

# Report of the Berkeley Meeting, 26-31 December 1954

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The report of any large scientific convention fulfills several useful functions. For those who were present, it provides an over-all account of the entire meeting, only a fraction of the sessions of which any person could have attended. Those who were absent are informed of what they have missed and may be prompted to attend another time. And, for future reference, there is a record of those data and impressions by which one year's meeting can be appraised or compared with others.

The 121st meeting of the American Association for the Advancement of Science—unique in that it was the Association's first national winter meeting west of the Rockies and also the first time in many decades that the AAAS has been able to meet, almost exclusively, upon a campus—was a truly memorable occasion. Although, inevitably, the housing accommodations were more scattered and less convenient than can be offered by the large hotels of a great city, this was offset by economies in cost, and the meeting was a decided success in all essential respects. The decision of the AAAS Executive Committee and Council to meet on the Berkeley campus of the University of California was amply vindicated since this meeting will long be remembered as one of the most pleasant, fruitful, and significant in the history of the AAAS.

Not only was this the largest diversified scientific meeting ever held on the Pacific Coast but it was one of the largest meetings ever sponsored by the Association, now in its 107th year. There were 3856 paid AAAS registrants, more than in any year since the exceptional 1949 meeting in New York. The Association does not make registration mandatory so it is probable that at least 4500 scientists, science teachers, and other science-minded persons were in attendance the week of 26-31 Dec. An *additional* 3612 persons visited the exhibits. Although size is not the most important aspect of a successful meeting, it is still an important factor, because it is related to the number of friends and colleagues one can meet and the number of persons who will hear, and perhaps discuss, one's paper. Both directly and indirectly, a substantial attendance assists materially with the finances of a meeting, through registration fees and from the satisfaction of the exhibitors who find that their expenses are well warranted.

In rich variety and high quality, the programs of the Berkeley meeting were impressive. No principal field of science was neglected. There were programs for specialists arranged by large societies in these fields and by some of the Association's sections. Characteristic of AAAS meetings, other sections and many of the participating societies organized strong interdisciplinary symposiums which brought diverse specialists together to consider areas of common concern. Of interest to nearly all scientists, such important matters as air pollution, scientific editorial problems, scientific manpower, the shortage of science teachers, and national security were presented to appreciative audiences. There were also all the customary features expected at AAAS meetings—outstanding evening addresses, the latest scientific films, large-scale exhibits, and, on the last evening, the traditional Biologists' Smoker with refreshments and cigarettes

contributed by the Coca-Cola Company, the National Biscuit Company, and Philip Morris & Co. Ltd., Inc.

Despite the record-breaking number of 105 symposiums, groups of invited papers, and panels, apparently all programs had audiences satisfactory to their chairmen. Indeed, there were numerous instances of expectations exceeded, which in some cases necessitated last-minute changes to a larger session room. In addition to the programs of the AAAS sections, an unprecedented number of 90 societies and other organizations participated, 57 with programs of their own, the others as official sponsors. One result was still another record: the AAAS General Program-Directory reached the unprecedented size of a 17-oz book of 420 pages.

There were favorable comments from all sides on the exceptional physical facilities of the University of California. In very large measure, credit for the efficiency and "smoothness" of the arrangements and servicing of the more than 350 sessions should go to the administrative staff and the employees of the university, who, without exception, were efficient, cooperative, and friendly to an unparalleled degree. The writer, the Association, and those who attended are especially indebted to those employees, faculty members and their wives, members and friends of the Association, and students who volunteered their services. The degree of assistance given in the AAAS Office, in the Press Room, in the exhibit area, and with the Visible Directory of Registrants constitutes a highlight of the Berkeley meeting.

Among the memorable events of the Berkeley meeting were the AAAS presidential address and reception, 28 Dec. President Robert Gordon Sproul's remarks when, as host and general chairman, he welcomed the AAAS to the campus, were delightful in their warmth and humor. Following President Warren Weaver's introduction of the retiring president, E. U. Condon received a spontaneous standing ovation prior to delivering his address, "A half-century of quantum physics." Not only was the auditorium of Wheeler Hall filled to capacity with some persons standing, but two additional rooms equipped with public-address systems were also filled beyond normal capacity. The AAAS reception that followed in nearby Stephens Memorial Union was thoroughly enjoyable, with refreshments arranged by Mrs. Sproul. Representatives of the Chinese and South African associations for the advancement of science were among those in the receiving line. The previous afternoon, Mrs. Sproul and Mrs. Clark Kerr had entertained some 400 ladies attending the meetings at tea in the Women's Faculty Club.

Through the cooperation of the University Food Services, those who roomed in the residence halls enjoyed breakfasts "in" before leaving for sessions of their choice. Coffee and light refreshments were available during the day in the lounge of the Gymnasium for Men and in the attractive new Alumni Lounge, which served as a meeting place for all. The University Cafeterias, which served all meals and took care of simultaneous banquets, were a convenience much appreciated by the attendance.

