 4000 individuals attended one or more of the 307 sessions. Finally, the registration total of 4636 does not

include 16 guests, 291 individuals connected with the exhibits, and 230 press representatives.

As Table 4 shows, 2013, or about 43 percent of the total number of registrants, came from Illinois. About two-thirds of these, or 30 percent of all registrants, came from the Chicago metropolitan area. The remaining 70 percent came from areas beyond commuting distance. Except for Hawaii, each of the 50 states in the nation was represented. Puerto Rico was represented by four persons; there were 26 registrants from Canada; and there were 27 scientists who represented 14 other countries. Most, if not all, of these were visiting scholars at American institutions.

The large attendance from so many geographical areas and the excellent representation at programs of each of the sections again demonstrated that, when programs of the symposium type are well chosen with respect to subject and are of high quality, a gratifying number of scientists and members of societies not meeting with the Association will travel long distances to attend them.

Table 3 shows an analysis of the 4636 registrants by subject field, except for 237 instances where the "field of

interest" line on the registration slip was left blank and where no other clues were available. Undoubtedly some of those who gave no field of interest were individuals who had registered hastily on their way to programs for which they were late. The remainder were principally wives of registrants. Between 300 and 400 wives attended the meeting, but many of these listed scientific interests. The "general interest" category includes a substantial number of research and other administrators.

In this analysis of subject fields, every effort was made to record each individual's primary interest: For example, high-school science teachers who indicated their major interest as teaching or science education were not classified as biologists or chemists, and so on. If the data on differences are grouped under still broader headings than those in Table 3, the composition of the registered attendance is as follows: physical sciences and applications, 1192 (26 percent); biological sciences and agriculture, 1479 (32 percent); medical sciences, 822 (18 percent); psychology and social and economic sciences, 415 (9 percent); science teaching and education, 407 (9 percent); general interest and other, 321 (7 percent).

The percentages for these groups

Table 4. Distribution of registrants by states and countries.

Alabama	9	Pennsylvania	120
Alaska	2	Rhode Island	7
Arizona	11	South Carolina	1
Arkansas	12	South Dakota	10
California	81	Tennessee	68
Colorado	28	Texas	44
Connecticut	33	Utah	14
Delaware	5	Vermont	5
District of Columbia	131	Virginia	54
Florida	32	Washington	12
Georgia	18	West Virginia	6
Idaho	4	Wisconsin	230
Illinois	2013	Wyoming	4
Indiana	275		
Iowa	126	Total, continental U.S.	4579
Kansas	37		
Kentucky	40	Brazil	1
Louisiana	40	Canada	26
Maine	6	England	2
Maryland	105	Germany	2
Massachusetts	67	Honduras	1
Michigan	239	India	5
Minnesota	83	Ireland	1
Mississippi	11	Jamaica	1
Missouri	80	Japan	1
Montana	6	Philippines	2
Nebraska	31	Puerto Rico	4
Nevada	1	Scotland	1
New Hampshire	5	Sweden	3
New Jersey	63	Taiwan	1
New Mexico	8	Thailand	4
New York	209	Venezuela	2
North Carolina	32		
North Dakota	3	Total, territorial and foreign	57
Ohio	130		
Oklahoma	21		
Oregon	7	Total registration	4636

have remained much the same in recent years. Over the past 11 years (except in 1957 in Indianapolis and in 1952 in St. Louis, when the physical sciences were first by a slight margin), the biological sciences have been the largest single group represented at each meeting, with, however, the physical and the medical sciences (in that order) following closely. Both the social sciences and science teaching and education have ranged from 5 to 9 or 10 percent each year.

Exhibitors of the books, instruments, and laboratory supplies which scientists and teachers use have an understandable interest in the composition of the attendance at AAAS meetings. From the foregoing data—and also in view of the fact that so many of the registrants were academic administrators, department heads, directors of research, and others in a position to decide on textbooks and other materials—it is

apparent that participation in an AAAS meeting, diversified as it is, is worth while for those who produce the things that scientists need.

Annual Exposition of Science and Industry

The 1959 Annual Exposition of Science and Industry was one of the most varied and attractive ever held. In addition to the "core exhibits" of publishers, supply houses, instrument companies, and laboratory-equipment firms, there were numerous and varied large-scale industrial exhibits—many especially built for this AAAS meeting—which were of decided interest to the thousands who saw them. The 103 booths filled the Constitution Room and the adjacent Parlors A—D of the Morrison Hotel and overflowed into the foyer. The AAAS Science Theatre,

filled to capacity throughout, was located at the far end of the exhibit area. The Visible Directory of Registrants was placed in the foyer at the entrance to the exhibits and the ballroom. These arrangements were made for the maximum convenience of the visitors to these several features and of those attending sessions in the hotel.

