Hotel; John A. Fenchen 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 Fenchen 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 Wolfle, 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.

Thelma C. Heatwole, technical editor for Armour and Company, Research Division, was director of the press room. After this experience for eight consecutive annual meetings of the Association, she has become an expert among science writers of the country as an intermediary between scientists and the press. She arranged 17 press conferences during the meeting. Allen H. Center and Patricia Hanson maintained their headquarters in the press room, and the latter had a special suite at the Morrison Hotel for radio and television interviews. These individuals, with the help of Foley F. Smith of Richmond, Mrs. Hjalmar W. Johnson and Marion E. Pretzal of Chicago, C. W. Hoerr and Jean D'Ottavio of Armour and Company's Research Division, John Jacoby of Flushing, New York, and William Haskell and Eleanor O'Hara of the AAAS staff, provided source material quickly for the science writers covering the meeting. Largely to these reporters goes the credit for attaining, through these annual meetings, one of the four principal objectives of the Association: increasing public understanding and appreciation of the importance and promise of the method of science in human progress.

The Association deeply appreciates the world-wide coverage of its meetings by members of the National Association of Science Writers and other representatives of the fourth estate.

Reports of Sections and Societies

Mathematics (Section A)

Section A had three meetings. At 4 P.M. on Saturday, 26 December, R. H. Bing (University of Wisconsin), retiring vice-president, gave his address, "Topology of Euclidean three-space," discussing the present state of knowledge in this field.

On Sunday at 9 A.M. there were four invited addresses on "The New Look in Mathematical Education." G. Baley Price (University of Kansas and the California Institute of Technology) reported on the work of the Committee on the Undergraduate Program, giving a brief statement of the background of this committee, what it wishes to accomplish in modifying the mathematical curricula in American colleges, and the success that has so far attended its efforts. Henry Swain (Winnetka, Ill.) spoke in particular of the new ninth grade course devised by the School Mathematics Study Group, of which he is a member, and emphasized the success that pilot classes have had with this curriculum. Morris Kline (New York University) objected to the present trend of curriculum planning committees and made a plea for teaching the applications of mathematics to physics and engineering. William M. Duren, Jr. (University of Virginia), stated that analytic geometry is now being required for entrance by most eastern colleges, and he predicted (without endorsement) that before long elementary calculus will be so required.

On Monday at 9 A.M. there was a symposium on Trends in the Applications of Mathematics cosponsored by Section A and the Society for Industrial and Applied Mathematics. Mina Rees (Hunter College) presided, and opened the symposium by emphasizing the increased use of modern mathematics by industry. R. F. Drenick (Bell Telephone Laboratories) spoke on random processes in control and communications. He stated that the theory of random processes utilizes many modern concepts (sets, measures, spaces of infinite dimensionality) and leads to results which hold true on the average. Its application has been strikingly successful in control and communications engineering, and in statistics. Philip Wolfe (Rand Corporation) spoke on mathematical programming and the allocation of resources. An allocation problem and a problem from the biological sciences were described and formulated as mathematical programming problems, and it was indicated how the theory of these problems leads to computer techniques for their solution. The final paper, on computers, computation and computer languages, was presented by Francis V. Wagner (North American Aviation). Computing languages are classified according to the techniques that the machines use to understand them. More significant is the fundamental nature of the languages, whether oriented toward the machine itself or toward the problem to be solved. There are several problem-oriented languages now under development, some of which were described and illustrated.

C. C. MACDUFFEE, *Secretary*

Physics (Section B)

A series of reports on recent advances in physics was the major theme of the 1959 program for Section B. David Inglis summarized progress on the subject of nuclear structure and pointed out some of the remaining unsolved problems. New ideas developing throughout the world on multi-Bev accelerators were presented by Keith R. Symon. Marcel Schein reported on current advances in high energy cosmic rays. After first presenting an analysis of what is meant by problems in theoretical physics, Harold W. Lewis reviewed some of the major unsolved problems in theoretical physics still extant. On behalf of the atomic structurists, Richard H. Sands reported on recent experiments concerned with the orientation of atoms, electrons, and protons. Walter L. Hyde gave a review of recent discoveries made on the physical and geometrical processes occurring in filament optics. The retiring vice president, Robert B. Lindsay, discussed, with a philosophical orientation, possible connections between ethics and thermodynamics.

J. H. MCMILLEN, *Secretary*

Chemistry (Section C)

Many thanks to our chairman, John A. King, director of research, Armour and Company; to our program chairman, Sidney Archer, Sterling-Winthrop