A significant occasion was the all-afternoon program for 850 selected high-school students from the San Fran-

cisco Bay area interested in science as a career, sponsored by the Association's Academy Conference and held on the new campus of San Francisco State College, a cosponsor. From 1 to 5 P.M. on 28 Dec. this audience of scientists of tomorrow (which could have been several times larger than it was if a larger auditorium had been available) enjoyed addresses and expert counsel on opportunities and careers in science from Warren Weaver and Harry C. Kelly, the GE "House of Magic," a panel, "Youth looks at science," moderated by James Stoney, and special film showings of *Nature's Half Acre* and *Water Birds*, through the courtesy of Walt Disney Productions. Local chairmen in charge of the entire project were Eugene Roberts, president of the California Science Teachers Association, northern section, and Robert Stollberg, professor of physical science and education at San Francisco State College. This Ninth Junior Scientists Assembly, especially arranged, was a departure from previous programs and marked the intention of the Association to do more for precollege science students at its annual meetings.

All aspects of the 121st AAAS meeting deserve more than passing attention and are discussed under subject headings.

**AAAS general symposium.** In Feb. 1954, the AAAS Symposium Committee, consisting of 19 prominent West Coast scientists, Warren Weaver, and the writer, ex officio, met in Berkeley to plan the General Symposium of the 121st meeting. One three-session general symposium, *Science and Society*, was decided upon, and separate program chairmen were chosen to organize each part, scheduled for 4 P.M., 27-29 Dec. inclusive. Part I, "Natural resources," arranged by Louis B. Slichter, speakers, Farrington Daniels, Evan Just (in absentia), and J. G. Harrar; part II, "Population problems," arranged by Curt Stern, speakers, Curt Stern, Dudley Kirk, and Alan Gregg; and part III, "Science in human thought and action," arranged by Roger R. Revelle, speakers, Joel Hildebrand, Bart Bok, and John von Neumann. All these enjoyed appreciative audiences, which ranged in size from 250 to 600.

**Other symposiums.** At Berkeley, the sections and societies together scheduled 105 symposiums, groups of invited papers, panels, or other sessions centered about a particular theme. The number is larger than that for any previous AAAS meeting—the previous high was 62 at St. Louis. Even discounting an arbitrary quality in classifying as a "symposium" any session of papers grouped under a common subject heading, the number of well-planned, organized programs of this type was impressively large. It would be impracticable to repeat here the complete list, which has appeared both in the General Program-Directory and in the pre-convention issue of *Science*, but some of these symposiums should be singled out because of the subject or the attendance they attracted. These include (figures in parentheses are attendance counts made during the sessions):

Third Berkeley Symposium on Mathematical Statistics and Probability, *Statistical Mechanics* (225), *The Spatial Distribution of Galaxies* (205), and *Probability and Induction* (225); American Physical Society, *High Energy Physics* (360) and *High Energy Machines* (460); Section C, *Nucleic Acids and Nucleotides* (160); Section E, *Earth Sciences from the Air* (85, 320).

**Marking Organisms in Ecological Studies** arranged by the Ecological Society of America, western section (140); National Association of Biology Teachers, especially *Biology for Survival* (190); Western Society of Naturalists,

*Photochemical Effects in Biological and Biochemical Systems* (121, 116), *Natural Resources of the West* (124), and *The Cell* (539, 550); Section G, *Modern Views on Tissue Differentiation* (102); *The Mode of Survival of Plant Pathogens in the Soil* (124), a program of the American Phytopathological Society, Pacific division; and Mycological Society of America, *Physico-chemical Control of Structural Differentiation in the Fungi* (265).

Section H, *Culture Change in the Pacific Area* (65, 118); Section I, *The Nervous System and Behavior* (155); *Perception: Learned and Unlearned* arranged by the Western Psychological Association (168); Section K, *The Social Structure of Cities* (120); the session, *National Defense against Atomic Attack* of the National Academy of Economics and Political Science (132); Section M, *Air Pollution* (170, 203).

Section N, *Physiology of Growth—Normal and Abnormal* (212, 210); *Preparation for Medical and Dental Education in the Liberal Arts College* arranged by Alpha Epsilon Delta (160); panels on *Recent Advances in Psychiatry-Pharmacology*, American Psychiatric Association (100, 98); *Recent Advances in Biophysics and Medical Physics*, Donner Laboratory of Biophysics and Medical Physics of the University of California (181, 278); *Adrenal-Pituitary Relationships*, Society for Experimental Biology and Medicine, Southern California and Pacific Coast sections (100); Section O, *Water Supplies and Irrigation* (135).