The local Committee on Exhibits, headed by William V. Kahler (president, Illinois Bell Telephone Company), with W. J. Peak (assistant vice president) as secretary, did an outstanding job in enlisting the interest and support of large firms in the Chicago area. The electric and electronic displays—missiles and related devices—and the demonstrations of new instruments for teachers and others in astronomy helped to make the 1959 exposition well worth repeated visits. A grateful acknowledgment of the work of the Exhibits Committee is made on behalf of the Associa-



Annual Exposition of Science and Industry

tion and of all those who enjoyed the exposition.

The names of nearly all of the 87 exhibitors and a description of their exhibits appeared both in the General Program and in the preconvention issue of *Science* [130, 1553 (4 Dec. 1959)]. Additional exhibitors, accommodated with desk space, were Air Research and Development Command Technical Films, Bio Kit, the Filbo Company, and *Particle*. A last-minute cancellation by one publisher made it possible to assign a booth to the Barnett Instrument Company of Tennessee.

AAAS Science Theatre

The Science Theatre, which at each meeting since the Chicago meeting of 1947 has shown a selection of the latest foreign and domestic scientific films, is now an established feature of the annual meeting of the Association. At the seventh Chicago meeting, 16-mm films were shown in seven 4-hour programs. Each film was shown twice and some a third time. The cooperation of the lending agencies is appreciated. A few films failed to arrive on time; for these, films provided by the Educational Testing Service were substituted. All films have now been returned to their sources; inquiries concerning them should be directed to the producers.

Work of the Local Committees

A scientific meeting as large and as complex as the annual meeting of the AAAS does not just happen. It cannot take place, nor can it succeed, without the cooperation and assistance of a great many agencies and persons. Of critical importance among these are the local committees and the general chairman and subchairmen who appoint them. The Association and all who attended the seventh Chicago meeting are greatly indebted to Edward L. Ryerson, former chairman of the board of Inland Steel Company and former chairman of the Board of Trustees of the University of Chicago, who made distinguished appointments to the local committees, kept in close touch with all phases of the meeting, and graciously welcomed members and friends of the Association on the evening of 28 December. On behalf of the Association, a grateful acknowledgment of our indebtedness to Mr. Ryerson is made here.

The able work of the Committee on Physical Arrangements and of the Committee on Exhibits has already been acknowledged. The remaining committees, in their respective fields, also contributed greatly to the meeting.

The Committee on Public Information, headed by Allen H. Center, vice president in charge of public relations of the Leo Burnett Company, provided expert advice and assistance in publicizing the meeting locally. Premeeting announcements in the press are not readily secured (probably because a meeting is not news until it happens), but in Chicago the local scientific societies and the local press did provide a reasonable amount of advance information. The coverage *during* the meeting—front-page features and inside stories on two or more pages each day—was exceptional, both in quantity and quality (no one recalls such extensive coverage of any previous scientific meeting by the leading newspapers of Chicago). The Association expresses its grateful appreciation. Additional details on this, and on the national coverage during the meeting, will be found in the report by Sidney S. Negus on page 518 of this issue.

The Association acknowledges with deep appreciation the work of the Finance Committee, which, through its chairman, Harry O. Bercher (executive vice president, International Harvester Company), in advance of the meeting, solicited funds to reduce the deficit. The firms and individuals who have made contributions to date include the following:

Allied Radio Corporation
Allied Structural Steel Companies
Allis-Chalmers Manufacturing Company
American Can Company
Atchison, Topeka and Santa Fe Railway System
Walter Bledsoe and Company
Borg-Warner Foundation, Inc.
Charles Bruning Company, Inc.
Burton-Dixie Corporation
Christiana Foundation, Inc.
Columbia Pipe and Supply Company
Commonwealth Plumbing Company
Continental Can Company, Inc.
Cutler-Hammer, Inc.
Charles C. Dawe Foundation
Dole Valve Company
DuKane Corporation
Fairbanks, Morse and Company
Field Enterprises Educational Corporation
Walter H. Flood and Company

General American Transportation Corporation
General Biological Supply House, Inc.
Globe-Union, Inc.
Granite City Steel Company
Illinois Tool Works
Inland Steel Company
International Harvester Company
International Minerals and Chemical Corporation
Joslyn Stainless Steels
M. S. Kaplan Company
La Salle National Bank
La Salle Steel Company
Link-Belt Company
Oscar Mayer Foundation, Inc.
McGraw-Edison Company
John Mohr and Sons
Motorola, Inc.
Nalco Chemical Company
Peabody Coal Company
Pickands Mather Fund
Precision Scientific Company
Republic Coal and Coke Company
Sinclair Research Laboratories, Inc.
SRA Foundation
Standard Forgings Corporation
Standard Oil Company (Indiana)
Sterling Products Company, Inc.
Swift and Company
Tousey Varnish Company
Union Tank Car Company
United States Steel Corporation
Victor Manufacturing and Gasket Company
Paul Weir Company, Inc.
Western Electric Company
Westinghouse Electric Corporation
Yale and Towne Manufacturing Company
Zonolite Company
Kenneth V. Zwiener

The Honorary Reception Committee included 36 heads of public and private agencies concerned with science and education. Many were able to be present during the meeting or made a point of attending the AAAS presidential address and reception.