Section P, *The Roles of Government, Industry, and the University in Basic Research* (120, 120); AAAS Cooperative Committee on the Teaching of Science and Mathematics, *The Crisis in Science Education* (104, 108); National Science Teachers Association, *Science Teachers Face Their Problems* (215, 269, 295); and *Research in Science Education* (196); *Recent Scientific Explorations in the West and Their Contributions to Natural History* arranged by the American Nature Study Society (163).

Although vigorous attempts were made to schedule programs in a given field of specialized interest to avoid conflicts, it was inevitable that most individuals attending the meeting had to choose, each half-day, among several sessions in which they were interested. The aforementioned symposiums competed not only with one another, in many instances, but also with a variety of other sessions and events. Each program chairman, however, had the satisfaction of realizing that the audience at his session chose his program in preference to all the others available at the same time. An idea of the number of alternatives, occurring principally on the four days, 27-30 Dec., inclusive, may be gained from Table 1.

**Analysis of sessions.** A comparison of the types of sessions primarily sponsored by AAAS sections and by the societies (there were, of course, many instances of joint sessions of sections, of societies, and of sections and societies) indicates, as might be expected, that the societies tend to arrange more sessions for contributed papers

Table 1. Analysis of sessions of the Berkeley meeting.

|                                       |            |
|---------------------------------------|------------|
| Sessions for contributed papers       | 97         |
| Sessions for symposiums, panels, etc. | 137        |
| Round-table sessions                  | 15         |
| Business sessions                     | 45         |
| Meal functions (many with addresses)  | 45         |
| Other sessions with addresses         | 29         |
| <b>Total sessions</b>                 | <b>368</b> |

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

| Item  | AAAS and its sections<br>and conferences  | Societies                        | Total<br>no.<br>sessions<br>with<br>papers | Total<br>no.<br>papers |
|---|---|----------------------------------|--|------------------------|
| Sessions for contributed papers                                 | 33 (by 10 sections),<br>216 papers        | 64 (by 17 societies), 518 papers | 97   | 734                    |
| Sessions for symposiums,<br>groups of invited papers,<br>panels | 52 (including 13 sections),<br>217 papers | 85 (by 30 societies), 405 papers | 137  | 622                    |
| Additional papers of listed<br>discussants                      | 25 papers                                 | 15 papers                        |  | 40                     |
| Addresses and lectures  | 13 papers                                 | 32 papers                        | 44   | 45                     |
|   |   | Total                            | 278  | 1441                   |

than do the sections, which have shown a growing interest in planning symposiums. It may be noted, however, that 10 of the Association's 18 sections scheduled a total of 33 sessions for contributed papers at which 216 such papers were read. It is particularly interesting that, on the other hand, 30 of the participating societies arranged a total of 85 sessions that could be classified as symposiums or groups of invited papers with comprehensive titles. In the combined total of 1441 papers and addresses prepared (multiple authors and program chairmen were not counted) for the 121st meeting, 734, approximately one-half, were of the short or contributed type. At most large scientific meetings, the sessions are preponderantly or even exclusively devoted to short reports of current specialized research, not centered around an inclusive theme. A summary of the comparison between sectional and societal programs is given in Table 2.

*Conferences.* There are at present three recurrent conferences at AAAS meetings. The Academy Conference made up of the official delegates of the 42 academies of science affiliated with the Association and others interested in academy affairs had a fruitful day of reports and round-table discussions, an afternoon address on the National Science Talent Search by Margaret Patterson, and a dinner with a presidential address by Wayne Taylor. The enlarged Ninth Junior Scientists Assembly, under the auspices of this conference, is mentioned in a preceding paragraph. The Conference on Scientific Manpower met at Berkeley for the fourth time on an organized basis. The third Conference on Scientific Editorial Problems increased its sessions to four. The First International Conference on Animal Venoms, cosponsored by AAAS Sections F and N, had eight sessions at which 65 papers from 14 countries were read, many of them necessarily in absentia. The attendance at this highly specialized conference ranged from 12 to 67 with an average of 31.

*Special sessions.* The distinguished evening addresses that add so much to meetings of the Association each year were continued at Berkeley and, without exception, all enjoyed large and responsive audiences. In chronological order, the speaker for the National Geographic Society's annual lecture and color motion picture was W. Robert Moore; his subject, "Five-star Burma," was enjoyed by some 3400 persons in the Berkeley High School auditorium. The 15th annual address of the United Chapters of Phi Beta Kappa with the AAAS was delivered by Conway Zirkle; his subject, "Our splintered learning and

the status of scientists," provocatively phrased, was an eloquent plea for a much broader and better integrated foundation in the liberal arts training of scientists. The AAAS presidential address, E. U. Condon's "A half-century of quantum physics," not only was a scholarly review of developments in this field but was enlivened by personal anecdotes that revealed how the author's own interest began. The annual address of the Society of the Sigma Xi, the latest in a series that began in 1922, was given by one of the University of California's own scientists, Nobel prize winner Edwin M. McMillan, who spoke on "High-energy physics." The seventh annual address of the Scientific Research Society of America, "Science and progress?" delivered by Vannevar Bush, dealt with science and national affairs, especially the need for a better system of national security. An additional special session at Berkeley was an afternoon address, 30 Dec., arranged by the Pacific Science Board. Alexander Spoehr's subject, "The human background of Pacific science," rounded out a brilliant series of public lectures at the Berkeley meeting.

*AAAS business sessions.* As required by the constitution, the Association's board of directors held its fourth regular meeting of the year at Berkeley; as usual its sessions preceded those of the AAAS council. The annual section officers' luncheon was well attended, and a good start was made on sectional plans for the Atlanta meeting.

*Attendance.* As mentioned previously, the 3856 paid registrations at the Berkeley meeting exceeded those of any year since the exceptional AAAS meeting of 1949 in New York (when a maximum number of societies that usually do not meet with the Association were present). This total is some 4 times the registration totals of the June meetings of the AAAS Pacific division. A geographic analysis of these registrants is given in Table 3.

Although the large and populous state of California provided three-fourths of the registrants, all sections of the nation were well represented. The only states without individual registrants were New Hampshire, South Carolina, South Dakota, and Vermont. Particularly gratifying was the attendance from the Atlantic seaboard, the Great Lakes area, and the southern states.

The *total attendance* of professional scientists, faculty members, other teachers, and graduate students at any national meeting of the Association is always greater than the number of paid registrations. This is due to a long-standing policy of the AAAS that all programs, from the semipopular evening addresses to the highly

technical paper-reading sessions or symposiums, should be open to all interested persons. Often this unpaid attendance is considerable. Some of the societies meeting with the AAAS maintain separate registrations and several may collect a fee of their own. It is understandable, in such instances, that some of the members of these societies may regard a double registration as onerous or superfluous. At Berkeley, if the unduplicated registrations of societies with separate registrations had been added, then almost certainly the AAAS registration total would have been at least 4500. In addition to the registration totals, there were 3612 science-minded persons who visited the Annual Exposition of Science and Industry, using complimentary tickets of admission. It may be conservatively estimated, therefore, that some phase of the Berkeley meeting was attended by approximately 10,000 individuals. Analyses of the subject fields of the registrants and of the additional visitors to the exposition is given in Table 4.

Although AAAS registration is not mandatory, as is true at the more homogeneous meetings of a single scientific discipline, the Association encourages and appreciates paid registrations, which are needed to assist with the finances of the meeting. The registration fee has been kept at the moderate figure of \$2.50 so that lower-income

teachers and students will find it possible to be completely a part of the meeting. A large majority of the 3856 registrants at Berkeley were AAAS members or members of the participating societies, but there was a gratifying number of others who demonstrated that they wished to support the meeting in this way, or who felt that the fee was well worth what it meant in return—a book-size General Program-Directory; posting in the Visible Directory of Registrants; an AAAS convention badge for admission to the Science Theatre, the Exposition, the Biologists' Smoker with its free refreshments and cigarettes, and the Morrison Planetarium of the California Academy of Sciences in San Francisco. For AAAS registrants who had their cars in Berkeley, the University of California thoughtfully provided special parking privileges.

*Physical arrangements.* With the exceptions of the evening illustrated lecture of the National Geographic Society (in the auditorium of the Berkeley High School), the Ninth Annual Junior Scientists Assembly (at San Francisco State College), the program of Beta Beta Beta (Trinity Methodist Church), the programs of Section P, and the annual conventions of the Society of Sigma Xi and the Scientific Research Society of America (at the Hotel Claremont), and some of the meal functions of the participating societies, all sessions of the 121st meeting were held in classroom buildings on the campus of the University of California. Fifty-eight session rooms were used, all stocked at the beginning of the week with whatever equipment had been requested. Some 90 percent of these had two sizes of lanterns; a number had 16-mm motion picture projectors. Two projectors of the are type were particularly helpful for the 3-D film, *Status of Photo-Interpretation in Petroleum Geology*, and in program V of *Science in the Arctic*, which preceded the Biologists' Smoker. An additional 14 rooms for meals and social functions, 9 rooms for committee meetings, and 4 for headquarters rooms were employed.