Other Acknowledgments

In concluding this report of the 126th meeting, besides thanking all members of the local committees, I personally wish to thank the staff of the Chicago Convention Bureau which supplied expert professional assistance and friendly help throughout, as well as management personnel and sales managers of the various cooperating hotels—especially John B. Grande, Gerald G. Sanderson, and N. A. Rickman of the Morrison

Hotel; John A. Fenchon of the Sherman Hotel; and their counterparts at the Hamilton and La Salle hotels. Their many courtesies and great assistance were essential for the success of the meeting. The secretaries and program chairmen of each section and participating organization cooperated ably,

especially in providing copy and galley proof for the 272-page General Program, published by the Horn-Shafer Company of Baltimore. Finally, the debt to W. Gilbert Horn of that firm for his able and sympathetic cooperation in seeing the "book" through the press is great.

Awards and Prize Winners

A complete list of the recipients of the awards announced at the Association's seventh Chicago meeting appeared in an earlier issue of *Science* [131, 89 (1960)] and need not be repeated here.

Public Information Service

Sidney S. Negus

Last summer Allen H. Center, vice president in charge of public relations for Leo Burnett Company, Inc., was invited to be the chairman of the local committee on public information for the Chicago meeting of the AAAS, on a volunteer basis. Fortunately for the Association, he accepted this invitation and soon had working with him 22 mass-media communication experts to help set the stage locally for the complex operation of informing the public throughout the world of the reports to be made concerning the progress of science in all its branches at this great gathering of scientists from nearly 300 organizations in this country and abroad. In early fall, Patricia Hanson of TV station WTTW (channel 11), Chicago, agreed to help arrange all radio and television programs. A team of 27, including Eleanor Pollard and myself of Richmond, with the aid of John Fenchon and N. A. Rickman of the Sherman and Morrison hotels, respectively, started to make active preparations in mid-September for this meeting, in which 18 AAAS sections and 101 other organizations participated. Various preliminary details had been cleared during the summer months. Then the usual pre-meeting procedures, which had been found more or less successful in the past, were followed [*Science* 127, 409 (1958)].

One hundred and sixty-two accredited representatives of the press, radio, and television registered in the press room at Chicago. Sixty-eight other reporters from the United States and abroad reported the meeting from nontechnical

abstracts and from complete papers mailed to them upon request before and during the convention. This is approximately 80 less than the number of reporters who covered the Washington meeting in 1958.

The Chicago newspapers did an outstanding job of science reporting, thanks especially to Arthur J. Snider of the *Daily News*, Roy J. Gibbons of the *Tribune*, Robert S. Kleckner of the *Sun-Times*, and Effie Alley of the *American*. The Association appreciates Mayor Richard J. Daley's proclamation of 26-31 December 1959 as Science Week in Chicago.

International coverage by reporters for the wire services and science writers for newspapers and magazines was especially good, as far as can be determined from clippings and letters sent to the Association by friends. Since the meeting, requests have been received from individuals in 32 countries for more information about specific papers on the program.

Feature stories, not requiring close deadlines, are beginning to appear in various publications. As is usually the case, quite a few representatives of magazines registered in the press room solely to get ideas for future articles. Some of these articles may not appear for months and then, when they do appear, will carry no particular credit reference to the Chicago AAAS meeting.

National radio and television coverage was not up to the usual standard of AAAS meetings. There were only seven coast-to-coast broadcasts, whereas

at last year's meeting in Washington there were 11. In my opinion, broadcasting companies nationally are not as alert to the news in a great gathering of scientists as are the leading world newspapers and magazines, which employ expert science writers on their staffs. The daily local coverage by radio and television stations in the Chicago area, however, was exceptionally good. Thanks for this attention to timely news about science in general is extended by the AAAS public information service to stations WBBM (TV and radio), WNBQ-TV, WIND (radio), WBKB-TV, WGN (TV and radio), WAIT (radio), WCFL (radio), WLS (radio), WJJD (radio), and WAAF (radio) and to TV station WTTW (channel 11).

The American Tobacco Company Research Laboratory contributed daily coffee breaks for reporters working in the press room. Armour and Company's Research Division had luncheon served for science writers on one of the busy days in the Hollywood room. Fresh orange juice in the pressroom during the convention was contributed by the Florida Citrus Commission. The General Electric Company Research Laboratory suite, long a rendezvous for science writers at AAAS gatherings, held open house for three evenings. The reception and dinner arranged by the Westinghouse Electric Corporation for science writers was especially well attended by reporters. The Association is grateful to these friends of its public information service for helping to make enjoyable the extremely intensive task of reporting a meeting of this magnitude to the general public. To Paul E. Klopsteg, AAAS president at the time of the meeting, Wallace R. Brode, immediate past president, Chauncey D. Leake, AAAS president as of 15 January 1960, Dael Wolfe, AAAS executive officer, Raymond L. Taylor, associate administrative secretary in charge of arrangements for the Chicago meeting, and the AAAS Board of Directors go the thanks of this department, also, for giving it a free rein to function as it deems best for the Association.