The centrally located, large Gymnasium for Men was an admirable center for the entire meeting. The lobby contained the AAAS Registration and Information Centers and the main corridor next to it afforded space for a variety of tables for society registrations, room assignments in the residence halls, sale of tickets for meal functions, signing up for tours, and the like. Unprecedentedly for a nonuniversity event, the basketball floor, carefully covered with a heavy tarpaulin, housed the Annual Exposition of Science and Industry. Large rooms near the exhibit housed a lounge, in which light refreshments were available, and the Visible Directory of Registrants, and check room. The AAAS Science Theatre occupied a room at the other end of the central corridor. For this, excellent projection facilities were provided; and, typical of the thoughtfulness and thoroughness of the Committee on Physical Arrangements, those attending the theatre enjoyed comfortable leather-covered seats, which came from virtually every faculty office in the university. Not only did the Department of Physical Education cheerfully evacuate an entire suite of offices for the AAAS Office, but a number of its staff offered whatever else might be needed. The AAAS Office began full operation the morning of 22 Dec. Despite a basketball game on the night of 22 Dec., all facilities of the Gymnasium for Men were set up by 5 P.M. 23 Dec.

For the convenience of all, the California Alumni Association made available its new building and lounge as a place in which to meet or to rest. Campus tours for visiting ladies were arranged here with faculty wives in charge.

*Housing facilities.* Although, of necessity, every visitor

Table 3. Distribution of registrants by states and countries.

|                      |      |                    |      |
|----------------------|------|--------------------|------|
| Alabama              | 2    | Texas              | 26   |
| Arizona              | 26   | Utah               | 48   |
| Arkansas             | 3    | Virginia           | 8    |
| California           | 2904 | Washington         | 100  |
| Colorado             | 29   | West Virginia      | 3    |
| Connecticut          | 12   | Wisconsin          | 25   |
| Delaware             | 1    | Wyoming            | 2    |
| District of Columbia | 39   |                    | —    |
| Florida              | 7    | Total, continental |      |
| Georgia              | 5    | U.S.               | 3786 |
| Idaho                | 11   |                    |      |
| Illinois             | 43   | Alaska             | 3    |
| Indiana              | 27   | Australia          | 3    |
| Iowa                 | 18   | Brazil             | 4    |
| Kansas               | 9    | Canada             | 23   |
| Kentucky             | 3    | Egypt              | 1    |
| Louisiana            | 10   | England            | 2    |
| Maine                | 1    | Formosa            | 2    |
| Maryland             | 18   | France             | 1    |
| Massachusetts        | 28   | Germany            | 1    |
| Michigan             | 25   | Hawaii             | 14   |
| Minnesota            | 16   | India              | 1    |
| Mississippi          | 1    | Israel             | 1    |
| Missouri             | 8    | Japan              | 1    |
| Montana              | 9    | Korea              | 2    |
| Nebraska             | 9    | Mexico             | 3    |
| Nevada               | 21   | Netherlands        | 1    |
| New Jersey           | 11   | Norway             | 1    |
| New Mexico           | 21   | Peru               | 1    |
| New York             | 53   | Philippines        | 1    |
| North Carolina       | 9    | South Africa       | 1    |
| North Dakota         | 1    | Spain              | 1    |
| Ohio                 | 22   | Venezuela          | 2    |
| Oklahoma             | 12   |                    | —    |
| Oregon               | 115  | Total, territorial |      |
| Pennsylvania         | 31   | and foreign        | 70   |
| Rhode Island         | 5    |                    | —    |
| Tennessee            | 9    | Total registration | 3856 |

Table 4. Attendance by subject fields.

| Subject                              | 3856<br>regis-<br>trants | 3612<br>compli-<br>mentary<br>admis-<br>sions |
|--------------------------------------|--------------------------|---|
| Mathematics and statistics           | 197                      | 81  |
| Physical sciences                    |                          |   |
| Physics                              | 258                      | 394   |
| Meteorology                          | 32                       | 6   |
| Astronomy                            | 75                       | 54  |
| Chemistry                            | 345                      | 287   |
| Geology and geography                | 67                       | 49  |
| Engineering and industrial science   | 118                      | 291   |
| Biological sciences                  |                          |   |
| Plant pathology and mycology         | 68                       | 18  |
| Other botanical sciences             | 179                      | 45  |
| Ecology                              | 60                       |   |
| Limnology, oceanography, ichthyology | 59                       | 8   |
| Genetics and cytology                | 64                       | 10  |
| Microbiology                         | 51                       | 7   |
| Zoological sciences                  | 374                      | 107   |
| Biology (in general, and other)      | 244                      | 126   |
| Agriculture and conservation         | 91                       | 67  |
| Medical sciences                     |                          |   |
| Bacteriology and virology            | 61                       | 42  |
| Biochemistry and nutrition           | 206                      | 45  |
| Biophysics                           | 36                       | 7   |
| Physiology                           | 108                      | 18  |
| Dental research                      | 34                       | 11  |
| Pharmacy, pharmacology, toxicology   | 55                       | 15  |
| Medicine (in general, and other)     | 257                      | 175   |
| Psychology                           | 156                      | 67  |
| Anthropology                         | 43                       | 25  |
| Economic and social sciences         | 56                       | 164   |
| History and philosophy of science    | 18                       | 32  |
| Science teaching and education       | 209                      | 293   |
| Scientific editorial problems        | 43                       | 22  |
| General                              | 292                      | 794   |
| No field indicated                   |                          | 352   |
| Total                                | 3856                     | 3612  |

could not enjoy a single room (relatively scarce at any convention), the hotels and motels of Berkeley, in conjunction with the university residence halls and International House, proved adequate housing accommodations for those who traveled to the meeting beyond commuting distance. An admirable job of processing the many applications for housing accommodations was done by the staff of the Convention Bureau of the Berkeley Chamber of Commerce, headed by Weldon E. Vance. His help in this and throughout the year is gratefully acknowledged.

*AAAS Public Information Service.* The AAAS Press Room utilized the facilities of *The Daily Californian* in Eshleman Hall. Those who visited this busy room during the meeting gained some impression of the efficient way in which science writers and other reporters were provided with releases during the meeting by Sidney S. Negus, AAAS Director of Public Information, whose full-time job the rest of the year is chairman, department of biochemistry, Medical College of Virginia. Negus reports:

"The University of California furnished ideal facilities for the world-wide reporting of the news of the meeting. Daniel M. Wilkes, science writer in the university's de-

partment of public information, started to set the stage for the complicated operation 4 months before the 121st meeting began. The secretaries and program chairmen of the 18 AAAS sections and the 90 participating societies cooperated fully, as did the 1750 persons on the program and the Association's presidents, Condon, Weaver, and Beadle. When the meeting got under way, Maynard T. Morris, head of public information for the university, and Richard H. Neddersen, acting business manager, helped greatly.

"One hundred twenty-two reporters representing the press, radio, and television covered the meeting directly from the campus. All American and several foreign wire services and leading news magazines were represented. Eighty-eight other individuals in the United States and abroad reported the meeting from abstracts and papers mailed to them. Coverage by the West Coast newspapers and broadcasting stations was exceptionally good. Reports of the meeting must have been widely distributed outside the West Coast area, since reporters filed approximately 70,000 words by Western Union wires alone. Many of these wire reports were relayed to news outlets in every country on the globe for millions of people to read. In addition, many pictures taken at Berkeley during the week were received by wire in newspaper offices everywhere.

"Active members of the National Association of Science Writers present at the meeting and representatives of West Coast newspapers and magazines were entertained most hospitably by President and Mrs. Robert Gordon Sproul at the Bohemian Club in San Francisco, by Mr. and Mrs. Henry J. Kaiser, Jr., at their home in Oakland, and by Robert Cutter at the Claremont Hotel in Berkeley. Freshly crushed orange juice was served continuously in the Press Room for the 6 days of the meeting by Sunkist Growers. Lunches were served the press each day by the American Tobacco Co. Research Laboratory of Richmond, Va., Noyes and Sproul, Inc., of New York, and Sunkist Growers of Los Angeles. The General Electric Research Laboratory of Schenectady, N.Y., held its usual "open house" every evening at the Shattuck Hotel in Berkeley. The Association is grateful to these individuals and organizations for making the public information function of the meeting so pleasant.

"Three Nobel prize winners, Edwin M. McMillan, Glenn T. Seaborg, and Wendell M. Stanley kindly served as Press Room consultants. George C. Tenney of McGraw-Hill Publishing Co., chairman of the local committee on public information, assisted in many ways. Nancy Kern of Berkeley handled in superior fashion the 25 radio and television programs that she set up on public service time. Several of these programs were broadcast coast-to-coast. Associates in the Press Room were Thelma C. Heatwole of Staunton, Va., and Margaret Blaney of San Francisco, with Wayne Taylor of Denton, Tex., in charge of photography. These individuals and the other five Press Room assistants were of invaluable aid in serving reporters to whom, more than to any others, goes the credit for helping to make possible the fulfillment of one of the principal objectives of the AAAS—to increase public understanding and appreciation of the importance and promise of the methods of science in human progress."

Reports and news of the Berkeley meeting in magazines will continue to appear during the year. One of the first of these was the initial six pages of *Life* for 10 Jan. 1955.

*AAAS Science Theatre.* Beginning Monday morning, 27 Dec., and ending Thursday afternoon, 30 Dec., in eight programs, each 4 hours long, 47 of the latest foreign and

domestic scientific films were presented. Each title was shown twice, with two exceptions of films shared with AAAS sections and for which other films were substituted. Through the kind cooperation of a faculty member, the number of persons present at each showing of each film was recorded. On the first day attendance began with 20 persons but climbed to 115 by 11 A.M. Thereafter, the audiences ranged principally from 75 to 160 and on Thursday afternoon reached maxima of 220 with *The Transistor* and 250 with *The Dances of the Bees* of Karl von Frisch. The average attendance was exactly 100—excellent, considering the large number of attractive concurrent sessions. It was noted that afternoon audiences exceeded those of the mornings and that, on the last day, the attendance was substantially heavier than on the preceding days. *The Bronchopulmonary Segments* of Chevalier L. Jackson, John F. Huber, and Charles Norris was not completed in time (it will be shown at the Atlanta meeting). Substituted for it was *Seifriz on Protoplasm* produced by J. M. B. Churchill, Jr., of Croton-on-Hudson, N.Y. The Association again expresses its appreciation to those who so kindly lent such excellent films.

*Annual Exposition of Science and Industry.* The 1954 Annual Exposition of Science and Industry was a decided success in the opinion of the exhibitors, who are the final judges. Because of a combination of circumstances—a scheduled basketball game on the evening of 22 Dec. and the observance of 24–26 Dec. as general holidays for all labor concerned—it was necessary for the university help to install the protective tarpaulin immediately after the game ended, and for the decorator, the J. L. Stuart Manufacturing Co. of San Francisco, to erect the 105 booths early on 23 Dec. By 5 P.M. that day many of the exhibits had been installed; the balance were done on the morning of 27 Dec. For an hour prior to opening time that afternoon, people had gathered before the entrance door. When 2 P.M. arrived, people radiated out through all the aisles, as one observer put it, “like logs filling a mill pond when a lumber drive is on.” Thereafter, during the 4 days the exhibits were open, booth traffic was heavy and satisfactory. The visitors were seriously interested in the latest tools and techniques of science and industry, and the exhibitors were pleased with their response.

The names of most of the 66 exhibitors and descriptions of their exhibits appeared both in the General Program Directory and in the preconvention issue of *Science*. Those that did not are listed here.

Alameda Naval Air Station

California State Department of Public Health (Sponsored by the Kaiser Steel Corp.)

Crown Zellerbach Corp.

Encyclopaedia Britannica, Inc.

Great Books of the Western World

Hazatrol, Inc.

Nateol Laboratories

University of California History of Science Library

University of California Press

As in past years, we are indebted to the Special Libraries Association, this time the San Francisco Chapter, for supervising the Science Library.

*Work of the local committees.* The Berkeley meeting enjoyed both exceptional physical facilities and the efficient services of many skilled persons. It is not an exaggeration that literally all the resources of the great University of California were placed at the disposal of the Association by the general chairman of the meeting, Robert Gordon Sproul. This meant not only classrooms, gymnasiums, residence halls, and cafeterias but also highly

trained men and women at all levels. Sproul, who accepted the general chairmanship in 1953, appointed the several local committees early in 1954 and, with the assistance of the executive secretary, George A. Pettitt, he kept in close touch with their work. The complete list appeared in the preconvention issue of *Science*. It was obvious to those in attendance that all phases of the meeting were operating with unequaled smoothness. In a very large measure, this was due to the caliber of the Committee on Physical Arrangements and the degree of planning, supervision, and personal assistance all its members contributed. Particular mention is made of this committee's chairman, Richard H. Neddersen, acting business manager of the university, for he chose his fellow-members carefully, organized all details soundly, and, when the meeting began, virtually moved into the AAAS Office, where he solved a multitude of small vexations systematically and with expedition. He was ably assisted by Joseph W. Hutchison, principal superintendent of grounds and buildings, and J. E. Lateana, principal audio-visual specialist, who, respectively, supervised the supply of physical equipment and projection. Ruth N. Donnelly, housing supervisor, not only organized the use of the residence halls but assisted materially with the AAAS reception and other social aspects of the meeting.

Sidney Negus in his report has testified to the services of the Committee on Public Relations. The extent of the contribution of this committee was apparent to all who visited the press headquarters or read the newspapers of the Bay area.

The Committee on Exhibits, under the chairmanship of Robert K. Cutter, president of Cutter Laboratories, worked hard from March on, to interest local industries in taking booth space. To this committee and Arthur K. Beekley of Cutter Laboratories, which absorbed all costs for local promotion of the exposition, goes the credit for securing representation from so many West Coast firms.

The Committee on Finance, with James B. Black, president of the Pacific Gas and Electric Co., as chairman, fully realized its objectives in raising funds to assist with the expenses of the meeting. Because the location of the meeting was more distant than usual, the Berkeley meeting was faced with a larger potential deficit. With D. M. Sheldon, and later J. W. Givens, both of Shell Development Co., serving as informal secretaries, public-spirited firms of the San Francisco Bay area began as early as 1951 to make pledges and contributions that totaled about half of the estimated sum needed. In September 1954, the Committee on Finance began to collect all early pledges and then secured a further sum that constituted more than half of the final total. The contributing firms were:

Allied Chemical and Dye Corp., General Chemical Division  
American Forest Products Co.  
American Trust Co.  
Bakelite Co.  
Bank of America  
Bechtel Corp.  
Bishop Oil Co.  
Braun-Knecht-Heimann Co.  
California and Hawaiian Sugar Refining Corp.  
California Packing Corp.  
Calveras Cement Co.  
Carbide and Carbon Chemicals Co.  
Columbia-Geneva Steel Division, U.S. Steel Corp.  
Crown Zellerbach Corp.  
Dean Witter and Co.  
Dow Chemical Co.

Electro-Metallurgical Co.  
 Fibreboard Products, Inc.  
 Food Machinery and Chemical Corp.  
 General Electric Co.  
 General Metals Corp.  
 Haynes Stellite Co.  
 Henry J. Kaiser Co.  
 Hercules Powder Co.  
 Honolulu Oil Corp.  
 Ideal Cement Co.  
 Johns-Manville Corp.  
 Kaiser Aluminum and Chemical Corp.  
 Kaiser Engineers  
 Kaiser Steel Corp.  
 Kern County Land Co.  
 Levi Strauss and Co.  
 Linde Air Products Co.  
 Monsanto Chemical Co.  
 National Carbon Co.  
 Pabco Products, Inc.  
 Pacific Gas and Electric Co.  
 Pacific Telephone and Telegraph Co.  
 Permanente Cement Co.  
 Schlage Lock Co.  
 Shell Oil Co.  
 Spreckels Sugar Co.  
 Standard Oil Company of California  
 Stauffer Chemical Co.  
 Union Oil Company of California  
 Westinghouse Electric Corp.

To these should be added contributions made by the Hotel Claremont of Berkeley and by the United-Carr Fastener Corp. of Cambridge, Mass., the latter made to the AAAS for any worthy purpose and applied to the Berkeley meeting. The Association gratefully acknowl-

edges these contributions and expresses its deep appreciation to all members of the local committees for their services.

#### Awards and Prize Winners at the Berkeley Meeting

AAAS 27th Newcomb Cleveland Prize of \$1000—Daniel H. Alpert, research physicist, Westinghouse Electric Corp., for his paper, "Experiments at very low pressures," read before a joint session of the American Physical Society and Section B; presented 30 Dec.

AAAS 10th Theobald Smith Award in the Medical Sciences, given by Eli Lilly and Co.—\$1000, a bronze medal, and \$150 travel expenses—Winston Harvey Price, associate professor of biochemistry, School of Hygiene and Public Health, Johns Hopkins University, for his epidemiological studies on Rocky Mountain spotted fever and typhus; presented in absentia at a session of Section N, 27 Dec.

Scientific Research Society of America—4th William Procter Prize of \$1000—Vannevar Bush, president, Carnegie Institution of Washington, for scientific achievement and distinction in scientific administration; presented at the annual RESA address, 30 Dec.

Cranbrook Institute of Science—Mary Soper Pope medal—Irving W. Bailey, professor of plant anatomy, Harvard University, for distinguished work in botany; presented at the botanists' dinner sponsored by Section G and cosponsored by the American Society of Plant Physiologists, western section, the Botanical Society of America, Pacific section, and the Mycological Society of America.

John Scott Award—Robley C. Williams, research biophysicist, Virus Laboratory, University of California; presented at the end of the symposium on "Viruses" of Section C and the American Chemical Society, California section.



## The 1954 Meeting of the Council of the AAAS

Dael Wolfe

*Administrative Secretary*

The 1954 meeting of the Council was held in two sessions, at 4 P.M. on 27 December and at 9 A.M. on 30 December. Both sessions were held on the campus of the University of California at Berkeley. President Warren Weaver presided.

#### Elections and Officers

1) The Council elected Paul B. Sears as President Elect, and Chauncey D. Leake and Margaret Mead as members of the Board of Directors. The entire list of general officers of the Association (those elected by the Council), including those elected at earlier meetings, is as follows. (Expiration dates are given in parentheses following the names of officers who serve for fixed terms of more than one year.)

Retiring President and Chairman of the Board of Directors: Warren Weaver (1955), Rockefeller Foundation

President: George W. Beadle (1956), California Institute of Technology

President Elect: Paul B. Sears (1957), Yale University

#### Other Members of the Board of Directors

John R. Dunning (1955), Columbia University  
 Laurence H. Snyder (1955), University of Oklahoma  
 Mark H. Ingraham (1956), University of Wisconsin  
 Paul E. Klopsteg (1956), Glenview, Illinois  
 Wallace R. Brode (1957), National Bureau of Standards  
 Thomas Park (1957), University of Chicago  
 Chauncey D. Leake (1958), University of Texas Medical Branch, Galveston  
 Margaret Mead (1958), American Museum of Natural History  
 Paul A. Scherer (ex officio), Carnegie Institution of Washington  
 Dael Wolfe (ex officio), AAAS